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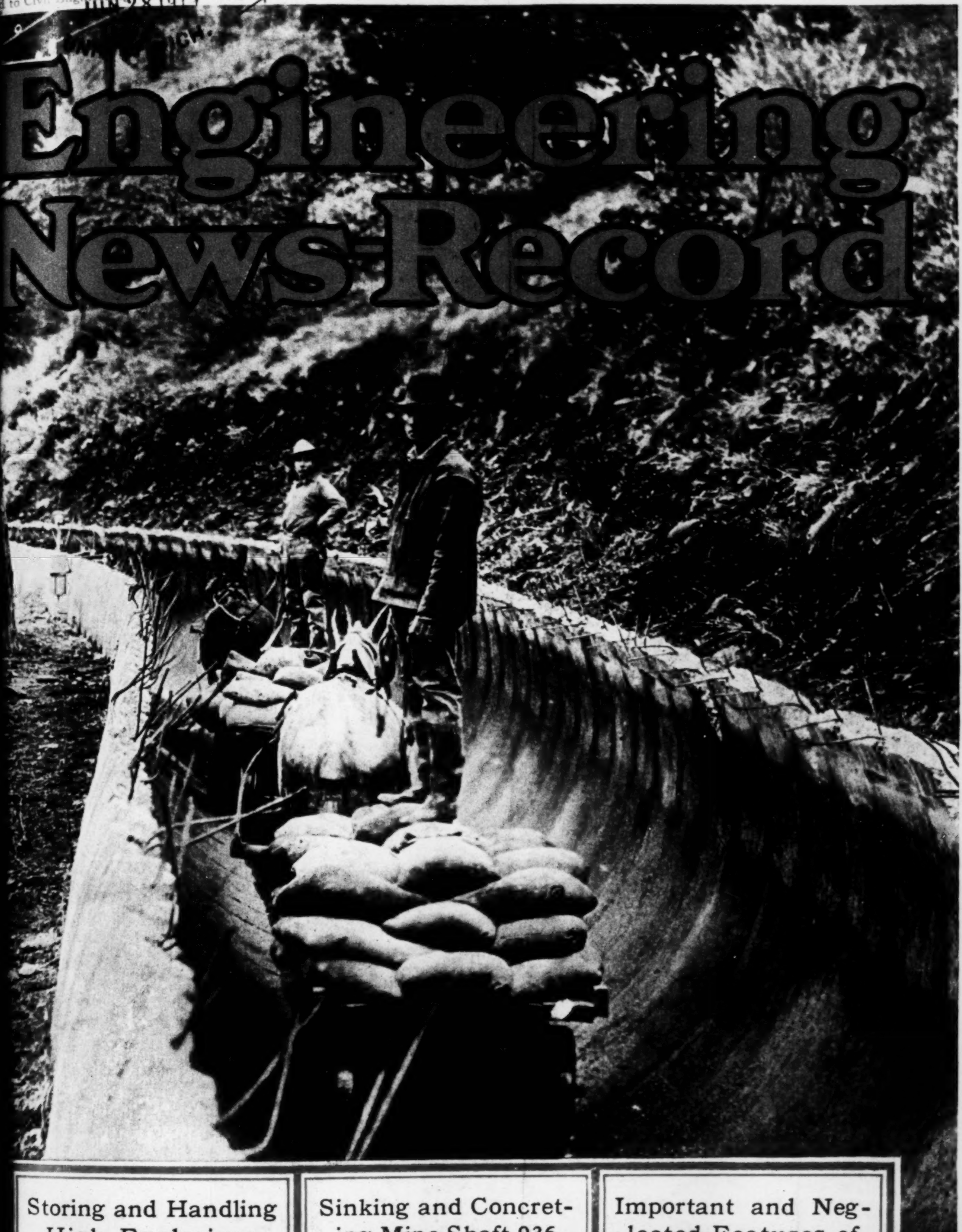

Storing and Handling High Explosives During the War

By G. C. MUNOZ

Sinking and Concreting Mine Shaft 936 Feet Deep

By RICHARD L. RUSSELL

Important and Neglected Features of Tire Maintenance

By A. F. MASURY

Cars Inside Yakima-Tieton Canal Used to Distribute Materials for Its Enlargement

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ENGINEERING NEWS-RECORD

DEVOTED TO CIVIL ENGINEERING
AND CONTRACTING

E. J. MEHREN
Editor

CHARLES WHITING BAKER
Consulting Editor

Volume 82 NEW YORK, THURSDAY, JUNE 26, 1919 Number 26

Philosophy and Romance

SELDOM does one hear an address of such singular charm as that of Francis C. Shenehon, delivered before the annual convention of the American Society of Civil Engineers. His subject, "The Engineering Activities of the Twin Cities," invited a dry-as-dust treatment —a stringing together of facts and figures that would swamp the visitor but leave him impressed with the idea, however vague it might be, that he had come to a country of engineering wonders. Instead, the address has an irresistible pull, is inviting, not repelling, gives the basic reasons, geologic and economic, for the location of St. Paul and Minneapolis, and then paints the picture not only of what is but what may be in the future. The philosophy illuminates the romance and justifies the vision. We urge every engineer, no matter what his specialty or place, to read with care, and then reread, the address of Mr. Shenehon. It is not merely interesting and informative, but is an unusual model of something we sadly lack in our engineering writing—a technical theme handled with grace and charm, losing nothing of its technical value, but rather being enhanced by the treatment.

Precautionary Maintenance of Motor Trucks

MAINTENANCE is as essential to a motor truck as to the road upon which it travels. While this statement seems obvious, there is an abundance of ocular evidence that many contractors and other truck owners disregard it—in its preventive aspects, at least. This tendency is seen in the condition of tires which have been practically ruined by overloading, skidding, overspeeding, and misalignment of wheels. The reasons for this neglect are no doubt lack of understanding on the part of the owner of the cost of tires relative to other truck maintenance and lack of knowledge as to the principal causes of excessive tire wear. What may be the result of such abuse is set forth in an article by A. F. Masury on p. 1262. The facts presented are well known to tire and truck manufacturers and dealers, but it is doubtful whether the majority of truck operators realize that, normally, gasoline and tire costs are equal. Failure to grasp this fact is probably due to the insidiousness of tire wear. Gasoline waste is immediately apparent both in bills and decreased truck efficiency, but in tire abuse the damage occurs in a manner which is not noticed until the tire goes to pieces. Neglect of precautions against abuse leads to a tire cost which often outweighs the utmost possible extravagance in gasoline waste, an excess which is not realized unless accurate itemized cost data have been kept. In the absence of such data, particular attention should be given to preventing those conditions of truck adjustment and operation which are known to be destructive.

Another Joint Concrete Committee

THREE years ago the Joint Committee on Concrete and Reinforced Concrete completed its third and "final" report, and shortly thereafter its constituent committees were discharged by their respective societies. Since then the world has been too full of other activities to bother much about standard specifications. The final report was an admirable document, which, in spite of the rigidity and conservatism peculiar to the efforts of joint action, is recognized as having the authority it deserves. Nevertheless, the subject of concrete, like all other technical subjects, is moving, and fresh consideration of concrete specifications is now necessary. It is, therefore, pleasing to note that the American Society for Testing Materials, through its executive committee, has initiated action toward the formation of a new joint committee to prepare standard specifications for reinforced concrete, with the same constituent societies as were brought together in the older joint committee. This committee should be formed at once and should proceed immediately to work, for some time must elapse before a report can be expected from it. As was pointed out in these columns three years ago, the opportunity for some authoritative utterance on the manufacture of concrete is more important than one on the design. Much remains to be crystallized regarding concrete as a material. To this, it is hoped, the new committee will devote most of its attention.

"Movies" in Science

MOTION-PICTURE houses for some time have been showing pictures of what they call the "analysis of motion," in which well known actions, such as figure skating, sprinting and baseball pitching, are reproduced on the screen at one-eighth the actual speed of the performer. Every element of motion in these pictures stands out with snapshot clearness. Grace hitherto unsuspected is revealed, and the methods by which results are achieved are understood as never before. This latter phase has decidedly an engineering application in the development of motion study and its consequent readjustment of production methods. No false or unnecessary movement can escape detection, but at the same time the sense of motion, lacking in a series of snapshots, is always present. An analogy may be found in the system used by Nathan C. Johnson in studying the setting of concrete, as referred to on another page. While the popular "movie" film slows down normally fast processes, Mr. Johnson's automatic camera speeds up the normally slow, so that one can, for instance, observe in a few minutes the physical and chemical phenomena of many days. Motion pictures have already had a marked influence on social conditions; may they not nave a bright future in science?

The Development Committee's Report

WITH the presentation to the board of direction of the progress report of the committee on development, there devolves on each member of the American Society of Civil Engineers a duty to study the report in detail and to communicate his views to the committee. Such is the wish and request of the board. The report has been prepared by a body representative of the society geographically and in varying points of view. It is a crystallization of ideas that have long been developing and that have assumed their present form after some months of study and four days of the hardest kind of work in Minneapolis.

Though the resolution accompanying the document states that the report contains "certain fundamentals which it is anticipated will form the basis of its ultimate report," it is clear from the discussion in Minneapolis that the committee is open-minded. It is seeking the views of the members of the society. It wants to know what of the content of the report they consider good, what they wish modified or rejected.

Space does not permit either detailed analysis or discussion. In general, it will be conceded, we believe, that the report stands on solid ground. Such radical innovations as the proposal to consolidate the four leading societies into one or to make the welfare work supreme are rejected. On the other hand, there is recognition that all engineering societies need to be drawn closer together, and that present conditions require more attention to welfare work than was necessary in the past. The provision for these steps is made without interjecting elements that would lessen the society's prestige.

In the four major divisions of the report the controlling ideas are plainly evident. In the category of technical activities, the spirit is that of development of a fuller service to the membership, a service that shall include in well rounded fullness the wide scope of what is now termed civil engineering. Question must be raised as to the source of the funds for the proposed enlarged work, but that will necessarily have the detailed consideration of the committee if the plans outlined are approved.

As to internal affairs, the ruling idea is that of organization along the lines of our Governmental system, so that the members in each community and each district may come to know one another better and by better acquaintance work more effectively for the advancement of the engineering profession. An important feature in this section of the report is the emphasis on the need for taking care of the younger members—not merely of the society but of the whole profession.

As to external relationships, the recommendations look to a federation for civic work of all elements of the profession, the method of organization being from the bottom up—through the locals and the state organizations to a national council.

In regard to public relations there are three dominant points: Publicity, that the function of the engineer may become better known; vigilance and action in matters of legislation affecting engineers; and the duty of the engineer as a citizen. As to each of these major lines of activity much will, we hope, be said in the near future.

It is evident that the committee has pitched high its ideal for the society. Appreciating the quality and the size of the membership, it proposes a program that a weaker body could not or would not dare attempt. As to the vision, generally, there will probably be little disagreement. As to detail and method there will be differences of opinion, and on these differences the committee desires light from the members.

In considering the report, there are two important facts to be remembered: (1) Whatever plans are evolved from the work of the committee will have the backing of nine thousand engineers of a class whose individual achievements are a warrant of effective action once they place themselves back of a definite program; (2) the ultimate report, strong as it will be with the backing of nine thousand civil engineers, will not stand alone. The other three national societies have similar committees. The inevitable conference report which, obviously, will not touch the internal affairs of the individual societies, will have mobilized for it the strength of forty thousand leaders of the profession.

The report, then, is destined, when developed into its final form, to have tremendous influence. Progress in the Mechanical Engineers' committee has been sufficient to show that the thinking in that society on external and civic relations is along parallel lines. The same vision is controlling that has actuated the Civil Engineers' committee—a vision of enlarged service to the profession and to the community. The other societies, if their participation in Engineering Council is a criterion, will have similar views. Forty thousand engineers united in effective organization, with a vigorous program such as they have the ability and vision to draft, can do more for the members of the profession than any other agency. Therefore, it behooves the members of the American Society of Civil Engineers to express their matured views on the report. The committee on development has reached the point where it must have their help and counsel. After the members have responded, the program for action can be formulated.

Good Roads on Long-Term Bonds

NEW York State has recently had a change in its highway administration, and with it has come a change in highway policy. The former administration, against the advice of its engineers, leaned, latterly at least, to the construction of a large mileage of cheaper type of highway. The object, if one may put it so, was political rather than statesmanlike—the desire to satisfy the clamors of the populace rather than to give them that which the state's own experience had demonstrated to be the most economical in the long run.

Furthermore, under the New York law the state assumes responsibility for maintenance and rebuilding, once it has taken over a road. It is to the interest of the local community, therefore, to get as much mileage as possible. If that mileage be constructed with a surfacing that wears out in four or five years, or less, it is no concern of the local community, except in so far as it contributes to the general state tax levy. It is a bad business procedure for the state, however, not merely because the maintenance cost of heavily traveled roads is high, but because the state highways are financed by fifty-year bonds, and with a continuance of this procedure issue upon issue would be piled up to pay for surfacings that had disappeared.

The figures in the New York case are very convincing. In the period from January, 1915, to December, 1918, the maintenance on 284 miles of brick road cost $210 per mile per year; on 208 miles of concrete roads, $138; on 2793 miles of bituminous macadam, penetration method, $490; on 2451 miles of water-bound macadam, $911, and on 173 miles of gravel macadam, $843. All of these figures are for the maintenance of surfacing without the reconstruction of more permanent or expensive types.

With such experience data available, we are not surprised at the reversal of policy in the highway department. Henceforth, ultimate economy is to be looked to and the mileage that the local communities do get will, in wearing ability, bear some decent proportion to the life of the bonds under which they are financed.

No one in these days will defend fifty-year highway bonds, but, that being the law, it is plain that the highest type construction only should be allowed on the heavily traveled roads.

City Transit Concentration

CITY growth has changed the aspect of many transit problems since the inauguration of the earliest rapid-transit systems. Improved transit facilities, constructed because of growing congestion, have in turn attracted more business to their neighborhoods, and have further increased the crowding of business and of traffic. Today transportation is the throttling point of city activities; housing, heating and lighting, telephone and other services have possibilities which our present demands do not approach, while the transportation systems are seriously overburdened.

New problems have come into being with the change of conditions. On the one hand, the congestion of traffic that has been created must be dealt with; better means must be devised for handling the very dense traffic with which existing transit routes have burdened themselves. On the other hand, concentration of traffic by a few transit routes must be counteracted and distribution of business and of traffic brought about. In connection with both directions of development, the coordination between street and transit routes needs to be improved, and the condition of mob-like crowding which exists at the entrances to important rapid-transit stations must be relieved. Some, perhaps all, of the new problems of transit congestion are worth consideration in connection with the discussion of continuous-train service which appears on another page.

If the continuous-train system will solve a sore and extreme problem, like that of 42nd St., it has much larger possibilities. Its distinguishing characteristics are its great traffic capacity, and its distributed station service. When we are confronted by serious overloading both of rapid-transit lines and of their street approaches, these qualities give the "moving sidewalk" a commanding claim for attention in transit planning.

Relatively few engineers have concerned themselves broadly with transit problems in the past; in the future these problems will concern many. City passenger movement—both surface and rapid-transit—is in the field of the municipal engineer, for it deals with one of the most essential services in the city's existence. Hitherto not all municipal engineers have been sufficiently free of the pressure of the moment's duties to face resolutely the problems which the future will bring. Mr. Seaman's article may prove helpful, therefore, by picturing conditions of serious character which, though now restricted to only two or three cities, are likely to become much more general.

Of greatest value, perhaps, is the emphasis which consideration of continuous trains lays upon what may be called the crosstown traffic problem. Reference to the conditions existing in the southerly one-third of Manhattan Island will bring this problem most clearly before the mind, although it exists in every large city. It is the problem of delivering traffic to an area rather than to points along a line—in other words, of distributing from the trunk lines of transit; and in Manhattan this distribution is crosstown. The one- to two-mile width of the island is adapted for highest-grade business use over its entire width, yet in the past only the central axis has been so developed, while the outskirts, because distant from the central axis, were left to second- and third-class service. In earlier years, moreover, concentration of all major business along a single line was most in harmony with the needs of the business. But, many decades ago, the facilities of a single street were out-grown, and today the great need is for means of spreading the traffic from river to river.

Counteracting the natural tendency toward lateral spread, however, there has been in New York the obstacle of the growing difficulty of crosstown transit. In recent years this difficulty has become serious indeed. The problem has had some study by the rapid-transit construction authorities of the city, but action has ever been blocked by the greater pressure for improved longitudinal transit. It may be hoped that now, with the principal rapid-transit lines nearing completion, the formidable crosstown problem may be taken in hand again. And it may also be hoped that the lessons sure to flow from such study will be noted by the engineers of other communities with respect to their bearing upon local transit needs and plans.

In view of the large possibilities of the continuous-train system, it is remarkable that no trial installation has been made so far. Important objections to the system lie on the surface. There are undoubtedly great mechanical difficulties in the problem. Equally serious doubts may be entertained concerning the ability of a miscellaneous public to use a moving device. But both classes of doubt may be regarded optimistically. As concerns the adaptability of the public, the doubts indeed have largely been deprived of their force by the success attained with moving stairways; their heavy patronage, even in the stores where they are used by women and children almost exclusively, and are often without attendance, overthrows the fear that moving transit devices are dangerous. With respect to mechanical difficulties, the case may be considered in the light of other unpromising railway problems that have been worked out to complete, practical success. In short, the striking correlation between certain vital transit needs, on the one hand, and the improved facilities afforded by the continuous train, on the other, is bound to force the system into notice, and, while difficulties of serious character may be expected in applying it, they do not appear insuperable.

The 42nd St. problem is only one of a class of crosstown problems in New York. The city is a ribbon of parallel threads which lack the bonding strength of cross-connection. Complete control of the crosstown problem, if it can be attained, will create a new basis for the city's development.

Storing and Handling High Explosives During the War

Methods Developed by Ordnance Department in Taking Care of Vast Quantities of Ammunition Were Based on Safety Regulations and Modern Material-Handling Devices

By G. C. Munoz

Major, United States Army, Chief of Construction Section, Supply Division, Ordnance Department, Washington, D. C.

HIGH explosives of the kind used in ammunition are rare commodities in peace times, but even their occasional use would seem to make it worth while to record for future reference the methods of handling and storage developed by the United States Army during the war. To assure the necessary steady flow of this ammunition to the American Expeditionary Forces, embarkation depots capable of handling a 30-day supply had to be built at seaboard points, remote from large communities and yet within the lighterage limits of the major ports from which the material was shipped. The principal problem to be solved in planning these depots was the adoption of standard types of magazines for the safe storage of ammunition, smokeless powder and explosives; the planning of terminal track and wharf facilities for the rapid handling of large amounts of ammunition; and the protection of the military stores from fires or from enemy attack.

Seven of these depots were established along the Atlantic seaboard; they were located as noted in the accompanying table. In addition, storage facilities were provided at the principal shell-loading and bag-loading plants, and since the signing of the armistice special depots for the storage of high explosives have been established in sparsely settled regions in the interior of the country. The tidewater depots were all designed in accordance with certain fixed standards which are given below, although, of course, in each case there were many variations in local conditions which required special detailing. The general layout of an ideal depot is shown in the accompanying drawing.

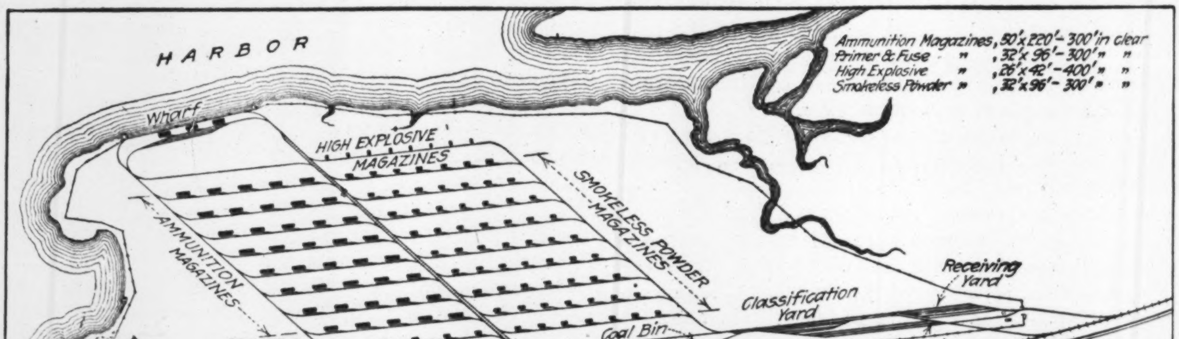
TABLE SHOWING LOCATION AND COST OF ARMY AMMUNITION SEABOARD DEPOTS.

Depot	Harbor	Cost
Raritan Arsenal, New Jersey	New York	$14,883,000
Sandy Hook Ordnance Depot, New Jersey	New York	972,000
Delaware Ordnance Depot, New Jersey	Philadelphia	$6,350,000
Curtis Bay Ordnance Depot, Maryland	Baltimore	8,253,000
Turner Ordnance Depot, Maryland	Baltimore	93,000
Pig Point Ordnance Depot, Virginia	Hampton Roads	3,340,000
Charleston Ordnance Depot, South Carolina	Charleston	5,516,000
Total Cost		$39,407,000

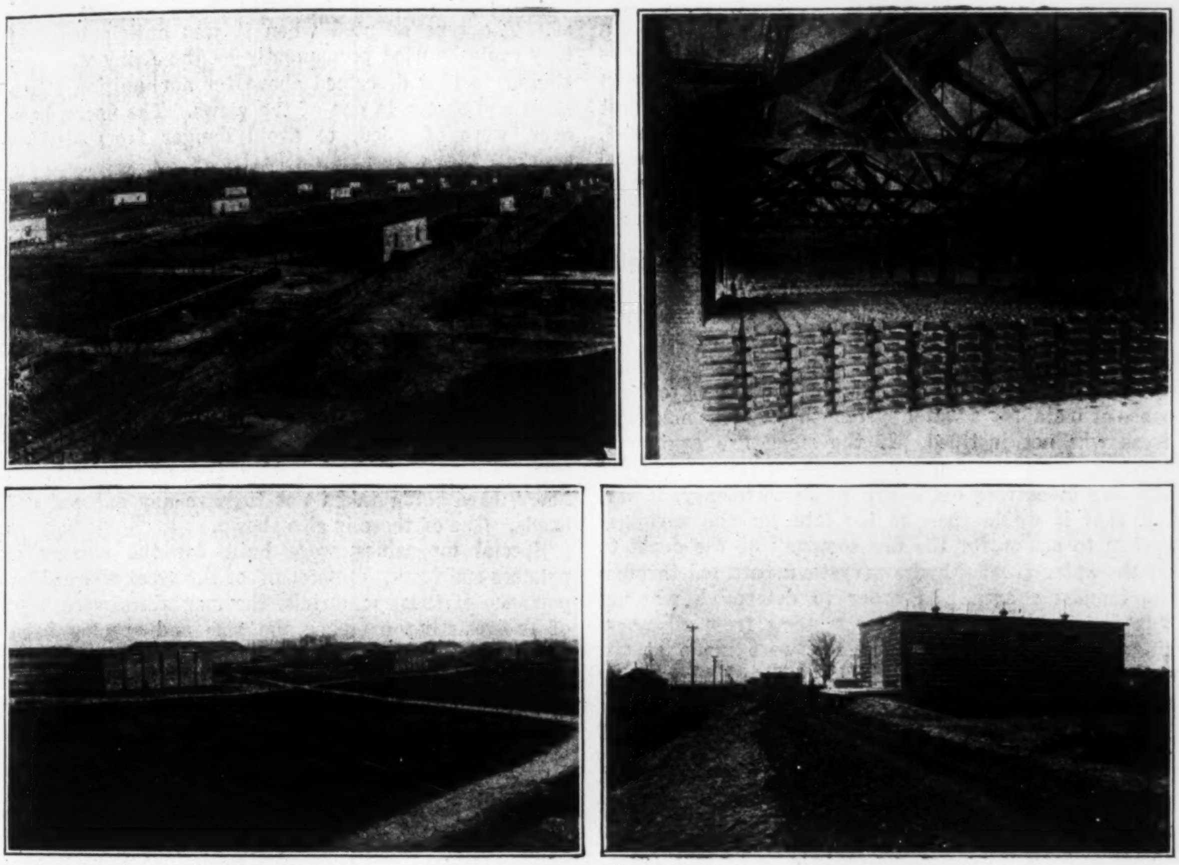
As a result of the study of various explosions of ammunition in storage it was concluded that, as in the event of an explosion in any ammunition magazine the shells might be hurled for a distance of one-half mile, it would therefore be necessary to space the magazines that distance apart, to preclude the danger of a bursting shell being hurled from one magazine into the next one and there causing a second explosion. This was obviously impossible, as it would have entailed the construction of tremendous amounts of railroad track and would have required the acquisition of much larger areas of land than could possibly be obtained in the neighborhood of our principal seaports. Experience indicated that a spacing of 50 ft. between magazines would be sufficient to preclude the danger of sympathetic detonation between magazines. It was necessary, therefore, to choose between the above two limits, and a spacing of 300 ft. in the clear between magazines was finally decided upon. The standard layout adopted was to stagger alternate rows of magazines, as this resulted in a slight economy in land.

In planning storage for high explosives in bulk, it was decided that a maximum amount of 250,000 lb. of high explosives per building would not be exceeded. The size adopted as a standard was 24 x 40 ft. by 9 ft. high.

The proper spacing of high-explosives magazines one from the other, and the distances that should be maintained between magazines and inhabited dwellings, railroads, highways, etc., were carefully studied. It was decided to comply with the requirements of the American table of distances regarding inhabited dwellings, public highways and railways outside of the ordnance depots. This table was a result of the studies of a



GENERAL LAYOUT OF A TYPICAL ORDNANCE DEPOT, USED AS AN OVERSEAS AMMUNITION-SHIPMENT POINT DURING THE WAR special committee appointed by an association of manufacturers of powder and high explosives established in 1910 and revised in 1914.



TYPICAL POWDER AND AMMUNITION MAGAZINES USED BY ARMY DURING WAR IN PORT DEPOTS

Upper left, smokeless powder magazines in group. Upper right, interior of ammunition magazine. Lower left, primer and fuse magazines. Lower right, high explosives magazine

A model law for regulating the storage of explosives recommended to various states by the Institution of Makers of Explosives contained a clause regulating the distance between magazines as follows: For 25,000 lb., the spacing between barricaded magazines should be 100 ft. and for each additional 1000 lb. of explosives there should be added a distance of 1⅓ ft., and for magazines without barricades the above spacings should be doubled. According to this rule the barricaded distance between magazines containing 250,000 lb. would be 400 ft. and after consultations with various experts on explosives, it was decided that on account of the relative insensibility of the principal military explosives, T.N.T. and picric acid, as compared with the demolition explosives for which the above rules were made, it was proper under war conditions to store the military explosives in unbarricaded magazines at the barricaded distances described above. This was finally adopted as a standard for the supply division, and all high-explosives magazines of 250,000-lb. capacity were spaced 400 ft. apart in the clear, unbarricaded.

It was decided that smokeless powder should be handled through the ordnance depots in bulk for the reloading of 75s and 4.7s overseas, and loaded in bags for propelling charges for the shells of larger calibers, the bags being packed in fiber or metal containers, those of the latter type being more bulky and more dangerous because each bag contained a core of black powder to assist in the rapid combustion of the charge. A practical test made with several boxes of smokeless powder demonstrated that this material in bulk burns very rapidly but does not explode. It was, therefore, decided that the maximum amount of smokeless powder in bulk to be stored in one building should be 500,000 lb. Allowing for proper ventilation around the walls and for the necessary aisle space, this amount of smokeless powder required a building 32 x 96 ft. by 10 ft. high, which was adopted as the standard-size smokeless-powder magazine.

Studies of fires in smokeless-powder factories showed that the flame from a conflagration of a large amount of smokeless powder would reach great distances. It was decided to space the smokeless-powder magazines 300 ft. apart in the clear, as experience available indicated that this would be sufficient to prevent a conflagration in one building from spreading to the adjoining buildings. The spacing adopted is clearly shown in the view of this type.

After the signing of the armistice a revision was made of all high-explosives magazines at the depots established on the Atlantic seaboard, and it was decided that, as a peace-time basis for storage of explosives, the amount of high explosives per magazine should be reduced so that the distance between them would be in strict compliance with the rule described above for the spacing of high-explosives magazines. For the storage of large amounts of surplus high explosives that were on hand at manufacturing plants, loading plants, etc., new depots were established in sparsely settled areas in the interior of this country. The amount of explosives in them was limited to 250,000 lb. per magazine, and magazines were spaced 800 ft. apart, which is the unbarricaded distance in accordance with the rule referred to above.

In planning the fire protection for the ammunition depots, consultations were held with the manufacturers of explosives, with other experts on the subject, and with the National Board of Fire Underwriters. As a result of this a standard policy of fire protection was adopted and followed at all of these depots. The problem of fire protection was devided into two classes, the first being the protection of the ammunition-storage areas, and the second being the protection of barracks, general storage warehouses, wharves and railroad yards.

SPRINKLERS NOT WARRANTED

The question of providing the magazine area with hydrants and equipping the magazines with sprinkler systems was discussed informally with the representative of the National Board of Fire Underwriters and with manufacturers of explosives. After thorough study of the matter, it was decided that the great expense of installing a water system through the magazine areas was not justified. If the small fire equipment which it was planned to place at all magazines was not effective in putting out a fire in its incipiency, it was felt that it would then be too late for the sprinkler system to act or for the fire company of the depot to obtain water from a hydrant system scattered through the magazine area. In order to determine whether this decision to omit sprinkler systems from all magazines was justified, arrangements were made at the suggestion of the National Board of Fire Underwriters and through the courtesy of E. I. du Pont de Nemours & Co. to make tests at Carney's Point to determine the value of a sprinkler equipment in fires in the storage of smokeless powder, T.N.T. and picric acid under different conditions. It was the consensus of opinion after these tests were made and studied that the cost of a sprinkler system was not warranted.

It was endeavored to prevent the occurrence of fires in the magazine area by precautions in the construction of the magazines, in guarding, in clearing the magazine area of all fire hazards, and in equipping the locomotives with fire equipment, spark arresters, and specially inclosed ashpans, in order to reduce as far as possible the danger of fire from these sources.

The magazines were protected from fire by a liberal supply of small fire equipment, both inside and outside. The type of small equipment generally used was 40-gal. bucket tanks and 5-gal. hand-pump extinguishers, both being filled with nonfreezing solutions. The fire protection for the barracks was the standard type developed by the Army and used at all cantonments. Other important features of the fire protection of the depots were the organization of fire brigades, the establishment of a fire-engine house with facilities for housing the fire marshal and his crew, the installation of electric fire-alarm systems, a liberal installation of telephones, and the construction of numerous small guard houses for housing the detachments assigned to guard duty.

In the design of the ammunition magazines it was attempted to reduce to a minimum the danger from missiles in the event of an explosion; to make the magazines as nearly fireproof as possible; and to make the buildings dry and well adapted to the mechanical handling methods that had been decided on. The standard adopted was a building 50 x 218 ft., with brick pilasters, tile walls, concrete floors and roof of gypsum slabs resting on wood roof trusses and wood purlins. The walls should eventually be plastered on the outside, but this was omitted for the sake of speed and economy. This construction is shown in the views.

Three types of high-explosives magazines were adopted. The type adopted when it was anticipated that they could be used permanently by the Army was very similar to that described above for ammunition magazines and shown in one of the views. The floors, however, were of wood, to avoid danger from striking sparks.

For temporary use, a wood-frame magazine with corrugated asbestos sheathing and gypsum slab roof was used; and for storing dynamite, which material could be detonated by a rifle bullet, bullet-proof magazines were constructed. These latter were similar to those of the permanent type except that the tile was filled with sand and the fire doors were bullet-proofed with steel. A test made with an Army rifle, by firing three bullets at the same spot of a sand-filled tile, resulted in penetrating only the outside shell of the tile.

Smokeless-powder magazines were built of wood frame, corrugated asbestos sides, gypsum roof and wood floors, care being taken not to have any exposed nail heads. One of these is also shown.

Special magazines were built for the storage of primers and fuses. On account of the great cost and importance of these materials, the magazines were made of fire-resisting exterior, the size and spacing being the same as for the smokeless-powder magazines (32 x 96 ft., and spaced 300 ft. apart). The walls of these magazines were of tile, the roof was of gypsum, and the floor of blind-nailed wood plank.

TRANSPORTATION METHODS IMPORTANT

It was planned to transport ammunition from the magazines to the wharves on flat-cars covered with tarpaulins and to transport explosives in box cars. For the rapid transfer of this material to lighters a front track was built as close to the pierhead line as possible, and light shells and explosives were skidded on hardwood skids direct from the cars to the lighters. For the transfer of heavy shells 15-ton locomotive cranes with 50-ft. booms were provided. These cranes operated on the front track, the flat-cars with shells being spotted on a second track spaced 18 ft. c. to c. from the front track. This spacing gave ample width for the operation of the crane. The standard width of wharf adopted was 46 ft., which left sufficient width in the rear of the second track to permit a fire engine or automobile to pass when the tracks were blocked with railroad equipment. The top of the rail of the front tracks was flush with the floor level, in order to permit of trucking across the tracks when necessary.

The wharves were designed for a live load of 500 lb. per square foot, and the tracks for either a Cooper E-40 locomotive or a 15-ton crane with loaded boom at point of overturning, the boom being so placed as to produce the maximum loads. All bracing was kept at least 3 ft. above mean low water, in order to avoid the delay usually encountered when placing bracing near low-tide level.

Dock sheds of fire-resisting construction, 60 x 216 ft., and spaced approximately 300 ft. apart in the clear, were built directly in the rear of the wharf, and were used as transfer sheds are used on commercial wharves. The floors of these buildings were of reinforced concrete supported on wooden piles and were designed to carry a live load of 600 lb. per square foot. Depressed tracks were built in the rear of the dock sheds to facilitate the rapid unloading of cars into these buildings, and behind these loading tracks small yards were provided to assist in the quick shifting of cars at the wharves.

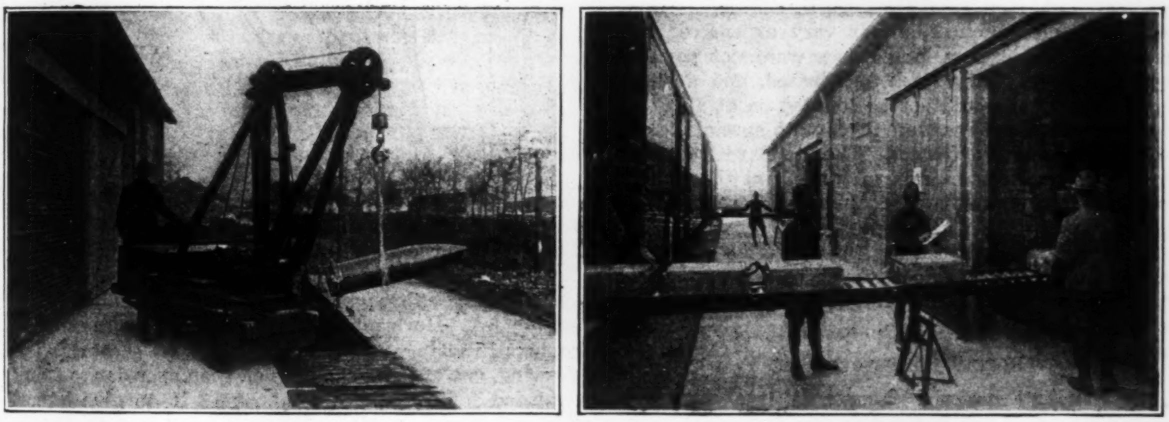
Fire walls were built under all of the ordnance wharves, concrete walls being spaced approximately 510 ft. apart. with intervening timber fire walls constructed of two layers of 2-in. plank, one layer being placed vertically and the other horizontally, and spaced approximately 170 ft. apart.

The plan for the pier at Pig Point, Norfolk, Va., differed slightly from the above plan; it was built 4000 ft. from the shore, and it was not anticipated that very heavy shipments would be made from this point. The pier was therefore built 105 ft. wide with a dock shed 260 x 40 ft. with surface tracks on one side and depressed tracks on the other, both sides of the pier being provided with fender piles so that lighters could be loaded on both sides when desired. As a certain amount of vibration was inevitable on this pier, the dock shed was built of wood-frame construction covered with corrugated asbestos.

A railroad system was constructed at each depot to make access easy to any point and to provide receiving and classification yards for incoming and outgoing cars. The main running tracks and yards were placed at a safe distance from the magazines. Curvature of track was limited wherever possible to 13°, to preclude any trouble from derailments. The 80-lb. A.S.C.E. rail was selected as a standard for ordnance depots, but, on account of the difficulty of obtaining these rails quickly, a good deal of 67½-lb. rail, which had been manufactured for the Imperial Russian Government but had not been shipped, was used, and proved very satisfactory.

All ammunition depots were surrounded by high fences built of 2-in. chain-mesh woven wire fence of No. 9 galvanized wire surmounted by three strands of barbed wire on an inclined arm, the total height of the fence being 8 ft. To assist in the guarding of the depots a series of flood lights, spaced approximately 500 ft. apart, were installed, mounted above the fence and throwing powerful beams of light parallel to the fence, thus thoroughly lighting a zone approximately 100 ft. wide outside the depots. That the guards inside of the fence might remain in darkness so that they could not be seen from the outside, vertical veins were fastened to the projectors; these reflected all rays directed toward the inside of the inclosure. The projectors were generally spaced 500 ft. apart.

Very careful consideration was given to the use of electrically driven machinery for handling ammunition and explosives in the magazines, but it was decided that any economies that might be gained by the use of this



MECHANICAL METHODS USED IN HANDLING AMMUNITION IN ARMY'S STORAGE DEPOTS
Upper left, electric crane handling heavy shell. Upper right, shrapnel on roller conveyor. Lower left, handling ammunition to barges. Lower right, roller conveyors between magazines

machinery were more than offset by the added risk entailed in running power lines into the magazines. It was, therefore, decided that for powder and high explosives no electrical machinery would be used, and for shells the use of power-driven machinery would be confined strictly to storage-battery equipment, and that the charging of all storage batteries would be carried on in a building outside of the magazine area. Battery-charging stations at safe distances from the magazines were therefore established at all of the principal depots.

On account of the short winter days, and as it was desired to be prepared to handle shipments day and night when necessary, it was essential to provide a means of lighting the magazines. This was accomplished by the use of storage-battery portable lamps, developed for this purpose. These lights were charged at the battery-charging station and could be carried to any magazine where night operations were under way.

Preliminary estimates showed that the trackage at the various depots would average from 10 miles at the small depots to 45 miles at the larger ones, and that the number of carloads passing through each depot would average from 15 to 243 per day. With these facts in mind, studies were made of various types of motive power, including electric locomotives, compressed air, fireless locomotives and oil burners; but there were certain objections to the use of all of these types under war conditions, and it was therefore decided to use for all heavy switching 62½-ton coal-burning steam locomotives, and for light work 40-ton locomotives. The principal reasons for this decision were that electrical equipment was scarce and the large trackage at the depots would have made electric installations very expensive; compressed-air and fireless locomotives were not powerful enough for the heavy work anticipated, and a steady supply of fuel oil could not be counted on at all of the depots. All locomotives were fitted with special inclosed ashpans and spark arresters. The standard locomotive crane adopted for handling heavy shells at the wharves was a 15-ton, eight-wheel, coal-burning crane with a 50-ft. boom.

All of the rolling stock for the operation of the depots was ordered at the commencement of the projects and was used to great advantage by the construction forces.

ROLLER CONVEYORS USED

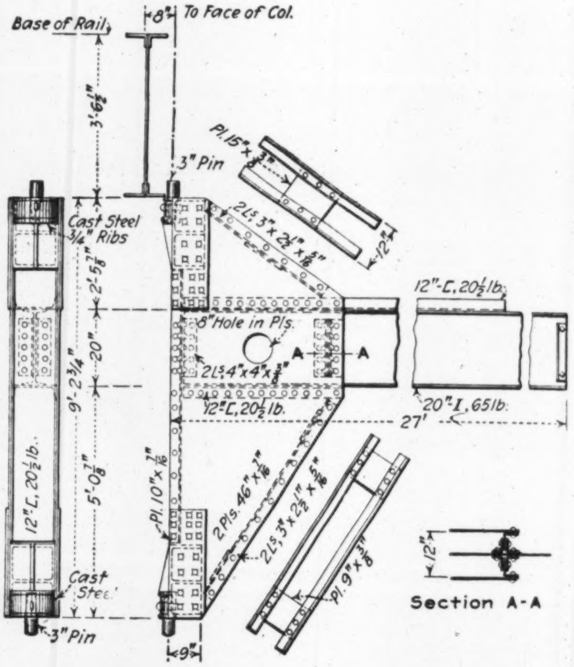
For handling material from cars into magazines, roller conveyors were utilized as far as possible. For inert material and shell, the ordinary steel roller conveyor, made up in 8-ft. sections, was used. Various forms of wooden pallets were provided for moving articles such as shells, bags of sodium nitrate, etc., over the conveyor. For handling explosives such as T.N.T., dynamite and black powder, wood roller conveyors fitted with wood guard rails were used to avoid the risk of sparks.

For handling shell above 12 in. in diameter a special type of storage-battery transfer crane truck, fitted with a short hinged boom and a hoist motor, was provided. As the platforms of the magazines used for the storage of heavy shells were built at car-floor level, this truck could be driven into the car, take a shell either by the nose ring or by means of a rope sling, back out of the car and proceed head on into the magazine to the point of storage. A view is given of one of these cranes in operation.

Jib Crane Designed for Maximum Clearance

TO REDUCE the overhead height of jib cranes recently installed in the Carnegie warehouse of the McClintic-Marshall Steel Supply Co. and thereby give maximum underclearance and lifting height, a special design was developed, using, instead of tension stays to take the cantilever moment, what was virtually a vertical girder. The details of this design are reproduced herewith.

The vertical girder was built up of two main plates with a 12-in. channel on the side near the column, and with angle stiffeners and tie plates supporting the edges. The main cantilever beam was framed into the vertical channel just mentioned, and was also connected by four vertical angles through the main plate, as indicated by section AA. Horizontal 12-in. channels were selected to connect the flanges to the main plate, as shown in the drawing, one of these channels on the upper flange being extended for a distance of about 18 ft. to give lateral stiffness to the cantilever beam. An 8-in. hole in the main plate was necessary in order to allow access to the rivets on the inside of the box section.



SPECIAL DETAILS OF CANTILEVER JIB CRANE

The bearings are of cast steel, using in general a thickness of ¾ in. for the ribs and main metal. The design was made by P. L. Wolfel, chief engineer, McClintic-Marshall Co., Pittsburgh, Penn.

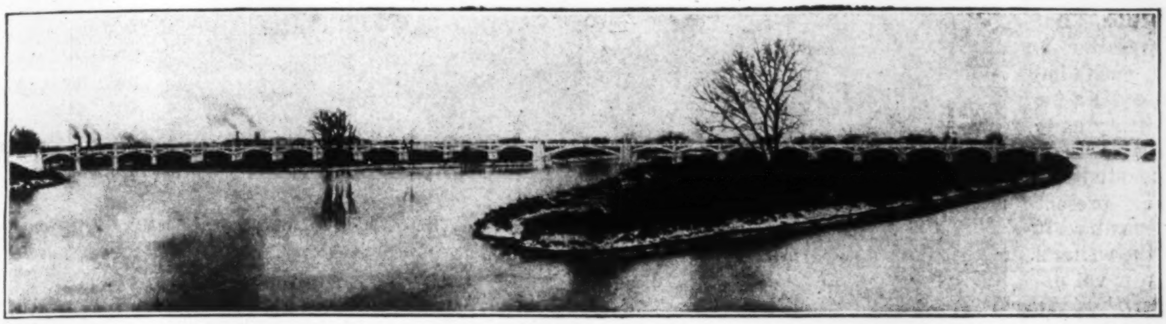
Publicity To Help Minnesota Water Projects

An educational campaign to assist municipalities which need new water-supplies or improvements in their existing supplies is a new activity being carried out under H. A. Whitaker, director of the Minnesota State Board of Health. The program includes a thorough investigation and report, also conferences with local officials and organizations, and lectures at public gatherings, in order that the people may have an opportunity to realize the importance of the problem before the time arrives for voting the necessary funds.

Long Concrete Bridge Contract To Be Let in Four Parts

Structure Nearly Mile Long Across Mohawk River and Barge Canal at Schenectady About To Be Built

JUST before the United States entered the war the State Engineer of New York had prepared plans for a long, reinforced-concrete bridge across the New York State Barge Canal and the Mohawk River between Schenectady and Scotia, N. Y. The work was held up during the war, but appropriation has now been approved by the legislature and preliminary work incident to the award of contracts will be begun immediately.



GREAT WESTERN GATEWAY, A CONCRETE BRIDGE NEARLY A MILE LONG, TO BE BUILT AT SCHENECTADY, N. Y.

In addition to the size of the structure, it is interesting on account of the novel division of labor proposed for the construction. Under a plan now in preparation, the first contract to be awarded will involve the construction of the approaches and abutments at either end of the bridge. The second contract will involve the excavation, the driving of foundation piles, the placing of concrete in the foundation of all the piers and abutments exclusive of the end abutments. This contract can be awarded at practically the same time as the first one, inasmuch as the two contractors can operate without any material interference. As this second contract will be composed almost exclusively of work in which contractors experienced in the building of foundations and the driving of piles would be interested, it is thought that keen competition will result. The third contract consists of placing concrete above the foundation lines, including arches and balustrades in the main portion of the structure, and the fourth in the pavement of the bridge and approaches. This fourth will be the last part of the work to be placed under contract. Under this scheme the first and second contracts would be practically completed through the 1919 season, and in 1920 the third contract would be awarded; the work would be completed toward the end of 1921.

The bridge is to be called the Great Western Gateway or Gateway Bridge. It has a total length of 4436 ft. comprising 23 spans varying from 106 ft. to 120 ft., and one 212-ft. span over the Barge Canal channel. The river at the site is divided into three channels by Van Slyck Island and Hog Island. Between Van Slyck Island and the Schenectady shore is the channel which leads up to the Schenectady Barge Canal terminal. Between the islands is the Barge Canal channel, and between Hog Island and Scotia is the river.

Starting at Washington Ave., Schenectady, as the continuation of State St., the main artery of east and west traffic through the city, the first 300 ft. of the structure to the Schenectady abutment will be in the form of a parkway 100 ft. wide between retaining walls. In the center of this will be a grassed reservation 20 ft. wide for street-railway tracks, and flanking this will be reservation roadways, 20 ft. wide, for vehicular traffic. Flanking the roadways will be grassed areas 10 ft. wide and then outside concrete sidewalks 10 ft. wide. From the Schenectady abutment to the Scotia abutment the roadway will be 40 ft. between curves, with double tracks for electric cars in the center, and two 6-ft. sidewalks. Four arch spans 106 ft. each, cross the terminal channel to the triangular pier on Van Slyck Island, where the bridge turns at an angle of 54°. The crossing of Van Slyck Island is in three arch spans 110 ft. each, one arch span 117 ft., all square-ended, and four arch spans 120 ft. each on a skew of 18°. Then comes the 212-ft. span across the Barge Canal, which is on a skew, then six 120-ft. skew spans, an anchor pier on the far side of Hog Island, and five more skew spans of 120 ft. each. The structure between abutments is divided into five sections by two anchor piers and the massive piers of the channel span.

All arches will be open spandrel, rib type. The 212-ft. span will be carried on two ribs 12 ft. wide, 24 ft. apart. All other spans will be carried on three ribs, the outer ribs 6 ft. wide and the center rib 12 ft. wide, with a clear distance between ribs of 12 ft. On the Scotia end, for a distance of 940 ft., the approach will consist of an earth embankment.

The new structure will replace the old steel toll bridge which crosses the river about 1200 ft. to the east. It will be paid for jointly by the State of New York, the City of Schenectady, the County of Schenectady and the Village of Scotia. The contract plans were prepared by Frank M. Williams, state engineer, from the original design by B. H. Davis, consulting engineer.

Good Results From Filter Galleries

Bacterial count of the water obtained in 1918 from the underground galleries of the Des Moines, Iowa, Water Works Co., which are flooded at times of low river stages and high consumption, indicated a 94.5% reduction from the average of 19,047 bacteria per cubic centimeter in the adjacent Raccoon River. Treatment with chlorine gas reduces this count to 48, according to a paper read at the recent meeting of the Iowa Section of the American Water Works Association by A. T. Luce, engineer and superintendent. The rate of infiltration from a series of ditches and pools extending along the land side of the galleries is estimated at 1,000,000 gal. daily per acre flooded.

Continuous Trains for Forty-Second Street Transit

Problems of Dense Traffic—Moving Platforms or Continuous Train Recommended for New York Ten Years Ago—Shown to Have Advantages in Speed up to Four Miles, and Remarkable Capacity

By Henry B. Seaman

Consulting Engineer, New York City; Former Chief Engineer of the Public Service Commission for the First District, New York

A RAPID-TRANSIT problem of peculiar importance is contained in the case of the 42nd St. shuttle-train service in the new subway system of New York City. The problem is that of short-distance transfer of a very dense traffic, and is by no means confined to New York City or to the 42nd St. connection. But the latter is of such immediate urgency as to require serious study at the present moment. It is the writer's conviction that the moving platform, or the continuous-train system, offers the only solution of this problem. Moreover, the same system is able to meet requirements of exceedingly dense rapid-transit traffic in other cases, for long as well as short distances. In the present period of active rapid-transit development, the subject merits general attention.

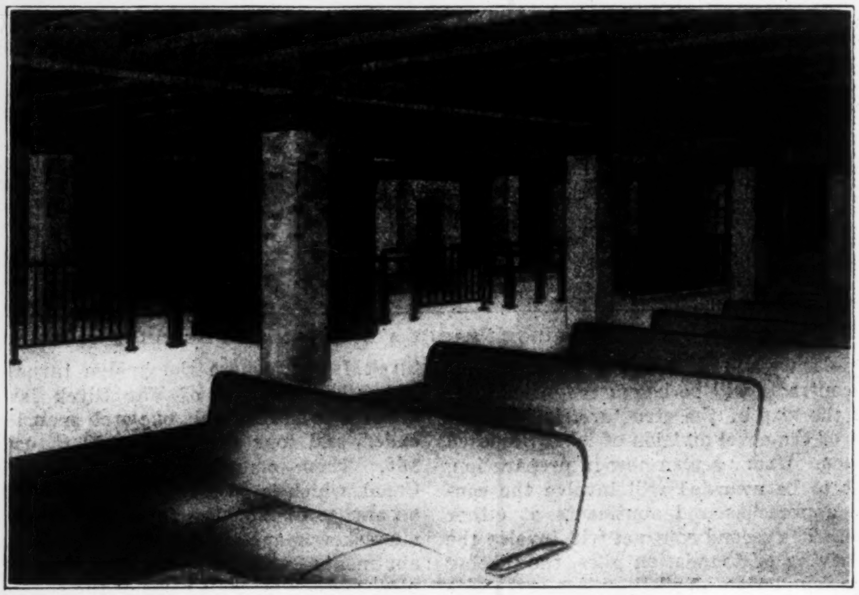


FIG. 1. HOW A MOVING PLATFORM SUBWAY INSTALLATION WOULD APPEAR, WHEN VIEWED FROM THE CENTER LINE OF COLUMNS (SLOW SPEED APPROACH PLATFORMS BEYOND THE SEAT PLATFORMS)

Ten years ago, when chief engineer to the Public Service Commission of New York City, the writer reported to the commission that moving platforms offered distinct advantages over separate trains with respect to speed as well as to capacity, recommended that an installation be made forwith. The general facts set forth in that report are as fully applicable today as then, and reference to them will support the statement that other rapid-transit routes than the 42nd St. shuttle connection may advantageously be equipped with continuous trains.

When the original subway, running north and south in Manhattan, was built, it was laid out on an indirect route through 42nd St., in order to reach the most populous localities and thus insure the immediate financial success of the project. But it was evidently intend eventually to complete the east- and west-side routes as now constructed. It would, therefore, seem that the connecting link across 42nd St. should have been considered and designed at the same time, in order to function with this general subway development. That this was not done can only be explained by the extraordinary pressure to rush the general improvement.

When, upon the opening of the new subways, it was found that no consideration had been given to this important matter, and it became necessary to close down the crosstown service in 42nd St. temporarily in order to avoid the resulting confusion, the citizens were naturally surprised and expressed disappointment. At the suggestion of the chairman of the commission, colored guide lines were then introduced. This was expected to reduce confusion, and the shuttle service was reëstablished. Other than this, however, there have apparently been no serious attempts to provide permanent relief of the congestion and inconvenience at this point.

A suggestion has recently been made by a former member of the commission that the shuttle service be operated from 14th St., running trains on the local tracks of the main line to 42nd St. and thence across to Seventh Ave. As a considerable portion of the crosstown traffic comes from the Steinway tunnel on the east and an ever-increasing number from the Lexington Ave. extension on the north, such operation would offer, at best, only partial relief.

Furthermore, in order to introduce a shuttle service which would be even approximately satisfactory, it would be necessary to switch at least half the local trains from 14th St. on the main line to the shuttle service across 42nd St. Since the interval between trains on the main line is about 2½ min. during rush hours, it would reduce the service on both the shuttle and the Lexington Ave. main line (above 42nd St.) to 5-min. headway, which would be entirely unsatisfactory in either case. Rush-hour service on all lines should approach 2-min. intervals as closely as practicable.

An alternative would be to deflect half the local trains on the lower east-side line across 42nd St. and then northward on the west-side line, and in turn deflect a corresponding number of trains from the lower west-side line across 42nd St., and thence northward on the east-side line. This would form a balanced system of operation, and would come nearer to fulfilling the requirements than any other train service which could be proposed, though the shuttle service would still be restricted to 5-min. intervals. In order, however, to make the necessary connections from the lower west-side to the upper east-side line, these plans should have been included in those of the general improvement—if, indeed, they could have been made at all. Now, with the general development which has since taken place, notably the completion of the Hotel Commodore, such connections cannot be made except at prohibitive cost.

The next possibility is utilizing the Steinway tunnel for relief by extending it westward to Seventh Ave. Plans for such extension were considered years ago, and undoubtedly such construction is still possible. But these plans were merely for the convenience of the traffic from Long Island City, and were not intended to fill the purposes of the present shuttle service. The tunnel is too deep for the purpose, and is difficult of access from the street surface.

At Lexington Ave., and again at Seventh Ave., the Steinway tunnel extension must pass below all other subways. It could approach the surface only somewhere midway between these two points; that is, in the vicinity of Fifth Ave. and 42nd St. But here street traffic is already so congested that a further increase is undesirable. Plans for a revision of street grades at Fifth Ave. have been under consideration.

An expenditure of possibly $3,500,000 would be required to construct the Steinway tunnel extension. The present subway section in 42nd St. would be of little value unless use could be made of it as an auxiliary. Some three years were required to construct the 42nd St. subway, and it could hardly be expected that the more difficult Steinway tunnel extension would be built in less time.

MOVING PLATFORM OPERATION

With these three suggestions of train service eliminated, the remaining expedient is the introduction of the moving platform, or a similar device, in the subway as at present existing.

While the introduction of this method of transportation would be novel and would call for the greatest structural and mechanical engineering skill, the system has been investigated by the most eminent engineers of their day and has received their unqualified indorsement. It is the escalator principle of continuous service, applied to horizontal transportation. To object now on the score of its novelty is not "conservative," but rather unprogressive and unscientific. The work should be undertaken, however, only by men of clear vision and of strong mechanical instinct, men who are determined to succeed and who are capable of overcoming obstacles as they appear.

The introduction of the moving platform into the present subway in 42nd St. would save the bulk of the expense of the Steinway tunnel extension. The cost to the city would be nominal. Close connections could be made with the Interborough subways which it is intended to serve, as well as with other subways, if so desired.

In its operation there would be no intervals of waiting between trains, as with car service, since the platform is ever there and ever moving. The traffic level would be nearer the street surface. Entrances and exits could be provided at every street, or, indeed, at every store. Finally, the equipment may be so designed that when it is in full operation and has demonstrated its efficiency it may be extended through the Steinway tunnel, affording continuous passage from Long Island City.

Studies of the moving platform or continuous-train system, made for the purposes of the report to the Public Service Commission in 1909, already referred to, brought to light very significant facts concerning the transportation value of the system. In point of capacity it surpasses the highest demands of present-day traffic. In point of speed it has the advantage over the present system for all distances up to four miles.

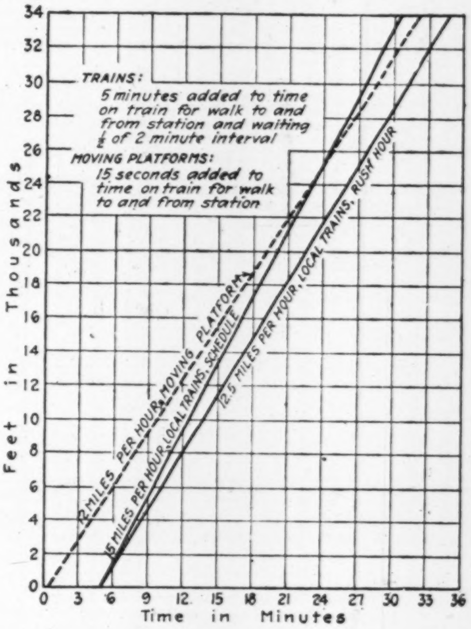


FIG. 2. SPEED COMPARISON OF MOVING PLATFORM AND TRAIN

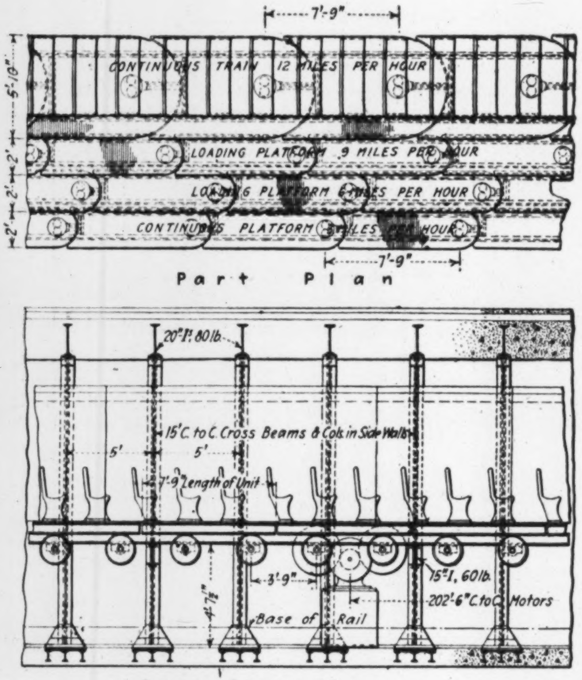
For the speed calculations, data were taken from rapid-transit service as it existed in New York City, average conditions being selected as follows:

Distance between express stations	2 miles
Distance between local stations	¼ mile
Distance between cross streets	1/20 mile
Speed of express trains, including stops	25 miles per hour
Speed of local trains, including stops	15 miles per hour
Speed of moving platform	12 miles per hour
Speed of pedestrians	3 miles per hour
Average interval between trains	3 min.

It was assumed that the average passenger starts his journey at a point distant from a local station by one-fourth the spacing of stations, and travels to a point of destination likewise one-fourth the station spacing away from a station. It was assumed that he must wait at the station for a time equal to one-half the interval between trains. These data led to conclusions which are plotted on the diagram, Fig. 2, herewith.

For all distances less than four miles the moving platform is a quicker mode of conveyance than local train service or even local and express service combined. This is true on the assumption of a speed of 15 miles per hour for local trains. But, as a matter of fact, local service during rush hours averages only about 12 miles per hour, and under these conditions the platform has the advantage over the train for all distances.

Great superiority in passenger capacity is, however, the primary distinction of the moving platform, next to its ability to receive and discharge passengers anywhere along the line. It can carry 73,500 passengers per hour, all seated, against 58,500 passengers for ordinary trains with both express and local service on separate tracks (36,000 for eight-car express trains, 22,500 for five-car locals) of whom only one-third would be seated. Ten years ago the writer reported that "the capacity of the moving platforms is beyond any requirements which can at present be foreseen." Though the density of traffic in the New York subways has more than doubled in the interim, this statement is approximately true even today.


7'-9"
5'-10"
2'
2'
2'
CONTINUOUS TRAIN 12 MILES PER HOUR
LOADING PLATFORM 9 MILES PER HOUR
LOADING PLATFORM 6 MILES PER HOUR
CONTINUOUS PLATFORM 3 MILES PER HOUR
7'-9"
20"I, 80 lb.
15' C. to C. Cross Beams & Cols. in Side Walls
5'
5'
7'-9" Length of Unit
3'-9"
4'-7½"
15"I, 60 lb.
20'-6" C. to C. Motors
Base of Rail
C. L. Street
24"I, 115 lb.
12 Miles per Hr.
9 Miles per Hr.
6 Miles per Hr.
3 Miles per Hr.
4L 6"x4"x¾"
1 Web 12"x½"
27'-6"
9'-3"
Seat (3 Persons)
10"[, 15 lb.
3½"
2'
3'-6"
4'-10¾"
1'4"
6'-8¼"
4'-5"

Part Plan

Part Elevation

Part Cross-section

FIG. 3. ADAPTATION OF MOVING PLATFORM TO A SUBWAY DESIGNED FOR TRAIN OPERATION

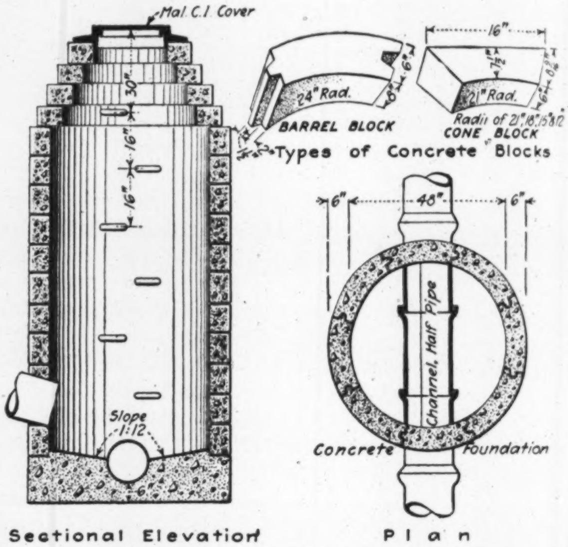
Introduction of the moving platform into the future transit system of New York City is inevitable. The channels of subway construction in lower Manhattan are practically filled, and in the increase of travel which will develop the inadequacy of the present transit facilities to accommodate it will become increasingly evident.

Design and Cost of Concrete-Block Manholes for Pipe Sewers

By R. A. Koerner

City Civil Engineer, Terre Haute, Ind.

CONCRETE-BLOCK manholes for pipe sewers, as built at Terre Haute, Ind., in accordance with the accompanying illustration, cost 40c. each, or about $8 per foot of height. The blocks are made of 1:2:4 concrete, with 10% of hydrated lime added for waterproofing. The floor of the manhole is sloped to obviate the remaining of sewage in the manhole when the sewer is running over half full. The same general design is used for catchbasins. So far as known, the design shown is original with the writer, who was led to make it by the exorbitant price demanded for brick.


Mal. C. I. Cover
30"
16"
16"
Slope 1:12
24" Rad.
BARREL BLOCK
16"
21" Rad.
Radii of 21", 18", 15" & 12"
CONE BLOCK
Types of Concrete Blocks
6"
48"
6"
Channel, Half Pipe
Concrete Foundation
Sectional Elevation
Plan

CONCRETE-BLOCK MANHOLE FOR PIPE SEWERS

Salvaging Construction Material in China

A letter from Donald F. McLeod, professor of railway engineering in the Chinese Government Engineering College at Tangshan, North China, describes an interesting adaptation of local materials to construction in hand. The contractor who dug a large, open well on the campus, 30 ft. in diameter and about the same depth, used for cribbing the stalks of a plant similar to sorghum to hold up the sides of the excavation, together with the surcharge due to the material excavated, until he could get a stone lining in place. He successfully salvaged all his sorghum stalks as the stone wall was completed. The letter continues: "Sorghum stalks are valuable as fuel when they are of no further use for building material. Although there are coal mines here the shafts are deep, about 1300 ft., which makes coal cost $4 per ton; pretty high for a man who gets only 30c. a day in wages. Consequently, nothing in the way of vegetation is despised as fuel, every leaf, every blade of grass being carefully gathered up for that purpose."

The title here used is that employed by Mr. Shenehon. Had we rewritten it we would have called the article, "The Philosophy and Romance of the Engineering Activities of the Minnesota Country."—EDITOR.

The Engineering Activities of the Twin Cities

An Address by Francis C. Shenehon, Consulting Engineer, Minneapolis, Before the Forty-Ninth Annual Convention of the American Society of Civil Engineers, Minneapolis, June 17, 1919

IN interpreting this subject "The Engineering Activities of the Twin Cities," it will be assumed that the Twin Cities are simply the hub of a radiating series of engineering activities, that follow transportation lines southward to the Gulf of Mexico, reach northward to the Lake of the Woods, and, loosely defined, eastward and westward to the Gulf of St. Lawrence and the Red River of the North. You will observe that the engineering activities of the Twin Cities are far-flung!

As I proceed to develop my theme, Sherlock Holmes might discover that my interests and convictions are hydraulic, because *water*, whether I will it or not, recurs and resounds like the burden of an opera.

The early voyageurs, Radisson and Groseilliers, who penetrated the wilderness and reached the prairies of Minnesota, and the Mississippi River in the vicinity of Winona, some miles south of St. Paul, started their pioneering journey at Montreal, proceeded by canoe up the Ottawa River to Georgian Bay, Lake Huron, thence to the inlets along the west short of Lake Michigan; and finally made an overland journey of 150 miles westward to the Mississippi. This was about the middle of the 17th century. These voyageurs prepared no maps of this region. Joliet in 1673 reached the Mississippi by way of Lake Michigan and the Illinois River, and opened a water avenue from the south for French exploration of Minnesota. Almost exactly 240 years ago this time of year, Sieur Duluth landed in the vicinity of the present City of Duluth, and penetrated the inland country of Minnesota to Mille Lacs, about 70 miles from Minneapolis—the first white man to report and record his explorations. Later on the Sieur La Salle, and Father Louis Hennepin (in the summer of 1680) came to St. Paul. Hennepin went on to the cataract to which he gave the name of his patron saint, Anthony of Padua. The Dakota Indian name for St. Anthony Falls was Minni-i-ha-ha—"the rushing water"—a name now transferred to the smaller falls immortalized by Longfellow, Minnehaha—"laughing water."

"EXPLORATION ENGINEERS"

These pioneers were *Exploration Engineers*, and their activities have had to do with present engineering activities in the Twin Cities—and they reached here by water transportation in birch-bark canoes. The motives of these exploration engineers, engaged in a reconnaissance survey for the advance of civilization across a continent, were mixed. The inculcation of religion in pagan souls, the extension of imperial domains, fur trading, adventure—and the search for a westerly passage from France to China—all had a part. The naming of the St. Lawrence Rapids at Montreal, Lachine Rapids—or "the Chinese rapids"—illustrates the geographical misapprehension as to the nearness of the Orient, which was actually more than 8000 miles toward the sunset. It is said of Nicollet, "so confident was he of reaching China that he took with him a gorgeous mandarin's robe of damask to wear at his court reception."

This Minnesota country, penetrated by these exploration engineers, was inhabited by savage peoples—Indians—whose chief engineering activities were military—eternal warfare. They subsisted by hunting and fishing perhaps more substantially than by agriculture. Wild rice grew in marginal shallows of the lakes and rivers, wild fowl fed on the wild rice; moose came to the water, as cattle do, to drink, keep cool and avoid fly pests; fish abounded; the streams were avenues of transportation—hence aboriginal populations kept close to the waterways.

WHERE FRENCH AND INDIAN MET

It is rather astonishing how this dependence on lakes and streams is reflected in Indian names, which now exist as geographical permanencies. Minnesota means blue or misty water. The name was first applied to the Minnesota River, and then taken over by the state. Missouri is Dakota for turbid water. Mississippi is Algonquin for far-reaching waters. Minnetonka means Great Water. Minneapolis is a half-breed name—Indian mother, "Minne," waters, Greek father, "polis," city—hence, the City of Waters. These recurring Indian names, and the French names Radisson, Hennepin, Nicollet, La Salle, Joliet, Frontenac and Duluth, still keep vivid the color of two centuries in which the picturesque glories of the French civilization met, by forest and prairie, the ancient, unprogressive, but picturesque, savagery.

My conception of a civil engineer is that he is a surgeon operating upon the earth as his patient; and in developing my subject it appears desirable to touch very lightly, and very briefly, on an activity, essentially engineering, which preceded the Indian and the French in this region. The Panama Canal in some form might ages ago have been cut by geologic action, without the guiding hand of the engineer as we know him. And this surgical operation successfully completed at Panama has done a thing which we find in other places already done for us by sure, slow, constructive geologic forces directed by the Engineer of the Universe. The problems engineers deal with today are inextricably and fundamentally dependent on natural evolutions and physical changes of the past. We take up the task at the point to which Nature has already brought it, and accelerate, retard or modify the project. We are in partnership with every elemental physical force of the universe, and each one of us likes to think of himself as the dominant senior partner.

Geological agencies conferred on Minnesota vast stores of hematite, the blood-red iron ore. Perhaps an account of the genesis of this deposit, the succession of events resulting in making it accessible and commercially worth while, will be of interest, particularly to those who are to visit the Iron Range. About 4½%

of the crust of the earth is iron; and every stream entering the ocean carries to this omnibus catchment basin a small contribution of this metal. It gradually precipitates in the deep sea bottom, securing oxygen and carbon in part from animal and vegetable organisms, until after countless æons great beds of ore are laid down. Then as the earth cools state-wide slabs of crust are reared above the sea level. A glacier scrapes off and truncates this pyramidal mass. Now, this hematite, as it came out of the sea, was not commercial ore, it was only about 30% iron. But, exposed to the elements, it weathers. The oxygen and carbon in part disappear, while all iron remains, until enrichment is complete, and the ore is commercially good, with 50% or more of iron.

The geological formations exposed in the Mississippi River gorge are interesting in their genesis, and tremendously important to the Twin Cities as bearing on present engineering activities.

Down underneath is the St. Peter sandstone several hundred feet in thickness. This is made up of fine, rounded grains of white sand imperfectly cemented with porcelain clay. This sandstone is so soft that you can carve your initials in it with your finger nail. It is porous and contains in part the artesian reservoir of water. On top of the sandstone are 4 ft. of blue shale, and above this about 30 ft. of limestone; then on top glacial drift, about 30 to 40 ft. of a mixture of sand, gravel, boulders and clay.

The sand was deposited ages ago in the sea, near shore in shallow water; then the bottom of the sea subsided, and in the deeper water the finer sediment, mud with some lime and some organic life, formed shale; the bottom of the sea was then further depressed, and in the deep sea, far from offshore sedimentary deposits, the pure hard limestone formed, imprisoning in its solidifying grip the organic dead. Then the ice sheet, a mile thick over this region, melted and left the rock débris, which we call glacial drift.

Might Have Been No Minneapolis

The significance of these geological formations is shown by the recession of the Falls of St. Anthony from somewhere down in Iowa to its present location in Minneapolis. The destructive force of the falling water successively cut out the soft sandstone, undermining the limestone ledge, toppling it down, and permitting the persistent northward travel of the falls, with the ever-lengthening gorge. If civilization and engineers had been in Minnesota some thousands of years ago, the water-power might have been caught and held at St. Paul, and there would have then been no Minneapolis! Minneapolis itself nearly lost the water-power by northward recession of the falls some forty-odd years ago. But engineers terminated the freedom of geologic action, built a great cut-off wall of concrete to protect the sandstone, and directed the flood waters over a timber apron. The engineeering activities of that day, in this arresting the recession of St. Anthony Falls, makes an interesting chapter in local history. The Mississippi River for sixty miles above Minneapolis has its channel in glacial drift. The high dam in the gorge below is founded on glacial drift mixed with fragments of limestone, while the power house and the vessel lock, at the two ends of the dam, are founded on the sandstone.

The Third Avenue bridge, a monumental recent engineering construction, is founded on the limestone ledge.

The sandstone formation is readily tunnelled, and Minneapolis and St. Paul, in particular, utilize this very fully for sewers.

With this historic and prehistoric background, the story of more recent developments and present engineering activities should be more understandable.

Navigation and City Location

In the days when Minnesota was on the lonely frontier, St. Paul grew to be its most populous city and later its capital, because it was at the head of practicable steamboat navigation—a water reason. Contrary to the rule of growth of cities, which fixes them a day's journey apart, Minneapolis grew into our largest city, centering about the great water-power here—a descent of about 48 ft. in a cataract in the Mississippi River, with over 20,000 available horsepower—another water reason. Another city, Stillwater, grew up at the virtual head of steamboat navigation on the St. Croix River, a tributary stream of the Mississippi, which is the trunk line of navigation leading to the Gulf of Mexico.

In passing, it may be of interest to note that in the division of spoils in state institutions St. Paul received the desirable capitol, Stillwater the desirable penitentiary, and Minneapolis the then doubtful university, all now centers of engineering activities.

Minneapolis and Stillwater had a kinship in the fact that a form of navigation, much exceeding the steamboat in importance, existed in the floating of logs on the upper Mississippi and the upper St. Croix, which, with their many tributaries, found their headwaters in the heart of limitless forests of pine, hemlock and cedar. At Minneapolis the forest products met water power which, with steam power, converted logs into lumber. At Stillwater steam sawmills operated and the logs were also rafted, to continue their journey southward. The floating of logs was the most considerable navigation which the Mississippi River through the State of Minnesota has ever known. It is a familiar fact that a stream which does float logs, and crosses a state boundary, ceases to exist only as a child of the state in which it has its source, but becomes a ward of the Federal Government, subject to all the limitations and advantages which this implies. The transportation of logs and the cutting up of logs in the past have been essential and important engineering activities, which now have practically vanished with the near destruction of the forests.

The water powers at Minneapolis and in the vicinity are the present dominant natural elements, which create engineering activities, which in turn supply other engineering activities. For the future, when population is dense enough, river navigation promises to mean much for Minneapolis, St. Paul, Stillwater and other river cities.

At the present time, by the building of the high dam and lock between Minneapolis and St. Paul, the actual head of navigation for steamboat service on the Mississippi River is brought to Minneapolis. The construction of this vessel lock and dam is one of the fairly recent engineering activities of the Twin Cities. The evolution of the project from a two-lock scheme, which neglected the water power (10,000 horsepower) inevitably present, marks the transition of the Federal Government from the rôle of navigational proprietor alone, blind to other uses, to the larger rôle of master of navigation and water power both. It is a little discouraging, however, to note that three years, during the war period, when our railways were congested getting coal to this water-power city, much steam-generated power was in use and coal consumed, while potential power equivalent to perhaps 50,000 to 100,000 tons of coal a year was wasted through the sluiceways or over the crest of the dam. The dam itself is of the Ambursen type, with normal 30-ft. head, with powerhouse foundations built contemplating a use of 6000 cu. ft. per second in generous river stages. The use of this power awaits action by Congress on a general water power bill.

The main 48-ft. drop at St. Anthony Falls is largely used for grinding flour, the most important engineering activity of Minneapolis. The flour mills have a story of their own, and this will be told at the mills to visitors. The annual production of high-grade flour ranges from 16,000,000 to 20,000,000 barrels.

Half a mile downstream from St. Anthony Falls, a second development exists with a fall of 18 ft., used by the local traction company.

POWER AUXILIARIES NEEDED

As the flow of the Mississippi River sometimes dwindles to 1000 cu.ft. per second in mid-winter attenuation, great steam auxiliaries are everywhere supplied. The Riverside station of the Minneapolis General Electric Co. with its recently installed 25,000-kw. turbogenerator, is the most colossal auxiliary of the Twin Cities, supplying current to the mills and other manufactories, and to public utilities as well, in times of low river flow.

The water power plants and water power sites of the Northern States Power Co. on the Mississippi and St. Croix Rivers represent engineering activities, existing and of the near future, of great interest. The Main St. station develops a portion of the St. Anthony Falls power. The Coon Rapids dam, with 18-ft. head, completed in 1914, is on the Mississippi River about 11 miles above Minneapolis. The Taylor's Falls plant of this company, on the St. Croix River, about 41 miles by transmission line from Minneapolis, has a fall of 60 ft., and 20,000 installed horsepower, mostly used in the Twin Cities for manufacturing and public utilities. The undeveloped dam sites of this company on the St. Croix and Mississippi Rivers represent in their future development problems of exceeding interest. Some of these dams will be on rock foundations and some of them will mean 30 or 40-ft. heads on glacial-drift foundations; which will call for most skillful planning and execution, and will doubtless, when constructed, mean long strides of advance in the art of dam building on porous foundations.

No summary of the engineering activities pivotal on the Twin Cities can omit mention of the great headwater reservoirs of the Mississippi River. These reservoirs have utilized two large and several smaller natural lakes. Their combined capacity is over 100,000,000,000 cu.ft., with a watershed area of about 4000 square miles, and an additional water area of over 400 square miles.

Controlled by the Federal proprietor, who by law must regard navigation, however little it is, as the predominant interest to be served, the release of water is not always beneficial to the water powers, and sometimes is detrimental, as in midwinter when power needs are great and river flow meager. The water powers are really at the present time a greater public resource here than navigation itself. The benefit in vessel draft is about 1 ft. at St. Paul, tapering off to zero perhaps a hundred miles downstream. I imagine it will require an act of Congress to modify the release of reservoir storage so as to give the maximum benefit to the important water powers of the Mississippi. The attitude of the Federal proprietor is likely to change when the Federal water power at the high dam becomes a beneficiary.

The things discussed thus far represent engineering activities which are inherent in the physical and geographical characteristics of the Minnesota region. The existence of these things has caused great aggregations of people to cluster here. This population must be served by many engineering activities. Railways must bring to them many things to supplement the regional products, and must take away the things produced here. Minneapolis and St. Paul are two beads threaded on five transcontinental lines; and four axial north-and-south lines reach toward the Canadian store house and the cotton belt. Locally we are excellently served by a traction system which is suffering from 5-c. fares and franchise uncertainties.

WATER-SUPPLY

The water-supply here cannot fail to represent an engineering activity of transcendent interest — more particularly after July 1. The Mississippi River which has served so efficiently in the past in bringing forest production to Minneapolis brings also the sewage of the City of Anoka, 20 miles upstream. Minneapolis uses the Mississippi River, as it departs southward, to convey its sewage to St. Paul. These two facts made Mississippi River water a bad beverage for Minneapolis, and an impossible source of water-supply for St. Paul. Up to 1912 Minneapolis did pump its domestic supply unpurified from the river, notwithstanding the malign contributions from Anoka. Well-to-do people bought spring water crystalline clear in bottles. Venders sold water as they now sell milk—only seven years ago. The poor and the careless had winter cholera and typhoid fever. The first civic awakening dosed the water with chlorine, which helped while the present mechanical filtration plant was planned and constructed. Investigations for a better water-supply gave consideration to four possible sources. Lake Superior, 140 miles away, was alluring. Mille Lacs, a lake 207 square miles in area, 70 miles away, was enticing. The subterranean artesian supply, rising by gravity to perhaps 100 ft. below the street level here, had many advocates. The Mississippi—"a poor thing, but our own"—could not be overlooked.

The investigations resulted in the rejection of the Lake Superior source as too distant, the Mille Lacs supply as inadequate, the artesian as too hard and too uncertain, and the acceptance of the sometimes turbid, sometimes defiled, but always adequate, Mississippi River water, which by skillful engineering processes has been relieved of its baser ingredients and converted into a crystalline, wholesome supply. The typhoid rate in Minneapolis is singularly low. Schools and hospitals freely use the domestic supply for drinking purposes.

and all persons may meet confidently the era of alcoholically dry days.

St. Paul secures its water-supply from a group of lakes, reinforced by the artesian flow.

In concluding this meandering talk on the things conceived as of vital engineering interest to the Twin Cities and their zones of influence, I wish to speak for a few minutes of the most important inland navigational resource of the world, which now brings steel vessels built on the Clyde in Scotland to our Minnesota harbor at Duluth. As the Mississippi River gives Minnesota a water route to the Gulf of Mexico, the Panama Canal, the Pacific Ocean and the Orient, so the Great Lakes lead to the Gulf of St. Lawrence, the blue Atlantic, England, France, the Mediterranean, the Suez Canal and the Indies. Minneapolis is at the utmost inland reach of the Mississippi, and Duluth at the utmost inland reach of the Great Lakes.

Nowhere exist such alluring, splendidly big engineering things, solved and unsolved, as in this chain of magnificent lakes and stately rivers. It has been my privilege to have had a part in the things solved, and it is still my privilege to work on the things unsolved, and I regard myself as peculiarly blessed in working within such far-reaching horizons.

The hematite ore of Minnesota is vitalized and made marketable—80 per cent of the whole country's supply—by this waterway, which carries the ore to the coal, and brings coal to some of the ore smelted at Duluth. It is probable that the bulk of this ore would lie unmined and unused were it dependent on rail transportation. It costs roundly $1 a ton to get the ore by rail 100 miles from the Missabe Range to the lake shore at Duluth, and it costs $1 to cary this ton of ore 1000 miles to Buffalo.

The tonnage passing the big ship locks in St. Mary's River, at the foot of Lake Superior, exceeds the combined tonnage of the Panama and Suez Canals.

Exit to the sea is still limited by the shallow drafts of the Erie, Welland and St. Lawrence Canals. But the Welland Canal is building now for 25-ft. draft in the canal prism and 30-ft. draft in the locks; and the St. Lawrence waterway will follow this lead. That is one of the big engineering things. The New York State Barge Canal shrinks to a trifling thing, with these great projects evolving.

The Chicago Drainage Canal, diverting a considerable stream of Lake Michigan water, has created the need of the regulation of Lakes Michigan, Huron, Erie and Ontario, by controlling work in the outflow rivers—Niagara and St. Lawrence in particular. St. Mary's River, the outlet of Lake Superior, is already under artificial control, in the interests of navigation and water power; and projects are maturing for the manipulation of the outflow in the Niagara and St. Lawrence Rivers. Each year, to a greater extent, it is realized that after all the lakes are storage reservoirs of almost limitless capacity and incalculable value. Nature has one sole motive in her operation of the outflow rivers, which is to rush the waters to the sea. The water returns through the heavens, and the endless cycle of rainfall and outflow goes on. But this water, when engineers intervene, must be made to serve better the artificial uses of navigation and power.

So it will come to the point where we must *budget* the water eventually—why not now?

Budgeting the water means spending it systematically and scientifically, in well thought out apportionments, which will make the Niagara and the St. Lawrence better navigable ways and better water power streams.

Water power is really the thing which inflames the imagination. Aladdin with his lamp never conjured genii to serve him so omnipotent as engineers have made emerge from seaward-bound waters. And the Niagara and the St. Lawrence descending to the ocean held in their depths potentialities to assume tremendous burdens of labor which still pitilessly strain human muscles.

In these things of which I have spoken I conceive to be in the largest sense the significant engineering activities of the Twin Cities.

Results of Long-Time Tests of Creosote-Treated Fence Posts

By C. H. Teesdale

Engineer in Forest Products, Forest Products Laboratory, Madison, Wis.

Over 2000 fence-posts were treated and set during 1908 and 1909 by the United States Forest Service, in coöperation with the University of Minnesota. Quite a number of these posts were treated with water-gas-tar creosote and others with coal-tar creosote, the hot and cold bath open-tank method being used and the entire post treated. An inspection in the summer of 1918, 9½ years after the posts were set, gives some interesting information, as it affords a direct comparison between coal-tar creosote and water-gas-tar creosote as wood preservatives. The table gives results from three inspections of these posts in 1913, 1916 and 1918.

BASSWOOD AND RED OAK POSTS TREATED BY COAL-TAR AND WATER-GAS-TAR CREOSOTE

Treatment	Species	Years of Service	Inspected	Number Tested	Good, %	Partly Decayed, %	Badly Decayed, %	Removed Account Decay, %
Coal-tar	Basswood	4½	1913	458	93.0	6.3	0.5	0.2
Creosote	Basswood	7½	1916	484	87.0	9.5	3.1	0.4
Creosote	Basswood	9½	1918	337	73.5	17.4	4.4	4.7
Water	Basswood	4½	1913	35	100.0	....	...	...
Gas-tar	Basswood	7½	1916	36	86.0	8.3	5.6	...
Creosote	Basswood	9½	1918	27	78.0	14.7	7.3	...
Coal-tar	Red Oak	4½	1913	226	100.0	....	...	...
Coal-tar	Red Oak	7½	1916	325	99.2	0.8	...	...
Creosote	Red Oak	9½	1918	330	94.5	1.8	1.2	2.5
Water	Red Oak	4½	1913	42	100.0	....	...	...
Gas-tar	Red Oak	7½	1916	98	97.0	1.0	2.0	...
Creosote	Red Oak	9½	1918	93	92.5	5.4	...	2.1

It is seen that at the last inspection 73.5% of the basswood treated with coal-tar creosote and 78% of that treated with water-gas-tar creosote were still sound. In the case of red oak 94½% treated with coal-tar creosote and 92½% treated with water-gas-tar creosote were still sound. It was found that the basswood posts did not take the treatment well, and for this reason this species is not recommended for open-tank treatment.

River Water Treated for Compensation Supply

To fulfil its obligations to supply compensation water to satisfy riparian or power rights, the City of Sheffield, England, will treat 9,000,000 Imp. gal. of Don River water per day to fit it for industrial use and pump it 11 miles back into the Loxley and Rivelen Rivers, tributaries of the Don. The water will be taken from the Don below Sheffield. Parliamentary authorization was required, and the committee hearing occupied 13 days. The London *Surveyor* states that this is new principle as to compensation water.

Enlargement of the Yakima-Tieton Main Canal

Half Circular Section of Reinforced Concrete Increased in Height—Bonus System Successful in Overcoming Great Scarcity of Labor at Favorable Cost

By G. C. Finley
Engineer United States Reclamation Service, Yakima, Wash.

UPON the extension of the boundaries of the Tieton Project of the Reclamation Service in the State of Washington from 24,000 acres to 32,000 acres, it became necessary to increase the capacity of the Tieton Canal. The reinforced-concrete section of this canal was circular, open at the top, slightly exceeding a semi-circle in cross-section. To enlarge the canal, a new top segment on each side was cast in place after the old concrete bracing ties were removed and a notch was cut for bonding the old to the new concrete. An acute labor situation was successfully met by introducing a bonus system, which also resulted in more than doubling the amount done per day, making possible the completion of the work, as desired, last fall.

The Tieton Canal was constructed by the United States Reclamation Service during the period from 1907 to 1909, and has been used to carry water for irrigation for the past eight years. The Tieton project, to which this canal supplies water, covers 32,000 acres, of which 26,000 acres are in a high state of cultivation. This past season there was produced $2,500,000 worth of foodstuffs, and the water duty was 2.36 acre-feet delivered on the farms.

The canal was originally constructed of reinforced concrete in sections on the flats along the river, the sections being transported to the canal site, then placed and grouted together. The sections were circular in form, 8 ft. 3⅝ in. in diameter, the top edge being 22 in. above the horizontal diameter and tied together by a 4 x 6-in. reinforced-concrete bar. They were built 2 ft. long and 4 in. thick, reinforced with ¼-in. steel longitudinally and ⅜-in. circumferentially.

The canal varies in elevation above the river from 0 at the point of diversion to 500 ft. at the lower end, and is constructed along a very rough and precipitous cañon wall. Fig. 1 shows a section of the original canal as completed in 1909.

Enlargement Necessary—The canal was designed and constructed for a project of 24,000 acres, but the boundaries of the project were subsequently extended to embrace 32,000 acres. This increase in area and a growth of algæ which reduced its capacity somewhat made it necessary to enlarge the canal section to carry the required quantity of water. The enlargement of the entire canal was begun in the fall of 1916, was continued in the fall of 1917 and then finally completed in the fall of 1918. Due to weather conditions in the Tieton Cañon and the necessity for continuing the operation of the canal, the working season was only from the first of October to about the middle of November, or about seven weeks each year.

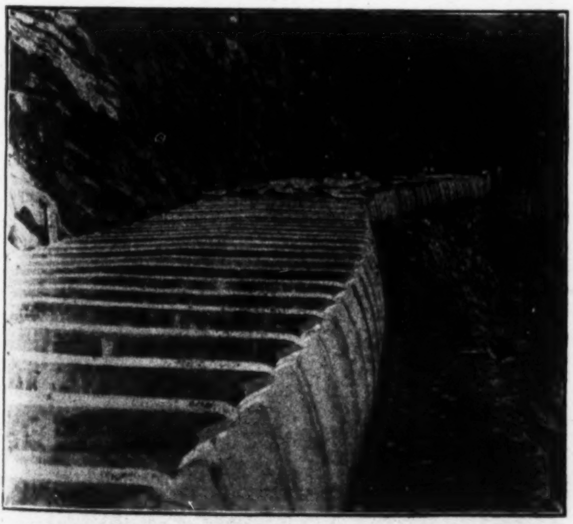


FIG. 1. ORIGINAL CANAL SECTION AS COMPLETED IN 1909

FIG. 2. TRANSPORTING CEMENT BY TRAMWAY

The necessary materials consisted of cement, sand and gravel, structural and reinforcing steel, and lumber for forms. The cement, steel and lumber were hauled by motor truck from Naches, an average distance of 15 miles. The aggregate was all hauled by teams from various points along the river, either direct to the canal or to the foot of tramways. The sand was screened through a ¼-in. mesh, and the gravel passed through a 1¼-in. mesh. Fig. 2 shows how the cement was transported at one point of the canal by inclined track and tramway.

One of the big problems was the distribution of materials along the canal. There were various parts of the canal up to 1½ miles in length where materials were delivered at only one point. This distribution was made by using mules hitched to small cars, as in Fig. 3. This work was first attempted by using men and cars, but the mules after the first few days were found to haul more load and make better time. The small stream of water shown running in the canal was used for the hoist boiler and for mixing concrete.

The preparation for joining the new work to the top of the original canal meant the removing of the concrete crossbars and the chiseling of a groove along the top of each side of the canal. This chiseling was first done by hand, but later by using two small pistol-grip

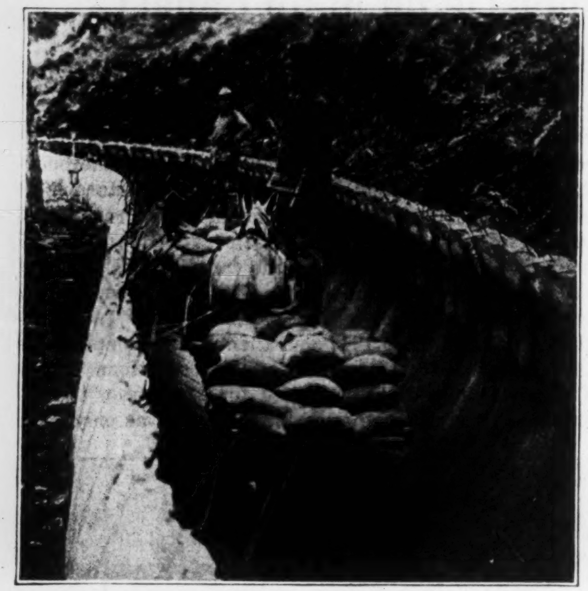


FIG. 3. MULES AND SMALL CARS USED FOR DISTRIBUTION OF MATERIAL ALONG CANAL

drilling machines run by an air compressor, operated by hand. Fig. 4 shows the canal as prepared for the enlargement. The hammers used for chiseling along the canal were found to work very successfully, in time and cost.

The old concrete crossbars were broken up and used for aggregate, and the reinforcing steel was salvaged. The new crossbars were made from 3-in. standard channels spaced 5 ft. apart and extended 6 in. into the old concrete. No provision for a contraction point was made in the new work, as 1% of temperature steel was provided and the work was all done during cool weather. To date there have not been any serious temperature cracks in the entire canal. The addition as constructed gave the canal a certain longitudinal strength as a beam, which may be of value in case of undermining. The maintenance work on the repair of the joints each season, due to temperature, has been materially reduced. Fig. 4 gives the general dimensions and details of the enlarged section.

Form Construction—Forms made of 1-in. surfaced cedar were used for the work and placed to grade by using a Y-level. The inside surfaces were all pointed with linseed oil twice during each season. Fig. 5 shows how the forms were placed, also the structural and reinforced steel and materials as they were placed.

Fig. 6 shows the manner in which the concrete was mixed and placed. The work was carried on by a number of crews of about 18 men, each in charge of a foreman. Each crew used about 600 ft. of forms, of which about 250 ft. were removed each day and moved ahead and refilled. The mixing and placing were all done by hand, the mix being 1:2:4 with sand and gravel aggregate. The mixing was done on a board supported above the canal by wooden horses which were moved forward along the canal. The concrete when mixed was shoveled direct into the forms. The forms were removed in 48 hours, and, because of careful mixing and tamping very little finishing was found necessary. The original canal was raised by placing the forms tangent to the curve a sufficient distance to make 1 ft. in elevation. The progress of the work from the beginning in 1916 until the close in 1918 varied per crew from 140 to 400 lin.ft. of canal per day.

Fig. 7 gives a view of the present completed canal, showing the steel crossbars, new work and the point of contact between the original canal and the enlargement. The capacity has been increased from 300 cu.ft. per second to about 350, which will be sufficient for the full development of the project.

Weather conditions during the working season on the canal were generally favorable, and especially during 1918 the weather was perfect, with no time lost on account of rain and no concrete damaged on account of cold weather. There was an average of 12 hours daylight during the working season.

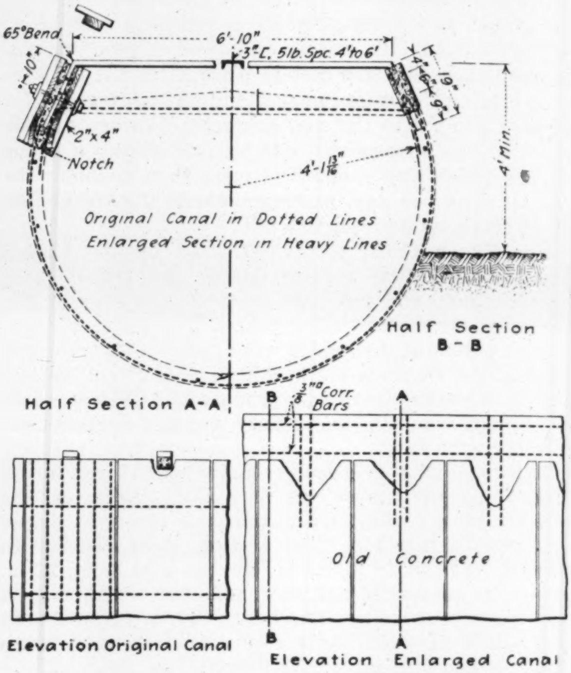


FIG. 4. DETAILS OF ORIGINAL AND ENLARGED SYSTEMS

Labor Situation—The local supply of labor during 1918 decreased rapidly from early spring on account of shipbuilding, logging and other war industries offering high wages on the coast, and, beginning with the need for farm labor in the valley about June 1, the labor situation in general began to look very serious for construc-

FIG. 5. BRACING AND FORMS IN PLACE

tion work of any kind. Wages were increased about 50%, which made the cost almost prohibitive.

The only time during which the enlargement work on the Tieton Canal could be done was the month of October and the first half of November. This was during the time when the farmers were harvesting their third cutting of alfalfa and practically the entire apple and potato crops, all three of which are produced in large quantities in the Yakima Valley. Prices for farm crops in general were most favorable, so that farmers were paying almost any price in order to obtain sufficient labor for harvesting these crops. Concrete work, especially where the mixing is done by hand, is not attractive to the average laborer because everyone knows it is hard work. Furthermore, a similar job was in progress where wages and living conditions were favorable, only about one-third the distance from Yakima, and this camp was not able to obtain sufficient men.

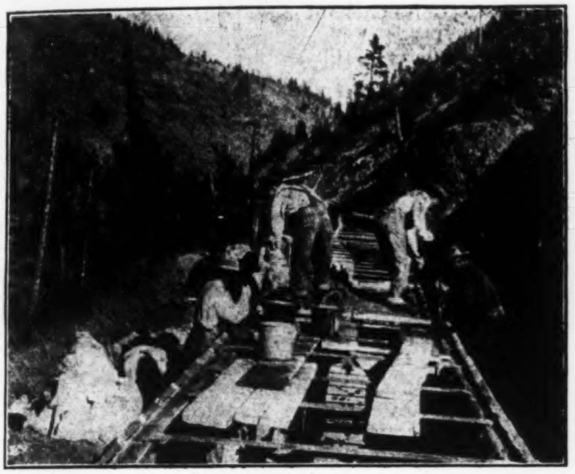


FIG. 6. HOW CONCRETE WAS MIXED AND PLACED

The estimate of the number of men necessary to complete the remaining work on the canal in the time required was about 160. This meant five crews of about 18 men each, mixing and placing, and the necessary labor to supply material. There were about 40 men in camp who were doing such preliminary work as building roads, erecting a tramway, building forms and screening sand and gravel. On Oct. 1 we were in need of about 120 more men. Labor for construction work in the Yakima Valley is obtained through Spokane and Seattle; many make Yakima their local headquarters.

Bonus System—In order to assist in the solving of the problem of getting sufficient labor while weather conditions were favorable, a bonus system of wages was adopted. The work had been started in 1916 and continued in 1917, and the plans were to complete the job in 1918. There were 126 stations completed in 1916; 97 stations in 1917, and 254 stations remaining. There had always been a labor shortage on this work, but especially during 1917. In 1916 the average progress was 150 ft. per day; in 1917 this average was brought up to 160 ft. per day.

As is the practice in establishing a bonus rate, the cost is divided equally between the employer and employee for any amount of work done over and above what is considered an average day's work, amounting to about 3c. per man per foot. Laborers must have a certain amount of bonus in order to become interested, and it was decided that 140 ft. per day should be counted as a good day's work. Therefore, each man in the crew received 1½c. per foot each day for any amount completed over 140 ft. The granting of this bonus was contingent on a man working 10 days, and the amount of bonus was determined on each 10-day period.

COST OF ENLARGEMENT WORK—TIETON MAIN CANAL

	1916	1917	1918	Total
General Costs				
Stations enlarged during year	126	97	254	477
Number of yards of concrete placed	433	333	874	1,640
Cement delivered	$2,926.36	$2,373.34	$4,767.87	$8,567.57
Sand and gravel delivered	4,292.25	3,491.71	7,679.55	15,463.51
Forms, labor and materials	2,583.61	1,655.82	6,632.71	10,872.14
Mixing and placing concrete	1,921.22	1,881.47	11,535.61	15,338.30
Finishing and protection	666.47	759.39	2,715.97	4,141.83
Equipment charge	831.46	375.77	1,854.73	3,061.96
Unit Costs				
Cost of cement delivered in barrels	$3.85	$4.10	$4.15	......
Lumber delivered—per thousand	11.00	......	17.00	......
Wages paid for labor—base rate	2.40	3.00	4.50	......
Cost of reinforcing steel—per lb. in place	0.045	0.054	0.062	......
Cost per cubic yard of concrete	30.54	31.64	40.26	35.00
Final Costs				
Preparation, chiseling, etc	$1,793.87	$1,995.37	$7,458.03	$12,747.27
Reinforcing steel in place	1,175.52	1,101.29	3,738.40	6,015.21
Steel crossbars	5,656.11	6,137.41	12,276.76	24,070.28
General expense	1,595.40	2,146.36	5,268.44	9,010.20
Total cost of work	23,442.27	21,917.93	63,928.07	109,288.27
Cost per lineal foot of canal	1.86	2.26	2.52	2.30

The cement haul was by teams in 1916 and 1917, an average distance of 18 and 16 miles. In 1918 motor trucks were used and the average distance was only 10 miles.

No lumber was bought in 1917, old forms being used.

Structural steel purchased in 1918 was 1½-in. reinforcing steel and not 3-in. channels, as previously used, because it was impossible to purchase the standard channels.

During the first two bonus periods the average amount of work was about 200 ft. per day. During the third bonus period this average was brought up to 220 ft. per day. The interest in this system of paying for work seemed to grow from the beginning of the work, and during the last period, which was from Nov. 10 to the date of completion, Nov. 18, 1918, the average was 300 ft. per day, with a maximum of 404 feet.

FIG. 7. COMPLETED CANAL SECTION AFTER ENLARGEMENT

Without a doubt, the result of this system of wages was very material in obtaining sufficient men to complete the work. This scarcity of labor was such that only three crews were working until Oct. 25, and four crews from this date until the completion of the work. There was an increase daily of the number of men in camp from 40 at the beginning of October to a maximum of 160, the increase being gradual. There was very little trouble in holding the men on the work, as wages in general were good and so was the mess.

Figuring the cost of the work done in 1918 carried out under the prevailing wages without bonus, using the work done in 1916 as a basis, it amounts to $3 per lineal foot, which was the estimate prepared for the work. The main result of the bonus system was that it proved to be a sound basis for productive efficiency. The entire canal was completed, and the figures show that the advance in costs in 1918 is considerably below the general advance in labor and materials.

The work was done under the supervision of R. K. Tiffany, project manager of the Yakima Project, with the writer as engineer in direct charge of the work.

Save $10,000 by Breaking Old Stone Across the Bed

Salvaged stone from an old boiler house at the river pumping station of the Louisville Water Co. was broken across the bed and its use on the new boiler house under erection has saved $10,000.

The old structure was 75 ft. square and 25 ft. high, and built of solid stone from Bedford, Ind. The new one is 75 x 150 ft. in plan and varies in height from 25 to 85 ft. It is similar in construction to the pumping station described in *Engineering News-Record* of May 9, 1918, p. 905, being faced with 6 in. of stone and backed up with reinforced concrete. The stone in the old building varied in thickness from 6 to 8 in. and in length from 3 to 4 ft., all being headers 2 ft. wide, faced on both inside and outside. Thus, hauling the stone six miles each way to the mill for sawing and refacing would have entailed considerable expense, making the cost practically the same as that of new stone. All of the stones were laid on their beds, and every stoneman who passed on the work said it could not be split across the bed except by sawing and drilling. The best price obtainable for sawing and refacing with a rock face and loading on cars at the factory was 57c. per cubic foot. The 25,000 cu.ft. has been done, according to J. A. Wilson, chief engineer and superintendent for 14c. per cubic foot with little breakage.

The splitting of each stone into three pieces was done by laying the piece to be broken on a bench made of 12 x 12-in. timbers, placing under the stone a $\frac{3}{4}$-in. iron rod and striking 6 to 10 blows with a 12-lb. hammer.

Calcium-Chloride Solution and Setting of Concrete

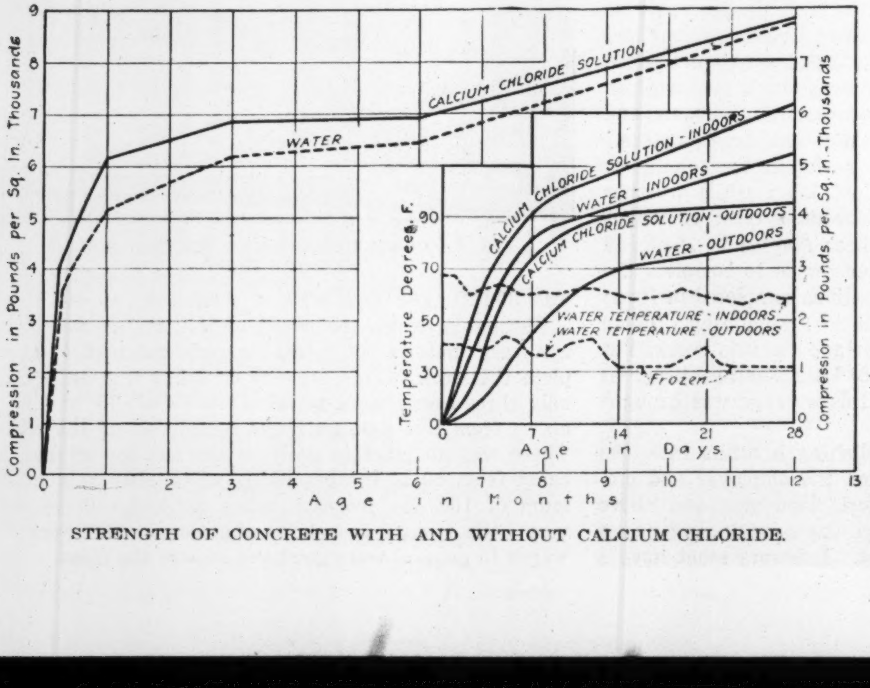
Results of Numerous Tests Show That Strength of Concrete Is Not Lowered—Hastens Setting Materially

CALCIUM-CHLORIDE solution materially hastens the setting of portland-cement concrete, and new tests have shown that up to the end of one year the strength of the product is not injured, according to the annual report of H. Eltinge Breed, until recently first deputy commissioner of highways, New York State Highway Department, and now consulting highway engineer, New York City.

In leading up to the portion of his report reproduced below, Mr. Breed stated that, although the department had had unusual success in doing its own construction work upon its unfinished contracts—in fact, so successful that the question is raised as to whether it might not be advantageous for highway departments to be authorized and prepared in emergencies to do their own construction as well as engineering work—still, he felt that perhaps the best contribution made this year by his department to the good-roads movement in the state and elsewhere was through the medium of its research work.

Important phases of this research work are the impact studies, described in *Engineering News-Record*, June 5, 1919, p. 1103, and the experiments with calcium-chloride solution. The following is an extract from Mr. Breed's report referring to the latter:

> A series of tests were completed to determine the advantages in use of calcium-chloride solution to hasten the setting of cement concrete. It has been stated that by use of this solution concrete gun foundations could be put in use three days after construction. The tests made by this department were for the purpose of determining whether the rapid setting would decrease the ultimate strength which the concrete would attain. It is well known that abnormally quick setting cements do not usually make concrete which is as strong ultimately as the slower setting cements.
>
> Laboratory test samples were prepared and tested at ages varying from one day to one year. The results are shown graphically herewith. They indicate the use of a 4 per cent. solution of calcium chloride as mixing water for cement concrete increases the strength attained at all ages up to one year.
>
> Beyond that it is still problematical, but what evidence we have indicates certainly no deterioration, and a probable continued, but slower, gain. The maximum increase appears to be about 20 per cent. at the age of one month.
>
> The importance of this determination will be appreciated when it is considered that by the use of this solution it will be possible not only for the contractor but also for the public to make use of cement-concrete pavements a few days after they have been laid, without risk of damage. It will mean the completion of much work in the autumn which has hitherto had to wait over unfinished until spring.



STRENGTH OF CONCRETE WITH AND WITHOUT CALCIUM CHLORIDE.

Sinking and Concreting Mine Shaft 936 Feet Deep

Lining and Walls of Four-Compartment Shaft No. 5 of Miami Copper Company Concreted Simultaneously With Excavation Operations—Blasting Impossible Below 200-Foot Depth

By Richard L. Russell
Superintendent, The Foundation Company, Miami, Ariz.

SEVERAL novel details in underground construction were developed and applied in the sinking and concreting of shaft No. 5 of the Miami Copper Co. at Miami, Ariz. This shaft has four compartments and is 936 ft. deep, and the concrete lining was carried on at the same time as, and without interference with, the sinking, 700 ft. of the shaft lining having been placed and two large stations having been excavated and concreted by the time the shaft had reached its final depth. The section, shown in Fig. 1, is 13 ft. x 16 ft. 4 in. clear and required an excavated section 15 x 19 feet.

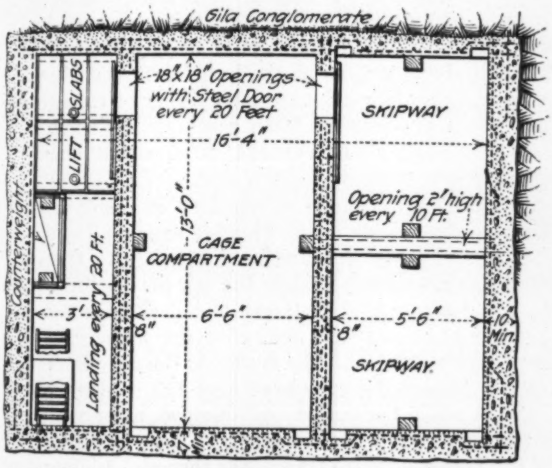

Gila Conglomerate
SLABS
LIFT
18"x18" Openings with Steel Door every 20 Feet
16'-4"
SKIPWAY
Opening 2' high every 10 Ft.
13'-0"
Counterweight
Landing every 20 Ft.
CAGE COMPARTMENT
3'
6'-6"
8"
5'-6"
8"
10" Min.
SKIPWAY

FIG. 1. CROSS-SECTION OF SHAFT, SHOWING CONCRETE LINING

The entire shaft lies in what is locally known as Gila conglomerate, a formation which is typical hardpan rather than a true conglomerate. Although the material is very hard, no blasting was done after water was encountered at a depth of about 200 ft., it being found practically impossible to remove the powder fumes from the fissures in the water-laden hardpan. Light jackhamers with "bull points" from 2 to 3 ft. long were used to break the ground. This method, besides permitting the walls to be trimmed neatly, with far less overbreak than would result from blasting, permitted a progress of 100 ft. per month.

The shaft was located on the side and near the top of a small, steep hill, the top of which was graded down by the contractor to the elevation of the collar of the shaft. The plant layout is shown in Fig. 2. The shaft being near the present operating plant of the Miami Copper Co., the air, water and electricity were delivered by that company at the collar of the shaft.

The contractor began erecting the headframe and other working structures Dec. 11, 1917, and hand excavated for the top 25 ft. of shaft without blasting, in order to avoid disturbing the ground adjacent to the collar. As the hoist could not be delivered until the end of January, 1918, the contractor obtained, late in December, permission to drift in from a tunnel of the Miami Copper Co. which passed within 20 ft. of the southerly corner of the shaft at a depth of 118 ft. This permitted the tramming of muck by hand a distance of about 300 ft. through the tunnel to a dump in the gulch at the tunnel entrance.

After the line of the shaft was reached, a raise was driven for the purpose of meeting the excavation from the surface. This raise was 2½ x 6 ft., of which 2½ x 2 ft. was a manway with ladders and the remaining space was occupied by a cribbed chute. At the tunnel level the drift was widened and the full shaft section excavated to make a working chamber large enough to accommodate a switch, which permitted the sidetracking of an empty car while another car was being loaded.

The full section of the shaft was then broken down through this chute by the use of 40% dynamite.

The drift was started Dec. 26, 1917, and completed Jan. 1, 1918; the raise was started Jan. 2, 1918, and completed at 6 a.m. Jan. 8, 1919—a rate of 5 ft. per eight-hour shift. The full section of shaft was excavated to the level of the tunnel Feb. 20, 1919, and 60 ft. of shaft had been concreted in the same period, as follows:

As soon as the excavation had reached a depth of 35 ft. the forms for the 25-ft. collar were started on 12 x

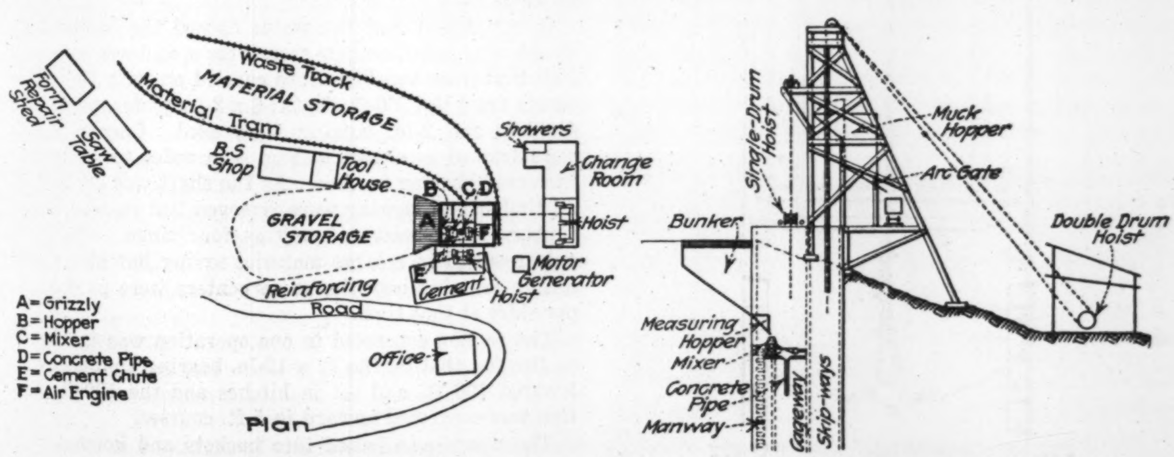

Form Repair Shed
Saw Table
Waste Track
MATERIAL STORAGE
Material Tram
B.S Shop
Tool House
B
C,D
A
E
F
GRAVEL STORAGE
Reinforcing
Road
Cement
Showers
Change Room
Hoist
Motor Generator
Hoist
Office
Plan
A= Grizzly
B= Hopper
C= Mixer
D= Concrete Pipe
E= Cement Chute
F= Air Engine
Single-Drum Hoist
Muck Hopper
Arc Gate
Bunker
Double Drum Hoist
Measuring Hopper
Mixer
Concrete Pipe
Manway
Cageway
Skip-ways

FIG. 20. PLAN OF CONSTRUCTION-PLANT LAYOUT FOR SINKING AND CONCRETING MINE SHAFT

12-in. bearing timbers placed in 18-in. hitches cut in the hardpan walls. No back forms were used, and the whole 25 ft. was poured continuously. As no water was encountered, no timbering was necessary.

While the collar was being concreted, the excavation had progressed to a depth of 55 ft. Hitches were again cut in the walls, and the three 12 x 12-in. bearing timbers were lowered into them. On these bearing timbers was placed a timber frame, the exact size of the concreted section, which served both as a bottom form and a sill on which the form panels could be set. The vertical reinforcing rods were then hooked to the verticals which had been left projecting from the bottom of the previous concrete, and the horizontal reinforcing was wired to the verticals. A 5-ft. section of forms was then placed and concrete was poured, this process continuing until the concrete was carried up to the bottom of the collar section. It was found that the ground would safely permit the opening up of a depth of fully 25 ft. of shaft without lateral support, and the concrete was carried down in 20-ft. sections by the above process for the first 200 ft. of the shaft.

As soon as the raise from the tunnel level was finished and the breaking-down process was well under way, a small air hoist was installed at the tunnel level, and the two skip compartments were sunk and timbered as a pilot shaft, this muck being hoisted to the tunnel level and also trammed through the tunnel. Thus excavation was being carried on simultaneously at two levels without interference, while waiting for the double hoist to be delivered.

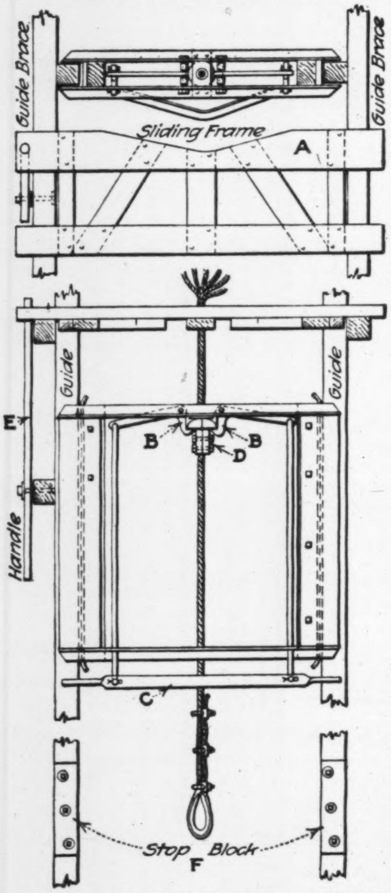


FIG. 3. CROSS-HEAD AND SAFETY DEVICES

By the time the whole shaft had been excavated down to the tunnel level a two-compartment pilot shaft 100 ft. deep was ready, one compartment serving as a chute through which to draw off the muck from breaking down the full section of the shaft and the other a hoisting compartment to the tunnel level through which the muck was still trammed.

Water was encountered at this depth (218 ft. below the surface) and while the full shaft section was being excavated to this depth the double-drum hoist was delivered and installed and a special crosshead was devised to comply with the requirements of the Arizona mining laws and at the same time permit the bucket to be dumped into the receiving bin in the headframe without excessively increasing the height of the latter.

As it was neither possible nor desirable to keep the bucket guides extended nearer the bottom than 15 to 30 ft. while sinking was in progress, this crosshead had to be such that it could be stopped at any desired point in the shaft as well as at the headframe and allow the bucket or skip to continue on, for filling or changing at the bottom or dumping when reaching the headframe. This was accomplished by the arrangement shown in Fig. 3.

A lug D was securely clamped to the cable about 6 ft. above the shackle loop. This lug engaged the dogs B and thus attached the crosshead securely to the cable. When the crosshead reached the top of the headframe, the top lander pulled the lever E and slid the frame A over against the guides and gave the lowering signal. The bumper C then hit the frame A, the dogs B released the lug D and the crosshead was left resting on the frame A while the bucket was dumped, after which the latter was raised high enough to take the crosshead off the frame A. The frame was then slid back and the bucket with the crosshead attached was ready for lowering. At the bottom of the shaft, or at any other point where free use of the bucket was desired, stop blocks E were bolted to the guides and performed the same function as the frame A at the headframe. This crosshead gave perfect satisfaction.

From the 218-ft. depth to the bottom the full section of shaft was excavated by the use of bull points; three men using jackhamers working them into the material loosened all that four muckers could load into the buckets.

It was found that the water caused the hardpan to slough very treacherously soon after a wall was exposed. Full timbering was therefore carried on with the excavation from the 250-ft. depth; 8 x 8-in. plates, posts and dividers and 2-in. lagging were used. Corner joints were framed as shown in Fig. 4 in order to secure an increased bearing surface. As the shaft was concreted, all timber and lagging were removed and re-used, some timbers being used as many as four times. This not only resulted in a large material saving but also saved a high framing expense, as carpenters were paid $7.25 per shift at that time.

The section concreted in one operation was increased to 100 ft.; that is, the 12 x 12-in. bearing timbers were lowered 100 ft. and set in hitches and the 100-ft. section was concreted upward in 5-ft. courses.

The water was bailed into buckets and hoisted, five buckets per hour, or 600 gal. which, together with the

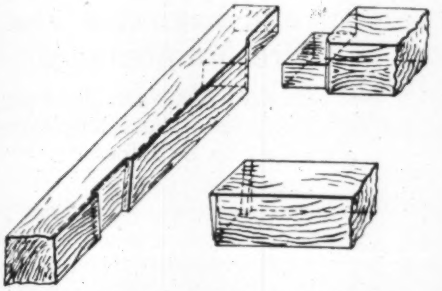


FIG. 4. DETAIL OF TIMBER FRAMING

water shoveled and hoisted with the muck, was sufficient to keep the bottom free. A timber bulkhead 6 in. thick was kept not over 50 ft. above the men working in the bottom over all of the shaft except the two skip compartments. While the reinforcing and forms were being set in one of the skip compartments all the hoisting from the bottom was done in the other compartments, and after the forms were set one of the skip compartments was bulkheaded at the level of the top of the forms, as were the cage and manway compartments, one skipway only being left open for hoisting.

Upon the completion by the contractor of the contract for lining with concrete the old shaft No. 3 of the Miami Copper Co., a mile distant from the new shaft No. 5, about Apr. 1, 1918, the single-drum hoist from shaft No. 3 was installed at shaft No. 5, as shown in Fig. 2, working from extension timbers from the same headframe and operating in the cage compartment.

This hoist handled all reinforcing, forms, concrete pipes and timbers to the form and concrete gangs, and as there was always a bulkhead in this compartment over the men in the bottom, the danger of working at two different levels was greatly lessened. This hoist was also used in pulling and resetting the rather heavy wooden forms in all compartments. It proved nearly as fast as a derrick and obviated the use of the slow and expensive block-and-tackle method.

Separate bunkers for sand and gravel were excavated immediately adjacent to the collar of the shaft at the manway end, and the sand and rock from the crushing plant, which was installed in the creek bed, was dumped through grizzlies into these hoppers. Through openings left in the shaft collar, with arc gates, the sand and stone passed into measuring hoppers inside the manway and cage compartments. These hoppers were of the proper dimension for a one-bag batch, and from these hoppers the material was chuted to a batch mixer located in the shaft cageway compartment 20 ft. below the surface. The cement was slid in bags down a chute from the door of the cement shed through an opening in the south side of the cageway compartment directly to the mixing plant.

The mixer, of 8-cu.ft. capacity, was belt-driven from a small air hoist set at the same level. This plant occupied the southerly half of the cage compartment and manway compartment, the wall between the two being omitted temporarily for its accommodation, the whole plant occupying an area only 7 ft. x 9½ ft., as clearance for buckets and material handled by the small hoist in the cage compartment had to be maintained at all times.

The 1:2:4 mixture of concrete was dumped from the mixer through a 6-in. iron pipe with screwed couplings and with the fall broken at junction boxes every 300 ft. and at the swiveled chute which carried the concrete to the forms around the shaft. This pipe was supported by timber clamps resting on 6 x 8-in. timbers carried in recesses left in the concrete when poured, and on the shaft timbers where the concrete had not yet been placed.

In the manway compartment the permanent iron ladders were placed in position as the concrete lining was placed. In advance of that, the permanent ladders were placed on temporary wooden landings. Concrete-lined stations were located at 235, 490, 576, 643, 729, 770, 835 and 920 ft. below the surface. The 490- and 576-, also the 770- and 835-ft. stations were the top and bottom of future ore pockets. The ore pocket between the 643- and 729-ft. stations is now being constructed.

To facilitate the construction of these pockets, 4 x 4-ft. cribbed chutes were excavated before the shaft was concreted just outside of the concrete walls of the northwestern skipway, with a gate and a chute leading into the skipway at the bottom of each pocketway. When the ore pockets are constructed the muck will be shoveled into these chutes and drawn off at the bottom and the cribbing removed as the excavation proceeds, thus effecting a considerable economy in the cost of excavation.

For the hoisting in the cageway compartment, cable guides were installed, carried on reels on the headframe and unreeled as the shaft was deepened, and even at the full depth of 936 ft. these did not oscillate enough to cause any difficulty.

To avoid trouble with the permanent guides from the use of expansion bolt fastenings, and to avoid the irregular spacing of bolt holes in the guides if anchor bolts were set in the concrete as it was poured, a novel guide fastener was designed. It was built in the concrete as poured, but still allowed drilling of the bolt holes by templet after the shaft was completed and allowed a leeway for any reasonable irregularity in location while pouring. These fasteners are shown in Fig. 5.

A chart was kept showing the progress made each day by each shift on each part of the work. A large-scale elevation of the whole shaft, stations, tunnels and ore pockets was made, and a certain portion was allotted to excavation, timbering, form work, reinforcing, concreting, etc. To each shift boss was asigned a certain color, and the portion of the chart representing the location and the amount of work done was colored for the shift doing the work. The date was then written through the color. Quantities for this purpose were determined both by actual measurement and by the foremen's reports. For instance, the number of buckets of

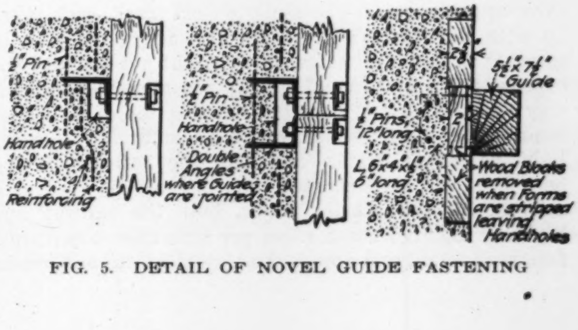

½" Pin
Handhole
Reinforcing
½" Pin
Handhole
Double Angles where Guides are jointed
5½" x 7½" Guide
½" Pins, 12" long
∠ 6x4x½" 6" long
Wood Blocks removed when Forms are stripped leaving Handholes

FIG. 5. DETAIL OF NOVEL GUIDE FASTENING

muck hoisted was a close check on the advance in sinking for that shift. The foremen were never formally notified that this chart was being kept, but within two days from the time it was instituted they all seemed familiar with it and watched it closely.

This chart not only furnished information as to progress at all times and gave a comparison of the work accomplished by each shift, but it also served as a record which showed at a glance which shift boss had excavated any part of the work. If faulty workmanship had been discovered it would have been simple to trace it.

Probably the greatest value of the chart, however, lay in the competition it aroused among the shift bosses, who realized that their work was being closely followed and that they were getting due credit.

In spite of the fact that the hardpan through which the shaft was driven is so firm that all former shaft sinking in the district had been done by blasting, it sloughed badly upon exposure to the air, and this without warning. Ground which had been sounded and found solid but a few minutes before would suddenly fall with no warning, so that the sinking combined the difficulties of both hard-rock work and soft, treacherous ground. In spite of this fact, there have been no serious accidents to either construction or the employees during the entire work, which means that while every precaution has been taken to safeguard the men and the work, good luck has also favored the job.

The Foundation Co., of New York City, did this work by contract, under the supervision of its Pacific Coast department, with Bayly Hipkins, vice-president and Pacific Coast manager and A. S. Lilley assistant manager; and under the direct charge of the writer as superintendent, James H. LeFeaver as assistant superintendent and John Sheehy as night superintendent.

Suggests Light Railway Feeder Lines

Light railways of the type used between the main-line railways and trenches during the world war were suggested as having a definite transportation value in sparsely settled countries, in a paper by Charles F. Lang, president of the Lakewood Engineering Co., read before the Pan-American Commercial Congress in Washington. Mr. Lang called attention to the developments in detail design and construction which were brought about by the war use of the narrow-gage railway, with its readily portable track and tie system. He suggested the use of such a railway to supplement the highway and the standard-gage railroad. He said there were a number of places where both the highway and the main-line railway were too expensive to build, particularly in undeveloped stretches of territory. The light railway could be laid out on fairly steep grades with high curvature through undeveloped country with a minimum of earthwork, and there could be in every farm or mine area a personally owned track, each tying up with the through line. He also suggested that in sparsely settled territories which might not warrant the expense for a first-class highway the narrow-gage railway could be used (1) for the construction of a cheaper improved highway which would be sufficient to carry light passenger traffic, and (2) the railway having been used for such construction, it could be used as a railway for the heavier traffic, both the railway and highway together costing less per mile than a hard-surface road would cost now in the United States or Canada.

Important and Neglected Features of Tire Maintenance

Tire Cost and Fuel Cost Are Normally About Equal For Large Trucks—Abuse May Cause Tire Cost to Be Excessive

By A. F. Masury

Chief Engineer, International Motor Company, New York City

Large numbers of persons who use motor trucks—such as contractors—consider that economy, as far as the trucks are concerned, means gasoline saving. However, saving of tire cost is equally important. On a heavy truck the tire cost and fuel cost are about equal. On lighter vehicles tire cost is slightly less than fuel cost, unless pneumatic tires are used, when the tire cost will slightly exceed fuel cost. Why, then, should we hear so much about means of saving gasoline and so little about economizing on tires? While the two items of cost are normally of equal magnitude, abuse of tires can raise their cost out of all proportion to their normal cost, and can swell this item far beyond the utmost extravagance in fuel.

It is a fortunate circumstance that gasoline waste inevitably limits the ability of the vehicle to perform, and that unless the carburetor adjustment is set for reasonable economy the truck will hardly operate at all and consequently cannot consume an excessive amount of gasoline. On the contrary, tire abuse, unfortunately, limits the performance of the vehicle but little, and in addition gives rise to increased chassis maintenance and even increased fuel cost.

Truck owners are often encountered who are extremely particular about carburetor adjustment, who employ the latest air-warming devices, and insist that the engine be shut off at each stop, but they allow the tires to remain cut and slivered, the wheels out of line, and the truck running daily on the car tracks. The truck will actually consume less gasoline without a governor than with one, but the removal of the governor and the consequent overspeeding imposes a heavy toll on tires.

Commonest among tire abuses are overloading, overspeeding, running in car tracks, neglecting cuts and tears, spinning, skidding and sliding the wheels, and wheel misalignment.

Overloading—This stresses the tires beyond their elastic limit, utterly destroying the life of the rubber, and, therefore, the durability and cushioning ability of the tires. Fig. 1 shows a tire which has been over-

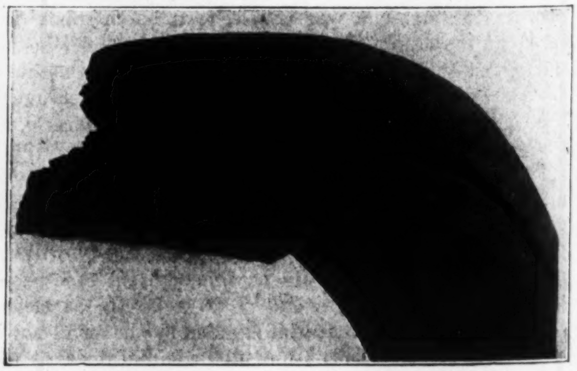
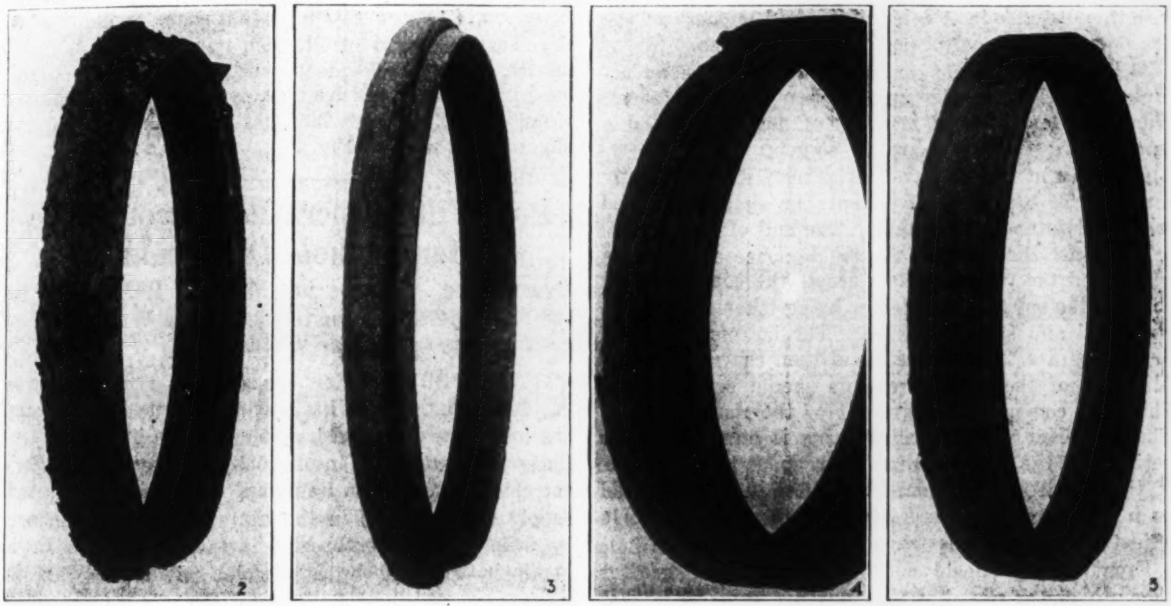


FIG. 1. OVERLOADING DESTROYS THE LIFE OF THE RUBBER AND CRACKS THE TIRE

loaded. Note the peripheral crack near the base and the separation of the tire at the base.

Overspeeding—Even with a light load, overspeeding has the same effect as overloading, since the increased speed causes the impact of the tire on road bumps to be magnified. Running over a bump at twice the normal speed pounds the tire eight times as hard, and consequently may overload it at one spot 400%. A tire treated in this manner may be seen in Fig. 2. If high speed is necessary, pneumatic tires should be used, though they cost more; it will be much cheaper than putting solid tires in the condition shown, after a few hundred miles.



FIGS. 2 TO 5. CONDITIONS RESULTING FROM VARIOUS ABUSES OF SOLID RUBBER MOTOR-TRUCK TIRES
Fig. 2. Overspeeding. Fig. 3. Running in car tracks. Fig. 4. Neglecting slivers, skidding and sliding.
Fig. 5. Misalignment of wheels.

Running in Car Tracks—This simply cuts the tires by centering the pressure at one point instead of evenly over the treads. A tire which has been run in car tracks is shown in Fig. 3. The edges of the rails, particularly the guard flanges of street-car tracks, become sharpened by the friction of the car wheels. Running tires over them is much like running them over the edges of steel knives.

When solid tires are cut or torn by glass or sharp stones the rubber slivers. These slivers should be cut off as soon as they appear. Care should be taken that a clean notch just below the end of the tear is made. If the sliver is left on, it will contribute nothing to the strength of the tire but will continue to extend until half the tread width is torn loose. Fig. 4 shows the condition produced in a tire by allowing slivers to remain uncut.

Spinning, Sliding and Skidding—Spinning and sliding the tires in starting and stopping, and skidding in rounding curves, also leaves serious destructive effects similar to that shown in Fig. 4. Upon loss of traction most drivers will speed up their engines under the wrong impression that this will increase traction. Actually, it does the reverse. The more slowly a wheel turns the better traction it has, the more gently it is started turning, the less liable it is to slip. When a wheel begins to lose traction the driver should throttle the engine rather than speed it up, retarding his spark and being ready to release the clutch to prevent stalling. In engaging the clutch it is also well to let it in gently, and low gear should be used, as this will permit the wheels to turn very slowly without so much danger of stalling.

In the application of the brakes the wheels should not slide. Not only does sliding the wheels injure tires, but it reduces the braking effect. The quickest stop is made when the wheels are just turning and the abrasion of the tires is least. Skidding on rounding curves is as unnecessary as it is dangerous. It is due to turning at excessive speed. All of these abuses do untold harm to the tires. A tire is made to roll over the ground, not to slide.

Besides these more obvious causes of excessive tire wear, there is an insidious cause which is too apt to be overlooked. This is faulty alignment. When the tire rolls smoothly there is a minimum of wear, but if out of alignment, it has a combination rolling and sliding movement over the road which not only causes rapid wear but consumes power. There are two forms of faulty alignment; that in which the wheel itself is out of line, so that it wobbles, and that in which the wheel spindle is at an improper angle, so that the wheel is constrained to a position out of parallel with the direction of the vehicle's motion.

Wheel wobbling is caused by warping of the wood and strains. Some of the strains which get wheels out of true can be avoided. When a truck is driven diagonally into the curb, for instance, or when a corner is rounded too sharply or a boulder is struck a glancing blow, the severe lateral strain at one point of the circumference of the wheel is apt to warp it. Sometimes carelessness in applying or removing pressed-on tires warps the wheel, and in some cases a careless operator will press the tire on crooked, so that the effect on the tire is the same as that of a warped wheel. The remedy is to have the tire pressed off and the wheel trued.

Misalignment of the wheel spindles is due to excessive shocks, such as running into curbs, overspeeding on rough roads, and so on, which bend the axle or the steering arms of the front steering knuckles. The destructive effect of a slight misalignment can readily be appreciated when one realizes that if a wheel is only out of line one degree horizontally it must slip 92½ ft. sidewise in a mile of travel. The destructive effect upon the tire is the same as though the truck were pulled sidewise this distance by a winch. On the periphery of the tire one degree is only equal to about $\frac{9}{32}$ inch.

Alignment of wheels can only be made true by accurately checking the distance between the wheel felloes. There are several good methods of doing this, and a number of methods that are not so good.

Most motor trucks have their rear wheels exactly parallel. To test their alignment, the simplest method requires two men and a tape. The end of the tape is held against the front of the inside space on one rear wheel, and the tape stretched across the corresponding point on the opposite wheel, care being taken to have the tape level and stretched tight. The bottom points of the felloes are then checked, and then the rear points. All three of these measurements should be the same. The most common misalignment of the rear wheels is what is called a spraddle. By this is meant that the bottoms of the wheels are farther apart than the top. If this condition is found, the wheel bearings should be inspected for looseness first. If these are properly adjusted, then the axles should be straightened.

Front wheels should not be parallel. For greater strength and easier steering they are cambered; that is, the wheels are farther apart at their tops than at their bottoms. To correct the resulting tendency for them to roll incorrectly they are correspondingly gathered so that their fronts are drawn or toed-in, usually about ⅜ in. Measuring as before, correctly aligned wheels will have their bottoms and their fronts about the same distance apart; the bottoms may be ⅛ in. closer together than the fronts, but should not be farther apart than the fronts.

If these measurements do not check, the gather at the front may be adjusted by means of the tie-rod, which is threaded for adjustment. Before adjusting the tie-rod, however, it would be well to be sure that the steering arms have not been bent. This can be determined by measuring the distance from the ball or pin, as the case may be, to the wheel felloes. The two arms should be the same distance from their respective wheels. If they are unequal, the one that is bent should be straightened, until the distance is the same, and the final adjustment made on the tie-rod.

So far, these checks apply only to the relation of the wheels to each other. Another important check must be made on the alignment of the axles with the frame. Naturally, the axles should be perpendicular to the chassis center line. This can best be checked by selecting a fixed point at the center of the axle, such as the front universal, and checking the measurements from it to the nearest unobstructed point on each rear wheel. The two should be equal. If unequal, be sure that the truck is on level ground and that the two rear springs are deflected equally. This may be checked by measuring the distance from the bottom of each frame side rail to the axle. If unequal, a jack may be used to raise the low side of the axle to the same level as the other side. The measurement to the universal can then be repeated. If it is found to be still unequal, the cause will be found either in unequal radius-rod adjustment, or, if no radius rods are fitted, in loose axle spring-clips which have permitted the springs to shift. At the front a similar check may be made from some central point on the crank case to the opposite point on the wheels.

Too many motor truck users neglect to check their wheel alignment until the occurrence of an accident or other cause that necessitates a serious repair. Misalignment is apt to result from minor causes in daily service, and unless frequently checked may go unnoticed, bringing about excessive tire destruction without apparent cause. A tire which has been damaged by misalignment is seen in Fig. 5.

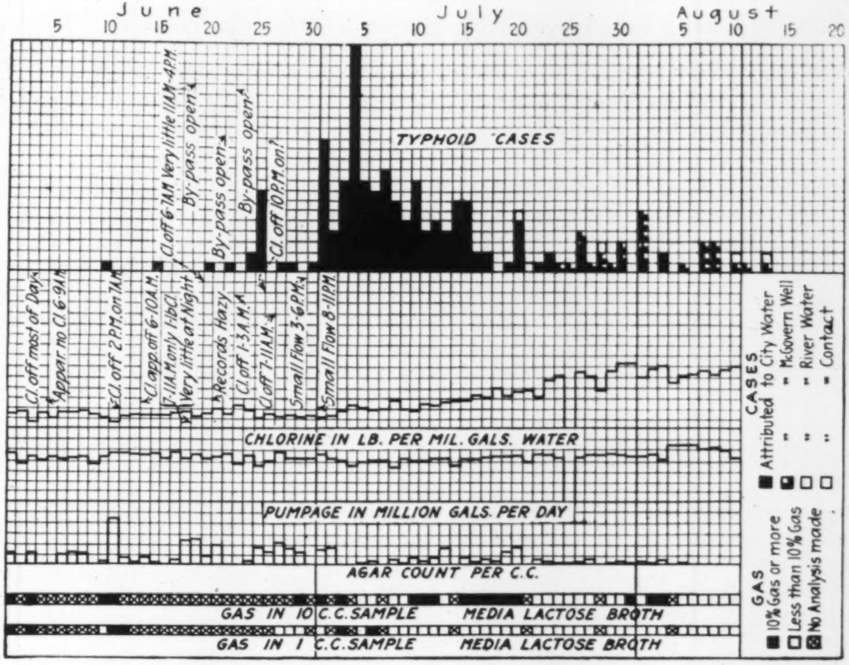
Poor Filter Operation Accountable for Typhoid Outbreaks

Overworked Filters in Moline, Ill., Lead to Bypassing Nonsterilized Raw Water to Clear-Water Basin

UNFILTERED water bypassed to a filtered-water basin in Moline, Ill., during the past two years has cost many lives and has caused not a little sickness. Clogged underdrains, insufficient capacity and indifferent chlorination of an unfiltered or improperly filtered supply are the links in the chain of typhoid carriage by which typhoid outbreaks have occurred in a town nominally supplied by a potable, safe water, despite newspaper boil-the-water advertisements to the contrary. Two exhaustive reports on the situation have been made by the Illinois State Board of Health. The first, dated February, 1918, went thoroughly into the series of outbreaks which occurred in the autumn and winter of 1917 and indicated that there were many interruptions in the chlorination of an inefficiently filtered and unsafe water. Typhoid in cities discharging into the river from three to 35 miles above the intake was held largely responsible for the infection of the raw river water. The second report took up a later outbreak traced to the opening of a bypass valve in June, 1918.

In 1902, Moline installed a mechanical filtration plant providing space for five 1,000,000-gal. units, but only three were equipped until 1910. An original 30-in. bed of sand overlying 14 in. of gravel was reduced to 20 in. in 1918. A large portion of the underdrainage system had become clogged, and only portions of the bed could be washed; thus the rate through the washed portions was increased excessively. Bacterial efficiencies of the plant ranged from 35 to 96 per cent., averaging 70 per cent. Due also to the clogging, the quantity filtered was insufficient, and water on the surface of the filters was bypassed directly to the filtered-water basin. This was made possible by the insertion of a valve below the junction of the wash-water outlet and effluent-to-drain outlet as shown in the sketch. The report states:

> Judging from the rather frequent use of the bypass, it appears certain that altogether too much confidence has been placed in the chlorinator, and far too little attention has been given to the filters.



CONDEMNATORY RECORDS PREVIOUS TO EXPLOSIVE TYPHOID OUTBREAKS

Mechanical devices will sooner or later give some trouble, and the chlorinator installed at Moline was no exception, for it has balked on a number of occasions. It is only to be expected, therefore, that with the filters operating with very low efficiencies, with the water bypassed at times and the chlorine off at spells, that the water-supply must have been of a quantity at times which would menace the health of the consumers.

However, the defects of the filter plant and chlorine machine, and the dangers due to using the by-pass appear to have been reported by the operator to the city authorities at different times during the winter of 1917-18, while the public was warned by newspaper advertisements from Feb. 15 to July 2 that the water was unsafe.

In July, 1918, the State Board of Health was called in again to investigate further outbreaks. Although the filter plant had been partially overhauled following the winter outbreak the investigation practically eliminated, as before, all sources of infection but the water.

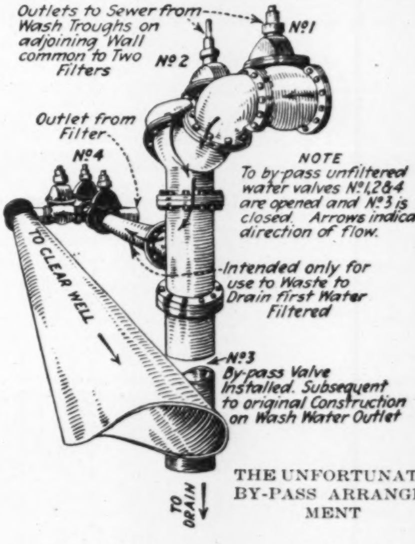
Quoting again from the report:

> It appeared quite impossible, therefore, that so large and explosive an outbreak (see chart) could result from water which had passed through the filters, even should the chlorine used for disinfection have been turned off for some reason. It appeared so evident, however, from the investigation that the water was the source of infection that it was only natural to suspect that the bypass had been opened at some time or other. . . . The raw water during a portion of this time had been passed through but one of the settling basins, as the other basin was being washed during the night. Even the settled water entering the filters and the bypass was, therefore, of inferior quality.
>
> It was found that both on June 19 and again on June 22, during the periods the bypass was open, no chlorine was being added for considerable periods, and very small quantities the remainder of the time, due to trouble in the chlorinating apparatus.

Following the main outbreak, reports of an unwarranted number of cases continued. A study made of this situation showed that a well extending almost wholly in limestone located at 352 Eighth St. had become infected through the entrance of sewage from near-by sewers and a number of people received their infections here.

The board declares unqualifiedly that the bypass is a dangerous arrangement which should be removed at the earliest possible date. For the time being, until additional filters are installed or additional storage capacity for filtered water is afforded, the bypass might be retained, but should be fastened shut by means of a lock and chain and the key left with one of the head men at the plant. This bypass should then be opened only in the event of an emergency, and only with a very heavy and continuous flow of chlorine being applied to the water. The bypass has already caused Moline citizens sufficient trouble, and it should not be permitted under any circumstances to repeat the past performance.

Connections between manufacturers' and city mains were under suspicion, and tests indicated that the single check valves tested were not always effective, but the general spread of the outbreak over the whole town practically eliminated the dual system. The practice was condemned, however, by the board. The investigation was made under the direct supervision of M. C. Sjoblom, then acting chief engineer for the Illinois State Board of Health.


Outlets to Sewer from Wash Troughs on adjoining Wall common to Two Filters
Nº1
Nº2
Outlet from Filter
Nº4
NOTE
To by-pass unfiltered water valves Nº1,2&4 are opened and Nº3 is closed. Arrows indicate direction of flow.
TO CLEAR WELL
Intended only for use to Waste to Drain first Water Filtered
Nº3
By-pass Valve Installed. Subsequent to original Construction on Wash Water Outlet
TO DRAIN

THE UNFORTUNATE BY-PASS ARRANGEMENT

The Long Beach Sewage Screen; A Correction

In the article on the sewage screen at Long Beach, Calif., published in *Engineering News-Record* of May 22, 1919, p. 1012, the names W. J. Knowlton and J. W. Geeks should have read W. T. Knowlton and J. W. Cooke. On p. 1013, in the same article, the dates Jan. 3 and 4, 1918, should have been June 3 and 4.

Bettering Concrete by a New Mixing Method

Using as a Basis Motion Mixture Studies of Concrete in the Mixing, New Type of Mixer Is Developed In Which, It Is Claimed, Cement Gets Necessary Thorough Contact With Aggregate

By Nathan C. Johnson
Consulting Engineer, New York City

This is a part of a lecture entitled "Better Concrete; the Problem and Its Solution," delivered recently by Mr. Johnson before the Philadelphia Engineers' Club. The lecture was much longer and contained a number of motion pictures of concrete during the mixing and setting processes. These pictures were taken with a special camera with an automatic long-interval shutter, so that the views reproduce on the screen, in a few moments, natural processes taking many hours or days—Editor.

SINCE the majority of the units entering into concrete are minute, they may be virtually affected in whole or in part by things minute, although collectively of great importance. It may even prove on examination that what to the eye are tiny crazings, of questionable import, may be vast chasms relative to the size of a cement grain put into the mass as a medium for transferring stress from sand grain to sand grain and that they may interpose impossible barriers to its functioning. Single air voids not uncommonly bulk larger than a dozen or more sand particles; and air voids are known to be present in vast numbers. Water pockets by the thousands in a single yard of concrete may cut off certain other would-be workers by the hundreds of thousands, and even sizable stones.

To estimate the true significance of such possibilities it may be well to place in diagrammatic form, as a preface to deeper study, the family tree of concrete. (See Fig. 1.) First and foremost in importance is the "glue" formed by the union of the powdered cement of commerce with water. As this formation is a chemical reaction, it follows the laws of such reactions and is affected vitally by two variables, temperature and time. The first is particularly difficult of regulation in field operations, but the second—as well as a third variable, physical treatment—may be controlled. Obviously, also, the strength of the fluid cementing solution so produced will depend primarily upon relative quantities of the two reacting substances. To the "glue" thus formed, which has greater or less worth according to the values of the variables affecting its formation, sand is added to make mortar, or sand and stone to make concrete—with, in each case, impurities, such as air, or other contaminating substances, and, again, physical treatment, entering as factors qualifying ultimate value.

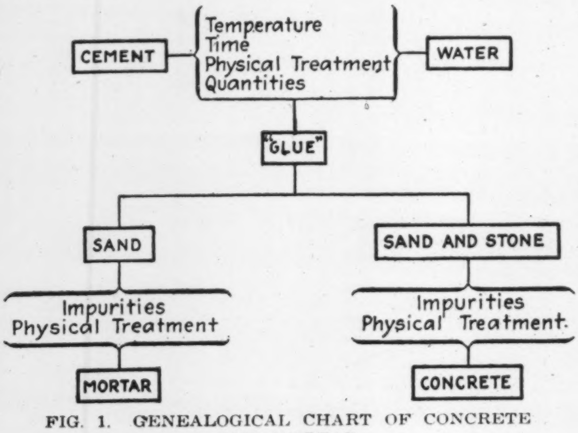


FIG. 1. GENEALOGICAL CHART OF CONCRETE AND MORTAR

If cement were supplied as ground after burning in kilns, it would be so hungry for water that reaction with mixing water would take place too quickly; and to avoid this, manufacturers add gypsum, which is hydrous or water-bearing calcium sulphate, to the still hot cement. This heat drives off water from the gypsum; and this water, spreading as steam, reacts with the hungry cement particles, forming over their surface a very thin, protecting skin of dead or hydrated cement, which for a time—depending upon the thickness of this skin and the temperature—resists penetration of mixing water to the active material within, deferring reaction to give ease in handling. It follows, therefore, that little of this chemical action has taken place before concrete is placed in forms.

Such a protective skin is pictured in the photomicrograph, Fig. 2, about an inert cement grain found in concrete. Obviously, it should be advantageous to remove this dead skin in some way when ready to use cement, so that water might find access without delay and make more and stronger "glue" in the brief hour or two of freedom before setting takes place. Of course, we must coat sand and stone with cement. Yet reason tells us that even an infinite supply of cement particles can cover a sand particle only so far as they may touch it at tangent points, while a solid bedment is assumed and desired in concrete. If there is not an infinite supply of cement particles, even this tangent covering is not possible.

Furthermore, when cement particles, sand particles and pieces of stone are wet, an envelope of water covers them, preventing contact, except accidentally, even at points of tangency, as shown in the diagram, Fig. 3, traced from the photograph, Fig. 2. This explains why there is rarely, if ever, contact between particles as their relative positions are revealed in magnified photographs.

A little thought and calculation with regard to aggregates reveal certain other facts not often considered. Briefly, these are that in a cubic yard of 1:2:4 concrete there are about one million stone particles, up to and including 1½; that there are about 25 *billion* sand particles with a commercial coarse sand, or 200 billion particles with a very fine sand, all of which have to be distributed and wetted and mixed with some 200 to 300 billion cement particles in a space of time that will pay commercially—usually less than a minute. Evidently, since this is so, "covering" sand and stone with powdered cement would really mean that when using coarse sands there would be not to exceed four to six cement particles; and using fine sands, not to exceed 1 to 1½ cement particles for each piece, large or small. Covering should be actual and thorough and uniform, but, obviously, true covering can only come through spreading of a liquid cementing product; and to achieve even

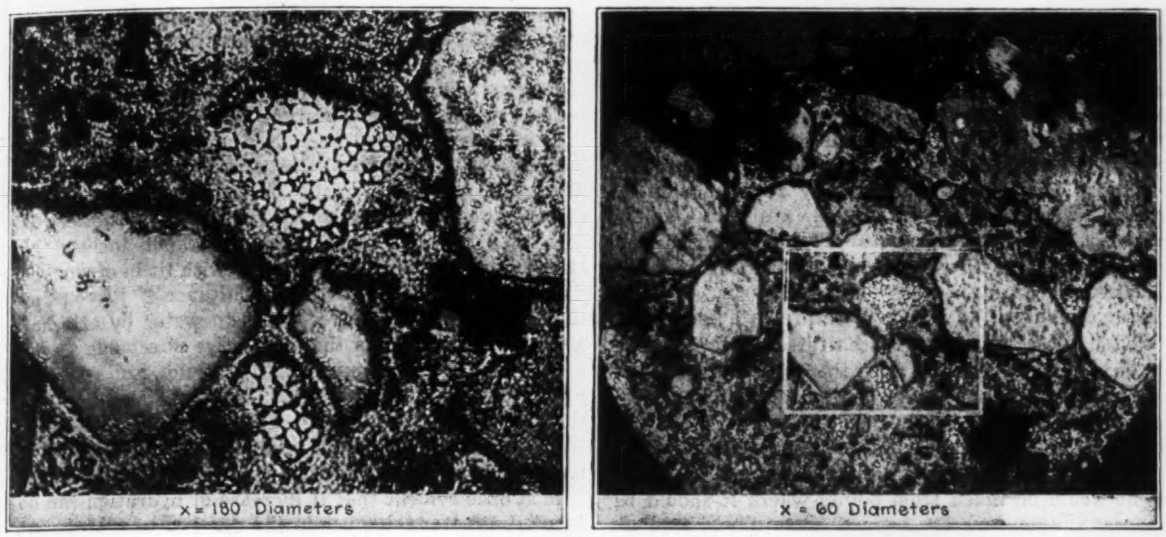


FIG. 2. PHOTOMICROGRAPHS OF COMMERCIAL CONCRETE SHOWING SAND GRAINS, UNUSED CEMENT AND AIR VOIDS

The view at left is an enlargement of the section limited by lines on the right view

a fair result, there must be left no analogue to the "unstirred sugar" of a cup of coffee, else some billions of potential workers will be rendered idle through denial of means wherewith to do their appointed share of work.

Remembering these things, further light may be gained by reconstructing the processes that formed a representative concrete, now in existence. Concrete from the warehouse of the Naumkeag Steam Cotton Co.'s warehouse at Lynn, Mass., is shown in Fig. 2, magnified 60 diameters. In it are clearly visible the sectioned sand grains with their irregular outlines; the clear matrix of hydrated cement; a few voids; and some "unstirred sugar" in the form of unhydrated cement particles. In Fig. 2 is also shown the lower center of the same field, enlarged to 180 diameters. It is to be remembered that in each of these photographs the relative positions held by the several substances are the positions held by them when placed in forms and that must be held by them so long as the concrete endues. What happened when this relationship was first established? All cement particles in the vicinity doubtless reacted with water, rather quickly for some time after the protecting skin was pierced. During this interval the sand grains lay surrounded by water, waiting quietly whatever might happen, save, perhaps, for an occasional settlement to easier position as concrete deposited above increased the general pressure.

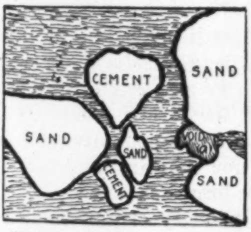


FIG. 3. PART OF FIG. 2

Showing relation held by cement and sand particles and water when placed in forms

At the surface of cement particles, however, there was, at first, saturation of the hydrated skin; then spasmodic reactions as water first reached active cement, formed new products, became sated and gradually diffused; then renewed activity as new water reached deeper layers of active cement through the same agencies, with repetition of the processes until setting of the richest products *directly at the surfaces of the cement particles* formed a new protective skin and brought about a shut-down of hydration.

The water-filled space about cement and sand particles was, during this time, gradually becoming charged by diffusion with these cementing products. But, diffusion is slow; and as distance from the source increased, concentration of these products became less, being *least* at the surface of the sand particles, where for man's purposes, it should have been *greatest.* If diffusion could have been aided by stirring, this defect would have been overcome; and, furthermore, longer activity of the cement particle would have been possible through removal of those surcharged products at its surface (where richness was not desired) and supplying of fresh water. Surely, one way of improving concrete should lie in procuring by some means a greater concentration of cementing products and distributing these, instead of insulating and diluting water, over the sand and stone *before* they find their final position in forms. If this were done, "water voids"—spaces left by water uncharged with cementing products—would disappear, for there would then be no uncharged water and the nature of such charging products is to solidify.

One other feature is prominent in these photographs; namely, an air void (recognized by its spherical or spheroidal form) tucked away at a surface pocket in a sand grain. When this grain was first wetted, this pocket was, of course, filled with air; and before the air could escape the viscous water envelope went over it, imprisoning it by surface tension; and, as diffusion progressed, molding it for all time in solidified cement.

By optical examination, boulders and sand grains of all sizes are found to have similar surfaces, full of pits and seams which are admirable for attachment of cement if contact could be brought about, but potent for ill unless inclusion of air bells is prevented. If only some means, such as stirring or scrubbing, could be utilized to remove impurities such as air, considerable improvement in general quality should result, for although one void is very minute, its duplication billions of times must be of great importance.

Although the mind sees in increasing number other possibilities indicated by reasoning as probable means of bettering concrete, those cited have every element necessary for very substantial improvement, provided they can be put into effect.

Starting experimentally with studies of the chemical union of cement and water, it is found that the process is initially of much greater rapidity at elevated temperatures. In Fig. 4, for instance, are shown interlacing crystal formations at 70° F. after three hours, as contrasted with those at 50° F. after 10 hours. As the latter photographs show no visible change from their original appearance, temperature is evidently of great assistance in forming concentrated products.

It is further to be noted from these photographs that there is grouping together of individual particles, with less intense formation of cementing products at the boundaries of such groups than at single particles. If such grouping were to exist in concrete, much of the cement would be taken from points where it should be usefully applied, since hydration would soon begin to act to unite these groups inseparably. But since these groupings are always observed, such deprivation doubtless does take place, with resultant effect on the concrete. Furthermore, examination of commercial powdered cement reveals small aggregations present in infinite number, due possibly to hydration from moist air and sticking together before it reaches a user's hands. Evidently such groupings should be forcibly broken up either prior to or during mixing, and evidently, also, there is little use in finer grinding of cement unless such groups can be broken up.

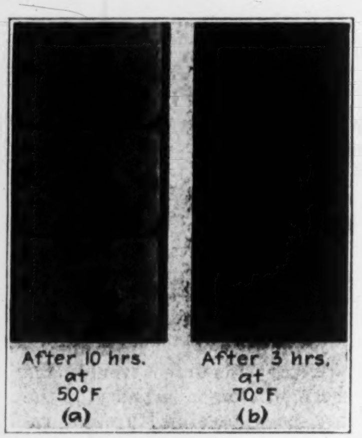


FIG. 4. HYDRATION OF PORTLAND CEMENT; CAMERA INTERVALS, 5 MINUTES

Grouping of cement particles rendering futile fine grinding

In addition to elevation of temperature, it is also found that intensive hydration can be brought about by violently stirring cement for periods longer than are usually employed, much as stirring sugar increases the sweetness of a cup of coffee. And it is further found that while sand grains poured into water are lifted bodily by tenacious air bells resident at irregularities in their surfaces, such air bells can be removed and full contacting of water (or of cementing solutions) brought about not by stirring alone, but by such violent stirring as to cause the attrition of particle on particle sufficient to bring about a scrubbing action. Considering these two phenomena in analogy, it is not improbable that the increased hydration of cement brought about by violent stirring is due to a removal of the protective skin from individual particles through such interparticle attrition, bringing about earlier and more prolonged chemical activity, as well as through the forcible breaking up of minute groupings before noted.

Combining these two benefits of removal of tenacious impurities and increased hydration by violently stirring cement and sand together in water, there is every element present of an improved process of making concrete, particularly as such violent stirring raises by internal friction the temperature of the mass, with further increase of hydration.

But what is the actual effect and result of this as expressed in accomplishment? Aside from increased hydration products as noted by the microscope, there is formed a viscous, coherent mixture, not inclined to separate even though very plastic, with little or no formation at the surface of fluffy "laitance." Remembering the levitation of sand grains in water by attached air bubbles, as well as the lubricative effect due to the mobility of gaseous bubbles in a liquid, it is not improbable that removal of such bubbles, together with the heavier specific gravity of the fluid brought about through increased solution of cement, has overcome the tendency to segregation usually present. Furthermore, it is at once evident that if increase of hydration can be assured, greater tolerance in the percentage presence of water is permissible, with increase of plasticity and ease of working, and, at the same time, assurance of a satisfactory result. Elimination of laitance and segregation on commercial operations would be of utmost importance, for materials so separated are almost valueless of themselves but would have high value if retained in their proper places.

And a corollary effect should be better compacting and greater solidity of the mass, with commensurate strength and endurance. If the particles shown in Fig. 2 had been closer together, solutions of cementing products at the surfaces of sand grains would have been stronger, through nearness to the source. Furthermore, a greater number of strong sand grains would have been present in any given volume. This result is sought in commercial work by spading, tamping or rolling, the last named being found by study to be preferable where the form of construction, as in roadways, permits of its use. Yet, if increased hydration is realized, together with very thorough distribution of such hydration products and detachment of air bubbles from sand and stone, a minimum of such artificial compacting is found to be necessary for a substantial improvement in texture and strength.

Furthermore, there should be less likelihood of points of weakness developing in such a product, either through the presence of an impurity at a center of disintegration or through loss of uncharged water, or through unequal internal strain due to nonuniformity. Study confirms this reasoning, for mortars (stuccos) and concretes reveal that three-branched cracks and their later ramifications are of primary origin, occurring at or about the time of set; and that they are induced by lack of uniform internal strength, for rupture comes suddenly, much as a sheet of paper might find relief from unbearable strain by rupturing abruptly about some point of weakness. (See Fig. 5.)

And, not least, disintegrations and softenings should, with such material, be at least mitigated, if not fully done away with. Disintegrations result from entrance of water into the body of concrete. Sea water carries so little material capable of attacking concrete that the entrance of many millions of gallons into the concrete is necessary for effective attack on a single cubic yard. Nor is the action of fresh water substantially different; and with this fluid the same requirement applies. As

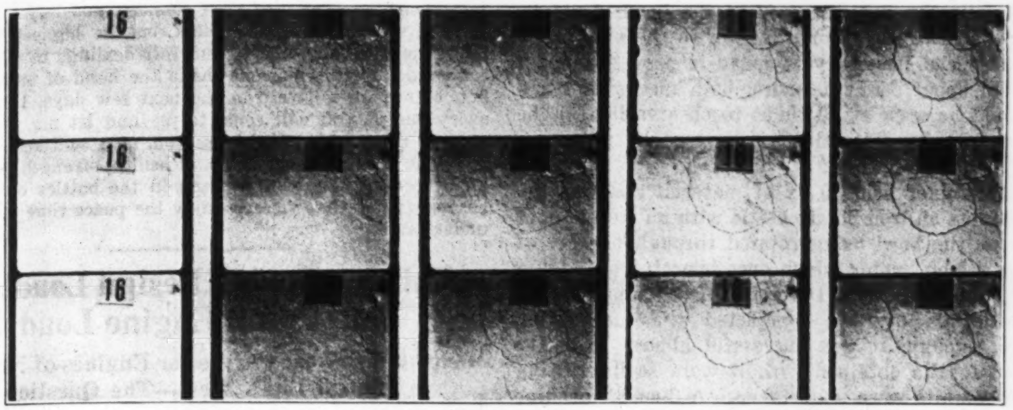


FIG. 5. FORMATION OF THREE-BRANCHED CRACKS IN STUCCO CAUGHT BY MOVIE CAMERA AT ONE-SECOND INTERVALS

Note that these originate at the surface pit seen in the upper right-hand corner

for rupture by rusting of reinforcement, the existence of this fault argues conclusively that water has reached the steel through the concrete, but when that happens, rusting, with expansion and rupture, is to be expected. On the other hand, given a uniform, dense concrete, without water or air voids, or laitance seams, or shrinkage cracks, the seas and lakes and rivers must confine their efforts to surfaces, instead of finding ready access to the interior, with proportionate endurance.

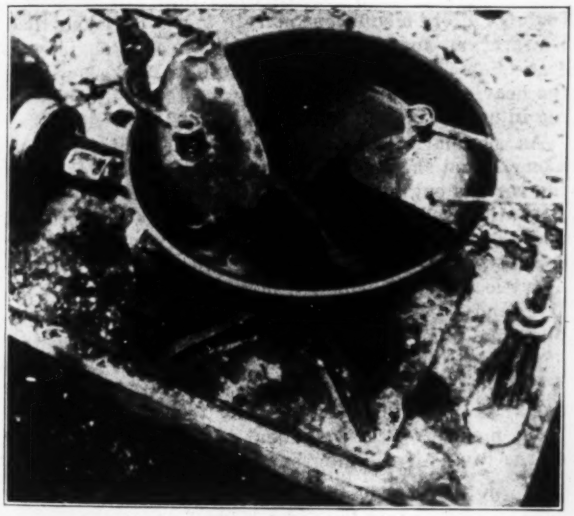


FIG. 6. FIRST CENTRIFUGAL CONCRETE-MIXING MACHINE IN ACTION. 10-INCH DIAMETER BOWL

But however much laboratory experimentation may prove, conversion into commercial terms only will be of substantial benefit.

Early in this effort, existing forms of mixers were discarded as ineffective and not susceptible of necessary changes. With time ever a limitation, the first thought was to substitute rapidity of action for customary slowness. By the same agency, also, it was hoped to effect the violence that seemed to be necessary to force reluctant materials into proper usefulness. In addition to rapidity of action, repetitive cycles and a mass held compactly together to secure interparticle attrition were indicated. These constituted a new and different process from that heretofore used and demanded new means to effect it.

High rotative speeds imply centrifugal force as a concomitant. Centrifugal force would hold the mass of materials together, but would render inactive the usual drum mixer. Furthermore, a very small portion of available drum space in such machines is in active use, the overcapacity varying from 250% to 825% of the batch size in the products of 10 different manufacturers. It was also found that much useful mixing time was consumed in charging and discharging, batches having to enter and leave through severely constricted openings.

The expedient was adopted, therefore, of using an open bowl, rotated rather rapidly in a vertical axis. Centrifugal force would compact the rotating batch in the bowl and cause it to rise toward the top. At proper points, curved blades could cut off ribbons of material, diverting them to the center, so that repetitive cycles could be brought about. Discharge could be overside by utilizing the velocity of the mass, giving a high dis-

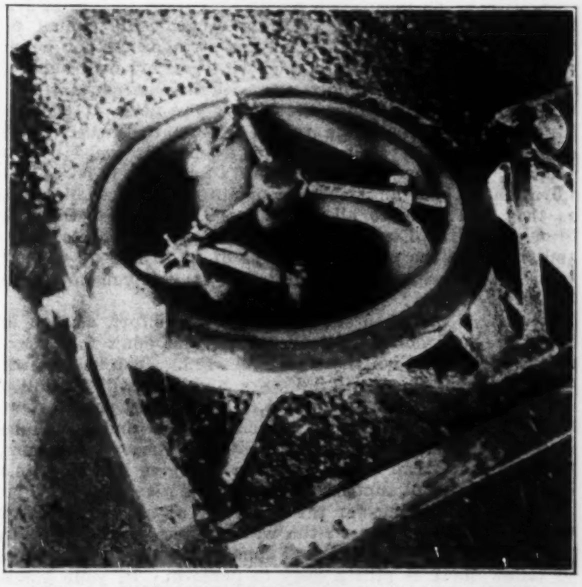


FIG. 7. THREE-CUBIC-FOOT CENTRIFUGAL MIXER IN ACTION

charge, while the full diameter of the bowl would be available for charging, doing away with the high elevation of material necessary to make it pass through a constricted spout. Furthermore, both mechanism and mass would be open at all times to observation. [The type of mixer here described is covered by patents—EDITOR.]

The first mixer held 30 lb. of material and was improvised from an iron potato kettle with an iron tamper for a base, the bowl being rotated through one set of gears by a ¼-hp. motor which once operated an adding machine. (See Fig. 6.) Diverting blades supported by small pedestals overside completed the mechanism. Strangely enough, it was successful almost from the first; and results obtained with it were so interesting that larger units were undertaken. A 3-cu.ft. machine was then constructed (Fig. 7) and later, a ½-yd. machine. Trials and tribulations were not few in number, but they are of no import in this discussion. Suffice it to say that a most intense action was secured, showing in practical result the actuality of the theoretical needs indicated by the reasoning before set forth.

Colonel Parsons' Address to His Men

ENGINEERS will appreciate the following heartfelt words by Col. William Barclay Parsons, now printed in the *Fighting Engineer*, the publication of the Eleventh Engineers' Association. It was delivered on the occasion of the regimental dinner at Hotel Pennsylvania in New York on April 30:

My men. I do not say officers and men, but, simply, my men. This is probably the only opportunity that I shall have to say a word to you all collectively.

In a few hours the process of disintegration will begin, and in a few days this regiment will exist in history only and the close comradeship that has held us for nearly two years will be at an end.

You and I have been together during that time, we have marched together by day and by night, we have worked and fought together in sunshine and in storm, in heat and in cold. We have been together and have seen our comrades fall, not to rise again, and we have stood side by side, with heads uncovered, as we laid them to rest in the far-away soil of France. Such a comradeship cannot be broken without a pulling of the heart strings. As you go on your several ways you will take with you my ever-abiding affection, and I hope that you are leaving me yours.

There are a few things that I ask you never to forget: First, and above all, the record of our regiment. That record, without a stain, without a spot, is yours. You made it, it is now yours to keep. In life let it be an inspiration to you, and when moments of temptation come, as they will come to all of us, let us remember that we belonged to the Eleventh, with its record second to none, and that it is the part of each one of us to live up to that record. You were willing to die for it; are you now willing to live for it?

It is right that men should make every effort, as men in Paris are now doing, to prevent war, but don't fool yourselves that there will be no more wars. Just so long as men are men, there will be wars and you will be called upon again. Unless the next war comes very soon, I fear that the operation of time will cut me out and it will be a younger and better man who will lead you on. For him, the best that I can ask is that you will give him the same loyal and faithful support that you have given me.

But while waiting for the next war of arms, remember there is always going on the war of good citizenship. In the war just ending you have done your duty; in the days to follow there is still a duty to perform. In your hands you have held the rifle and the pick, the weapons of the engineer; now you hold in your hands the ballot, the weapon of a good citizen. Use the latter as you have used the former, in the service of your country, and insist, as members of the Eleventh Engineers, on the highest ideals of law, order, decency, liberty and fair dealings to all men.

I cannot at this moment shake the hand of each of you, but, before we separate in the next few days, I hope that every one of you will come to me and let me give you a parting clasp. May God bless you, men, and keep you and give you, each and every one, all health, strength, happiness and success. May you triumph in the battles of life, and having gained that victory enjoy the peace that passeth all understanding.

Railway Bridge Design Loadings and Actual Engine Loads

Moment and Shear Curves for Engines of New York Central Lines West—The Question of Minimum Loading

BY B. R. LEFFLER

Bridge Engineer, New York Central Lines West of Buffalo, Cleveland, Ohio

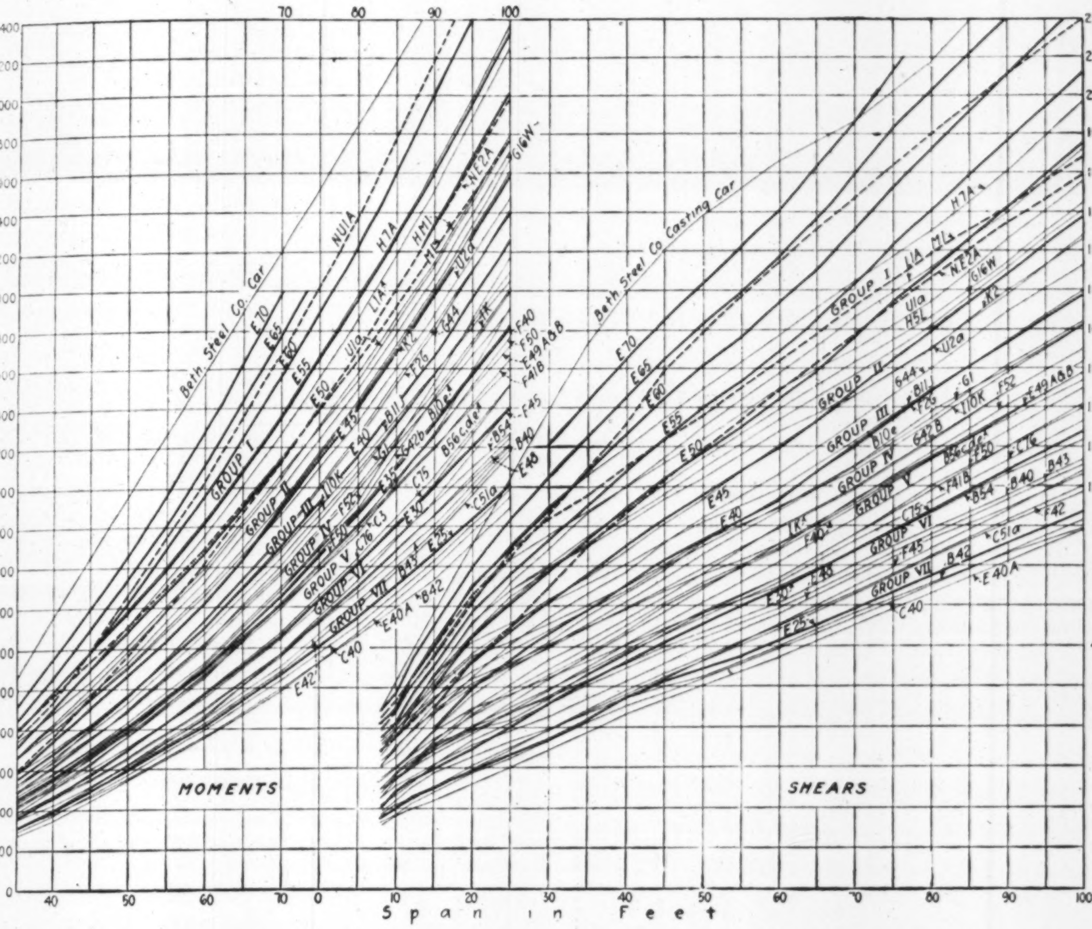
DEVELOPMENTS in railroad practice during recent years have carried engine and train weights slowly but steadily higher, until the margin between actual loads and current bridge-design loadings has become quite small. Recently, at the American Railway Engineering Association convention, remarks made in discussion of the subject of bridge specifications seemed to show a faith on the part of some that present design loadings afford a sufficient margin to last for a long time. However, an analysis of the bridge effect of engines operating on the New York Central Lines West shows that the heaviest power is very nearly up to the design loading in use today, and that special loads go even higher.

As summarized on the diagram herewith, showing moment and shear curves for spans up to 100 ft. under the various engines in use on the road, the actual loads are fairly well distributed over the range between E25 and E65. The engine designations given are those of the New York Central nomenclature. Two particularly heavy locomotives, which are also among the newest, are H7A and NU-1A. Engine H7A has four driving axles, pilot and trailing axle, and weighs 332,000 lb. without tender; its heaviest axle-load is 65,000 lb. Engine NU-1A is a Mallet with two sets of drivers, each of four axles; it weighs 622,000 lb. with tender. This engine has a moment effect equivalent to about E62 over most of the range of the diagram.

MOMENTS AND SHEARS COMPUTED FOR TWO ENGINES COUPLED

It should be said that in all cases moments and shears were computed for two engines coupled, except in the case of M1 and NE-2A, which were taken single, followed by a train of 115,000-lb. capacity cars. The NU-1A was taken single followed by a train of 70-ton capacity cars.

Wrecking cars were plotted on similar diagrams, but they produce considerably lower moments and shears than do the heavy locomotives. The heaviest wreckers do not exceed in moment 800,000 ft.-lb. per rail on a 40-ft. span. Still higher effects are produced by a heavy engine (N1S) of the Pennsylvania Lines West, which operates over New York Central tracks in Cleveland territory. It produces moments and shears exceeding those due to E70 loading. The engine is of the 2-10-2 type, has a length between couplers (tender included) of about 90 ft., and weighs 651,000 lb. with tender. Its driving wheel-loads range up to 39,000 pounds.



MOMENT AND SHEAR CURVES FOR ENGINES IN USE ON NEW YORK CENTRAL LINES WEST OF BUFFALO, AND FOR COOPER LOADINGS

Group numbers represent the classification of engines for purposes of defined bridge capacity

The moments *M* and shears *S* produced by this engine on various spans (compared with those due to E70 loading) are, per rail: On 40-ft. span, $M = 1230$ (1147), $S = 135$ (132); on 60-ft. span, $M = 2330$ (2274), $S = 169.3$ (171); on 80-ft. span, $M = 3600$ (3781), $S = 200$ (217).

Exceeding all the engines, a special car of the Bethlehem Steel Co., built for handling heavy castings, produces the critical stresses. This car has 60,000-lb. axle-loads, and its moment and shear effects are considerably above E70 on short spans. On a 100-ft. span the car produces a single-rail moment of 5126, while E70 produces a moment of 5635.

With this graphical comparison in mind, it is evident that no one can yet say what is to be taken as the heaviest railway loading. The fact that the upper lines in the diagrams represent engines added only in the past three or four years is an indication of the fact that the growth of loadings is still in progress.

Heavy motive power affects only the road on which it operates, of course. Freight cars, however, circulate everywhere, and it is difficult to exclude them from any particular division. This is especially true of coal cars, since coal must be carried to every station and to all railroad terminals.

It is found that 140,000-lb. coal cars, which are in use on the Pennsylvania and the Chesapeake & Ohio lines, are equivalent to about E45 for spans up to 40 ft., tapering to E36 for 100-ft. spans. Such rolling stock, then, would fix the minimum loading for which bridges anywhere in the country should be designed, no matter how light the power used on a particular road. From the diagram it can be seen that some of our light engines are below E30 in their effect. If a road used engines of this kind, however, and designed its bridges accordingly, the structures would be overloaded if a train that was composed of heavy coal cars were run over them.

The 140,000-lb. car is 43 ft. 8 in. long, 31 ft. 10 in. between the truck centers, and 5 ft. 10 in. in truck wheelbase. Its dead weight is 50,800 lb., and when loaded with a 10% overload (or 154,000 lb.) its wheel loads are 25,600 lb. On a 100-ft. span such cars would produce a moment of 2995 per rail, as against 2817 for E36 loading.

Edge Taping Strengthens Fiber-Board Boxes

Tests of fiber-board boxes in the box-testing machine of the Forest Products Laboratory, Madison, Wis., showed that failure usually started in the scores at the edges. When adhesive paper or tape strips were applied over the edges the strength of the box was increased about 25 per cent.

SOCIETY SERVICE

A Section Dealing with the Results of Teamwork by Technical Men

St. Louis Electrical Engineers Advise Development Committee

In order that the representative of the St. Louis Section of the American Institute of Electrical Engineers on the national development committee might have back of him, in tangible form, the local opinion which he represents, resolution were adopted pertaining to the relation of the institute to its members, to other engineering organizations and to the public. Briefly, they are as follows:

That annual visits be paid to sections by national officers; that institute meetings to be held bimonthly in the various sections' cities, on schedule; that expenses of board members be paid; that the country be districted and a vice-president elected from each district; that the *Proceedings* be changed to 9 x 12-in. size, contain articles of live interest, current topics as well as technical articles, editorial reviews, abstracts only of strictly technical articles, and advertising; that a National Engineering Congress be held biennially for the discussion of all matters pertaining to the general profession of engineering; that the section views with disfavor any thought of losing the identity of the institute through substitution of a common engineering body, but does favor affiliations along present lines through the United Engineering Society; that the Associated Engineering Societies of St. Louis is a model of successful federation; that members of the local joint council be automatically members of a National Engineering Council; that participation in all public affairs by the local federation or the national federation shall first be approved by the respective councils.

Iowa Publicity Committee at Work

An intensive publicity organization is being perfected in Iowa by the Iowa Engineering Society. Minutes of a recent meeting of a committee in charge of the work indicate a plan by which the state is divided into 11 districts, with a subcommitteeman in charge of each district and having under him local representatives.

On district organization the following rules were adopted: That members or nonmembers may be chosen as district committeemen or local representatives; that the main purpose of the work is to obtain publicity for the profession, its work and its relation to the public, and not publicity for the society; that individuals should be chosen who are or can become acquainted with the editors of the most influential papers. District committeemen are to enlist the services of local representatives to organize and supervise the publicity work in their respective districts; to furnish to the central office lists of representatives and newspapers and to report to the central office, sending clippings of articles published.

On the local representatives depends the success of the plan. They are to make the acquaintance of the editors; to prepare news stories of engineering of local interest, to procure news items of general interest for distribution through the central office, as well as obtain publication of similar items sent to them.

In a report on the functions and work of the committee, salient features that were brought out were as follows:

The fundamental principle in publicity work is that the engineer is a public servant and must render nontechnical as well as technical service. For the former the engineer is urged to ally himself with local nontechnical organizations. He should offer his ability as an organizer and specialist in materializing ideas promoted by such organizations. In the technical-service publicity the effort should be made to prove that the engineer is a financial asset to his community. Newspaper work should be supplemented by personal talks to individuals and by addresses. General instructions call for the maintenance of so high an ethical standard that the engineer will not indulge in or seek to obtain personal publicity at the expense of some other individual.

LETTERS TO THE EDITOR

Comment on Matters of Interest to Engineers and Contractors Will Be Welcome

Training in Latin and Greek Not Best for Engineers

Sir—Many years of study of the general subject of Latin and Greek as preparation for engineering, which subject is treated by Dr. M. E. Cooley as quoted in *Engineering News-Record* of May 8, 1919, p. 930, lead me to a conclusion quite opposed to the position taken by him. I am, therefore, led to offer the following principal reasons for my disagreement and my belief that these dead languages, if taught at all, should be incorporated into our teaching of English.

It is remarkable that this old controversy does not seem to down. On one side are men, some familiar with the ancient languages, who trace to them many advantages they have had from such knowledge, but ignoring the multitude of fellow students who, notwithstanding that acquirement, were never able to rise above mediocrity. On the other side are men who never studied Latin or Greek but, notwithstanding, have reached eminent positions in the world.

When a boy I studied Latin for four years and Greek for three. My study included some conversational "live" dialogues. All of this, I presume, fully meets Dean Cooley's prescription. Thus qualified, I shall try to be unbiased.

As all men differ in their capacities and opportunities, they should not and do not receive the same kind or extent of education. But, as of first importance, everyone of us should know as well as possible the language of his own country. Therefore, no education can be more valuable to an American "engineer trained for responsible citizenship" than to get a thorough knowledge of the use of the English language.

The study of the classics can have no influence whatever toward a better understanding of abstract sciences, such as logic and mathematics, or any of the concrete sciences, such as physics, chemistry, geology, astronomy, or of the sciences of organisms, including their lives, from botany up to psychology, and even sociology. In fact, also the history of ancient civilization and of its stages of development can hardly be grasped by us in Greek or Latin as well as it can be in English when presented by specially trained linguists. The ancients at best had but rudimentary knowledge of all sciences and even less of the scientific method, which is gradually unravelling our most complex problems of practical life and our knowledge of all the fundamental inductions concerning our loftiest conceptions of religion, art and social life.

Greek and Latin of two thousand years ago do not and cannot give us, in any of these directions, what modern scientific knowledge and practical experience have given already and will surely continue to give; but they can give us something else. They can and do help us to understand and use the English language more accurately than by a knowledge merely of its words learned in childhood.

When I first gained this opinion, I asked myself, How then should I study Greek and Latin? As I had studied them? No. As my children studied them? decidedly, no. How, then, should they be taught?

Most thoroughly to understand and use a language, one should know, besides the meaning, also the derivation and life of its words, the way to form its sentences, and the relation of words and sentences to express our feelings, thoughts and conceptions. The English language was once Anglo-Saxon and into it were transfused later more than half of its words from the Norman-French after the conquest, and finally, for advanced knowledge, words from the Latin and Greek.

Therefore, we should be informed by our teachers, as in an interesting story, how the words of the English language were developed from crude origins, how they were influenced by internal and external causes, how and why they were changed from one period to another and gradually arrived where they are today—in short, we should learn the story of the life and growth of our language.

Such a story would raise a lasting interest in the growing young mind. As a first reading book, the edition of "Robinson Crusoe" written in monosyllables, almost all of Anglo-Saxon origin, might be an entertaining help. The history of the peoples who spoke these four languages—Anglo-Saxon, Norman-French, Latin and Greek—should then be learned, in order that the student may understand how and why their words and expressions were finally united with and converted into modern English.

For instance, under which conditions did our language ancestors derive their words, and which conditions caused the gradual changes in the words? What were their grammatical forms, compared with one another? Why and how did the Anglo-Saxon forefathers take over so many of its words and forms of sentences from the French language? And, finally, how were new words created to express the multiplying new ideas and conceptions, by utilizing Greek and Latin roots? Spencer says, "the development of language is a psychological process determined by social conditions."

Pari passu with these interesting stories to be told by the teacher, the young folks should memorize actual words of those old languages, with their original meanings and as used in conversational phrases, selected to cover those words that were gradually embodied in modern English. The words learned should not be vocabularies having no reference to modern English. Let us learn, for instance, the origin of the words "home," "love," "children," etc. Let us know when we see the word "geography" that it is made up of two Greek words, "*ge*," earth and "*grapho*," to write. Let us learn the declensions and conjugations in order to form simple sentences and phrases in those old tongues and so as to give the words life and interest in relation to our new tongue.

If Greek and Latin and also Norman-French and Anglo-Saxon were studied in this manner—and I see no reason why they could not be—we should better understand the spirit and weight of our words and sentences. Incidentally, we should automatically not be tempted to write the word "seperate" instead of "separate," nor say "this data" and "this phenomena" instead of "these data" and "these phenomena." Nor should we mistake the nominative for the accusative case, as is so often done, nor make any other misuses which together mean "bad" English. Our dictionaries have a list of phrases and expressions, mostly in Latin, which are used by us daily. Let us learn them early, with their original meanings, so that they are understood and correctly used—generally to differentiate or specialize the meanings when the phrases or expressions are interpolated in an English sentence.

It has seemed to me that if the study of these ancient languages were taught not as a "fad," which is evidently the case at present, but for real, practical, intellectual usefulness, we should read and hear a better language today than we do. All this interest and benefit could be obtained from efficient teachers trained along philological lines, in a fraction of the time now spent. One or two semesters at the utmost should suffice amply for teaching each one of our parent languages for the above purpose, including the interesting histories of their developments.

Why should we weaken our modern education by antiquated methods, surviving from the Middle Ages, when Greek and Latin were the only languages of culture and the only means of preserving the records of civilization and intercourse between the intellectuals of different nations? A thousand years ago the preservation of these languages was necessary, because without any printed books for general distribution there was a gradual breaking up—a vulgarization, for instance—of Latin into Italian, French, Spanish, Portuguese and Rumanian.

In our present age, however, with the constantly growing mass of necessary and useful knowledge which is pushing civilization ahead, it is becoming absolutely necessary to economize in our studies and in the time which can be devoted to them. The study of the ancient languages as above outlined would seem to be ample, if indeed such knowledge is at all necessary for most of the intellectuals of modern times. John Bright, Herbert Spencer and others who wrote excellent English say that their knowledge of Greek and Latin was not worth mentioning. The "humanists" of the Middle Ages should be transformed into "humans" of today. Waste, through conservation, should be converted into economy; extravagance, through limitation, into frugality.

One of the pet reasons given for studying Greek and Latin is to get "mental discipline." Faraday says that "science is greatly superior to language as a means of discipline," and that it "culivates our judgment more safely and intensely." The best discipline arises when we act under laws and rules *without* exceptions, as in any scientific pursuit. The ancient languages have many exceptions to their rules, concerning genders, declensions, conjugations, etc., and even their sentences, as I remember, are not always as logical as algebraic expressions must be always.

Another of the pet reasons for holding on to Greek and Latin in the schools is that we may read the "classic literature of the ancients," which has been held as a model for civilization for several thousand years. How many Greek and Latin students of the present century are able to read, understand and really enjoy that literature in the tongues in which it was originally written, even if their minds could take themselves back into the actual state of civilization then existing?

Those who live today and must look upon the ancients as historical relics—magnificient and interesting in a museum, if you please—can certainly acquire more benefit and enjoyment by reading that same literature in the best translations, into English, French and German, of every ancient writer worth considering. Neither Americans nor Western Europeans need learn Greek and Latin for that purpose.

Finally, with reference to the editorial remark that colleges of literature and arts turn out men of more breadth and culture than engineering colleges: This may unfortunately still be true, but the reason, so far as my experience has gone, is not the study of Greek and Latin. There is another cause. The universities formerly had a rank much higher than that of the technical schools. Fifty years ago I heard it said, somewhat to my disgust, "Oh, he is not able or bright enough to study law or medicine; he must take up some engineering occupation or trade." Families of higher culture are apt to produce boys and girls of greater mental capacity and breadth. Their sons, therefore, as a rule were sent to the universities, and those who could not stand the greater strain selected engineering. This feeling was particularly common in England and Germany. It was not so in France, where engineers came often from the best families and socially had a higher standing than in any other country. M. Freycinet, for many years head of the French cabinet, was an engineer.

Greek and Latin have been studied within the past century mostly by those expecting to follow the legal and medical professions, rarely by engineering students. The lack of knowledge, until recently, concerning the origin and course of diseases was such that 39 years ago no less a person than Dr. Pettenkofer said to me: "In but few cases can we do more than make the best guess that our experience justifies." Since the advent of bacteriology, and progress along other lines, the medical profession has moved ahead with leaps and bounds, so that within a third of a century both death and sick rates in the most highly civilized countries have dropped in a great ratio than during many centuries before. Neither Greek nor Latin helped in this advance.

Since the Middle Ages even the greatest of the creating artists in music, painting, sculpture and architecture were not specially versed, if at all, in these ancient languages.

The engineering and allied professions, the students of which generally have not been obliged to study Greek and Latin, have contributed more to advance modern civilization than any of the above professions. By studying and utilizing the laws of nature, they have made it possible to travel over land and sea without limit and open up the possibilities of the entire earth for the benefit of men. They have introduced more rapid means of mental communication through the telegraph and telephone, without which the amount of our progressive work of today would be very greatly diminished. The achievements of mining, manufacturing, sanitation and agriculture during the past century did more to advance the human race toward higher planes than was done in any previous equal period.

I heartily agree with your correspondent in the issue of May 22, 1919, p. 1031, in his reference to Herbert Spencer, whose essay on "What Knowledge Is of Most Worth," written about 60 years ago, pretty thoroughly settles the question as to the relative value of the "classics" and of modern sciences. As Spencer in his early life had been an engineer himself, Dean Cooley should take that philosopher's opinion as applying especially to engineering students, and "as a means of training (them) for responsible citizenship."

New York City. RUDOLPH HERING,
Consulting Engineer.

The Manning Formula Again

Sir—Considering the discussions that have recently appeared in *Engineering News-Record* [see *Engineering News-Record* of Jan. 16, 1919, p. 149; Mar. 13, 1919, p. 536, and Apr. 3, 1919, p. 685] regarding the treatment of the Manning formulas in the Miami Conservancy District's Technical Report, Part IV, it seems pertinent to add a few remarks concerning these equations.

Up to the time Professor King's "Handbook of Hydraulics" was published, which was after the manuscript for Part IV had gone to the printer, the equation generally known as the Manning formula had been mentioned but briefly in American engineering literature. For this reason, although it was known that the formula is used to a limited extent in certain foreign countries, it was not considered necessary to publish a detailed treatment of the equation, especially as our investigations had led to the conclusion that nothing could be gained by its use.

The formula recommended by Manning, given on p. 221 of Part IV, never found any appreciable acceptance among practicing engineers, although it is, next to the Ganguillet and Kutter formula, the best one so far proposed. It was this equation that was referred to on p. 243 of Part IV in the statement: "The average error of the results calculated by the Manning formula for the gagings of Humphreys and Abbot was 19.8%, while the average of those calculated by Kutter's formula for the same gagings was only 4%." These average errors were determined by Manning in a manner similar to that used by Leach in calculating the "average departure from mean" (*Engineering News-Record* of Mar. 13, 1919, p. 536) and consequently would not be affected by constant errors in velocity measurements.

The equation now known as the Manning formula is merely an exponential formula in which the coefficient is given as a function of *n*. It would have been discussed under the heading "Exponential Formulas," in Part IV, if it had not been for its connection with the

VARIATIONS IN VALUES OF KUTTER'S *n* AND MANNING'S *n* CALCULATED FROM EXPERIMENTAL DATA

Description of Data	Number of Experiments in Series	Average Values K's *n*	Average Values M's *n*	Difference in % of K's *n*	Average Variation* K's *n*	Average Variation* M's *n*
Experiments 16a and 17a, Table 112, King's "Handbook"	2	0.0127	0.0137	7.9	2.36	9.48
Experiments 18a and 19a, Table 112, King's "Handbook"	2	0.0124	0.0121	2.4	0.81	2.48
Experiments 46, 48 and 50, Table 112, King's "Handbook"	3	0.0194	0.0198	2.1	3.95	3.88
Experiments 47 and 49, Table 112, King's "Handbook"	2	0.0184	0.0190	3.3	4.35	6.31
Experiments 60a to 63a, Table 112, King's "Handbook"	4	0.0119	0.0116	2.5	4.83	5.17
Experiments 65 to 68, Table 112, King's "Handbook"	4	0.0130	0.0127	2.3	7.31	7.08
Experiments 137 to 140, Table 112, King's "Handbook"	4	0.0193	0.0196	1.6	1.82	1.78
Experiments 206 to 208, Table 112, King's "Handbook"	3	0.0281	0.0314	11.7	3.20	4.77
Experiments 247a and 248a, Table 112, King's "Handbook"	2	0.0524	0.0711	35.7	0.96	0.56
Bazin's Series 6, "Récherches Hydrauliques"	12	0.0127	0.0125	1.6	1.1	1.27
Bazin's Series 7, "Récherches Hydrauliques"	12	0.0120	0.0118	1.7	1.0	0.99
Bazin's Series 8, "Récherches Hydrauliques"	12	0.0116	0.0114	1.7	2.5	1.67
Bazin's Series 9, "Récherches Hydrauliques"	7	0.0130	0.0129	0.8	1.2	3.24
Bazin's Series 10, "Récherches Hydrauliques"	7	0.0117	0.0115	1.7	1.4	0.71
Bazin's Series 11, "Récherches Hydrauliques"	7	0.0113	0.0111	1.8	3.8	2.12
Bazin's Series 12, "Récherches Hydrauliques"	7	0.0151	0.0153	1.3	1.0	1.31
Bazin's Series 13, "Récherches Hydrauliques"	7	0.0148	0.0153	3.4	1.2	1.87
Bazin's Series 14, "Récherches Hydrauliques"	7	0.0150	0.0155	3.3	1.8	0.92
Bazin's Series 15, "Récherches Hydrauliques"	7	0.0209	0.0223	6.7	1.2	2.76
Bazin's Series 16, "Récherches Hydrauliques"	7	0.0212	0.0232	9.4	1.6	2.46
Bazin's Series 17, "Récherches Hydrauliques"	7	0.0215	0.0237	10.2	2.2	1.51
Bazin's Series 32, "Récherches Hydrauliques"	4	0.0168	0.0177	5.4	0.4	1.69
Bazin's Series 33, "Récherches Hydrauliques"	4	0.0171	0.0177	3.5	1.2	2.26
Bazin's Series 44, "Récherches Hydrauliques"	4	0.0195	0.0202	3.6	8.8	10.64
Bazin's Series 46, "Récherches Hydrauliques"	4	0.0205	0.0212	3.4	5.7	7.54
Tadmor experiments, 2, 4, 6 and 10, Table 9, Pt. IV	5	0.0316	0.0305	3.5	4.9	4.59
Ark. ditches, experiments 40 to 45, Table 9, Pt. IV	6	0.0342	0.0317	7.3	1.6	2.94
Total number of measurements	241	Mean Variations		10.1	3.58	5.02

* Average variation from mean in per cent. of mean value.

original Manning equation which is not of the exponential type. Manning investigated this equation, in a slightly different form, and rejected it because it did not give satisfactory results for the Mississippi River gagings. Bazin, in his paper in "Annales des Ponts et Chaussées," 1871, entitled "Étude Comparative des Formules Nouvellement Proposées Pour Calculer le Débit des Canaux Déconverts," showed that an exponential formula is not the proper kind of an equation to represent the conditions of flow in open channels. He showed that the curve is not the right kind of a curve, that while it may be made to fit a small range in conditions in a given case, by varying the coefficients and exponents, it cannot be used as a general formula.

One way in which the Manning formula may be compared with Kutter's is to calculate, by the two equations, the values of *n* for several series of measurements, in channels where *the roughness conditions are constant* and then to compare the constancy of the calculated values. This method was used in several instances in Part IV. The method used by Leach in his studies, referred to above, was similar, except that he assumed that the roughness factor for a given channel should be the same for all stages, irrespective of actual differences in roughness conditions. Mr. Horton, in his reply to Mr. Leach, has already called attention to the great differences in actual roughness that may exist in a given channel with different stages. The Tadmor measurements, which Mr. Leach used and to which he gave greater weight than to any of the others which he investigated, may be cited as an example of such conditions. The experiment, made during the 2-ft. stage of September, 1916, which causes the Manning formula to appear so much better than the Kutter formula, was made when the water was comparatively low. For such stages the channel is smoother than it is during flood stages, when the other measurements were made. The bed and banks are more regular, and the disturbing effect of the fringes of trees along the banks, which is very marked during flood stages, is entirely absent. While this was not emphasized in our report, it was mentioned in the descriptions of the Tadmor measurements and also on p. 142. For the above reasons this experiment was omitted from the Tadmor series in the studies given on pp. 239, 243 and 260 of our report, and also in the study of the Manning and Kutter formulas given in the accompanying table.

The table printed above gives, for each of several series of measurements, the average value of Kutter's *n*, the average value of Manning's *n*, the difference in the two values expressed as a percentage of Kutter's *n*, the average variation in Kutter's *n* in per cent. of the mean value, the average variation in Manning's *n*, and the number of measurements in each series. It also shows the mean values of the average variations of the two factors and of the actual differences in the factors for the entire group of 241 measurements. The data chosen for this study include those used in comparing the Bazin and Kutter formulas, on p. 260 of our report, and also such data given in Table 112 of Professor King's "Handbook of Hydraulics" as might properly be used for this purpose. Owing to the fact that the calculations were made at different times, some of the values of average variation of Kutter's *n* are computed to tenths of a per cent. only, instead of to hundredths as are the others. However, this has no material effect on the results.

A study of the results given in this table shows some interesting conditions. A comparison of the last two columns shows that the average variation of the Kutter roughness factor is the greater in 12 cases and the less in 23. The mean variation of Kutter's *n* for all measurements is 3.58%, while the mean variation of Mannings' *n* is 5.02%, or about 40% greater. The difference between the absolute average values of the two coefficients varies from 0.8 to 43.5%, the mean value for the 35 locations being 10.1%. If the experiments made on the Bogue Phalia, the Mississippi, the Irawadi, and the Volga are omitted (the only ones made in channels of unusually large size) the mean variation of Kutter's *n* is 2.67%, the mean variation of Manning's *n* is 3.41%, and the mean difference between the two roughness factors is 5.18 per cent.

This shows that Kutter's formula is better for channels of ordinary dimensions as well as for channels of unusual size. In view of the large number of diagrams and tables that are available for aid in using the Kutter formula, the advantage of simplicity possessed by the Manning formula does not seem to be of great importance, certainly not of sufficient importance to warrant its general adoption and the rejection of the Kutter formula. While the Manning formula might be used in approximate calculations, as might also several other equations, it would seem to be better to use the Kutter formula in all important calculations in channels of ordinary dimensions as well as in channels of unusual size. Although the Kutter formula is not ideal, it is the best we have at the present time.

Ivan E. Houk.

Miami Conservancy District, Dayton, Ohio.

United States Chamber of Scientists Proposed for Engineers

Sir—I have read with much interest W. L. Saunders' article in your issue of Apr. 17, 1919, p. 756, on an Engineering Civic Federation. It appears to me to be the most practical and logical solution of the many troubles that beset the engineering profession at this time, but I would go farther.

Everyone is doubtless familiar with the activities and influence of the United States Chamber of Commerce in the commercial world. The federation proposed by Mr. Saunders would have a similar influence and effect on engineering and all scientific progress and civic betterment if open to all technical, scientific and engineering societies, to all technical engineers, surveyors, architects, and, in general, to scientific men or women who work with their brains more than with their hands in engineering and science in all branches.

Mr. Saunders has well said that engineering societies are not effective in public matters. The public and legislators cannot be made to believe that their aims are unselfish, although these classes are the most altruistic of the human race. One does not have to go far to discover the reason for this. Scientific men and engineers are all technical and the public and legislators do not want technics, but policy and (we trust) public betterment.

I remember very well when this fact was first brought home to me in the late '80s when the late E. L. Corthell, Lyman E. Cooley and several others, including myself, then secretary and director of the Southern Society of Civil Engineers, prepared a bill for the establishment of a Department of Public Works to take over the river and harbor work of the national Government and place it in the hands of the civil engineers. The bill was promptly killed as "class legislation."

The engineers in this country are, however, very restless, and something must be done to better their condition, which is certainly deplorable when compared with that of the workmen under them. This condition has been brought about largely by the action of the War Department in this war in establishing the rank of "engineer" from men more noted for their brawn and fighting ability than for their engineering knowledge, in many cases. Pick-and-shovel men, railroad trackmen and trainmen, chauffeurs and auto-repair men and even lumberjacks were all called "engineers," and the general public does not discriminate.

These conditions must be radically changed, and the American Association of Engineers and Engineering Council are doing a praiseworthy work, but they cannot reach the great mass of the people, and so wield an overpowering influence as can a chamber of science, with a membership of half a million.

Important as the salary question is, it is not everything, and the result can perhaps be brought about in a more dignified and desirable manner. My old professor urged his students to give no thought to pecuniary emoluments but to rest assured that with professional success "all these things would be added."

I do not like the word "federation." It savors too much of a labor union. I prefer United States Chamber of Scientists. If the public knows that half a million voters are behind us we carry far more prestige than 50,000 could possibly do, and if a measure is before Congress it may be embodied in a bill that will not appear selfish, sordid or as class legislation, but, as the Chinese told his partner, who objected to certain items not being specified in a bill they were about to present, "You no see 'em, but they there allee same."

And now comes the report that the Boston engineers have joined the American Federation of Labor, a trade union. Shades of the immortal Stevenson, Roebling, Eads and Francis! And this is the modern Athens, city of culture and of the Pilgrims, and my birthplace!

Everyone should read the admirable article by Mr. Saunders and also the able address of W. W. K. Sparrow, chief engineer of the Chicago, Milwaukee & St. Paul R.R. printed in the April number of the *Monad*, the organ of the American Association of Engineers, both of which advocate a chamber of commerce of engineers along similar lines. No better man can be found for president than Maj. Gen. George W. Goethals, as proposed by Mr. Saunders. I have had the pleasure of knowing him for nearly 30 years. One of the first activities for this chamber of scientists to undertake will be educational and missionary work among the people, and especially among the engineers of Boston.

J. Francis Le Baron,
Consulting Engineer.

Panama City, Fla.

Variation of Roughness Coefficient in Manning's and Kutter's Formulas

Sir—Concerning the correspondence in your issue of Jan. 20 and Mar. 13 under above heading, and also Mr. Houk's most interesting report on the "Calculation of Flow in Open Channels," I trust the following statement will not be regarded as controversial:

I notice that all of the engineers concerned use the gagings of the Irawadi at Saiktha as an example. I have a very high respect for those investigations, but I think, considering their date and the methods used, that it is unwise to regard them as sufficiently authoritative for testing the newer standard formulas. The exigencies of the war have separated us from libraries, so I speak from memory, but I believe that (1) these experiments were made before 1880; (2) the standard apparatus was the twin float, though current meters of an experimental type were also employed; (3) the results when plotted against any of the newer standard formulas, Bazin's (1899) or Manning's, are less concordant than the average of modern observations.

For their date the Irawadi experiments were first-class, but I think that in the present state of knowledge they, like the earlier Mississippi work, should be considered as second-class only.

I would add that for the present purpose, their selection, even if they were first-class, appears unfortunate. The investigation is concerned with changes in Kutter's (or Manning's) n and Bazin's γ produced by variations in gage heights. The Saiktha gage site is situated upstream from a bar and crosses a deep pool. Thus, the conditions affecting the connection between the gage height and the discharge must be abnormal when compared with those existing in the ordinary cases to which it is desired to apply the results of the investigations.

Kuala Lumpur. P. PARKER.

Definition of Engineering

Sir—Writing definitions of human vocations is not a simple matter, as Mr. Condron has doubtless found out, judging from your issue of May 29, 1919, p. 1079.

Attempting to make a suggestion, a definition of engineering was formulated, containing 72 words. By revision, it was reduced to the form which follows, containing 45 words. This is thought to be sufficiently inclusive and not too inclusive. It is not the result of the effort of one mind, but rather of the efforts of three minds.

For use in license laws it seems to be desirable to define not only engineering but professional engineering, or perhaps a professional engineer. Therefore, a definition of professional engineer is added:

> Engineering is the intelligent application of the laws of mathematics and physics and often those of other sciences in the design, construction and operation of machines and the physical structures of public and private enterprises, and in the discussion, investigation and solution of related problems.
>
> A professional engineer is one whose vocation is engineering.

APPLIED SCIENCE.

Classes Draftsmen With Engineers

Sir—In your issue of Apr. 24, 1919, p. 834, Thomas P. Morrissey makes a statement to the effect that draftsmen are to be classed in the same category as bricklayers, carpenters and other mechanics. He then asks these questions: "Are they engineers? Tell me, now, are men of this type qualified to receive as much or more than mechanics? What do you mean when you say 'engineer'?"

Of a similar tenor are the remarks of Palmer C. Ricketts in your issue of May 29, 1919, p. 1075 where he says, "The difficulty is that common surveying and ordinary drafting are not difficult to learn and the law of supply and demand takes care of the pay for this kind of work. It is also a fact that a good carpenter is often worth more to a community than a good leveler or a good draftsman."

Now, giving the matter honest and due consideration, is it really fair, just, or even correct to give the young graduate engineer who is serving as a structural draftsman a classification on a par with, or even lower than a mechanic? Take my own case, which is fairly typical. During the summers of 1913, 1914 and 1915 I earned a part of the expense of technical training by working at the carpenter's trade, and I am capable of holding the best kind of a carpenter's job today. From this experience I can say that any lively young man with a whit of mechanical ability can learn the carpenter's trade in six months.

Engineering knowledge is not gained with any such ease. If, then, the difficulties in becoming proficient as a competent structural draftsman are to have anything to do with his worth as compared with that of the carpenter, the odds are heavy in favor of the structural draftsman. Moreover, the draftsman in preparing his drawing lays out the work and directs the activities of mechanics. Is it not usually considered in the industrial world that the man who directs the activities of others is to be given compensation and rank above them?

On the other hand, how many mechanics can be found who are competent to prepare a rational and economical design in structural steel or reinforced concrete? It may not be the constant duty of the structural draftsman to perform such work, yet it is required of him at times, and he is expected to be able to do it at any time. To suggest that a carpenter or mechanic could do it, or attempt it, is positively absurd.

It is true that complaint regarding the classification and pay for engineering services has come largely from draftsmen and instrumentmen. And the reason is this: Compensation for a mechanic's services in 1914 was less than for the draftsman. Since that time the increase in pay of the former has kept pace with the increased cost of living because of his union and the urgency of war work. The draftsman's pay, however, has not kept pace with the increased cost of living and today he is paid no more than the mechanic and, in some cases, less.

Our Government has compiled figures to show that the increase in cost of living has been 66% since 1914. Draftsmen's salaries have increased a spare 25 to 30%. Mechanics' wages have increased the full 66% and in some cases have doubled.

Now, as to "What is an engineer?" and "Is a structural draftsman an engineer?" I should say that an engineer is a man who has, by endowment and development, what I would call the engineering mind. The engineering mind works in two phases, the analytic and synthetic, to direct the forces of nature toward the upbuilding of modern industry, and for the benefit of mankind.

In order so to direct the forces of nature, the engineer must conceive a structure, a machine, a railroad, a plant, or perhaps a whole industry. Such a conception takes place in the mind of the engineer and must be presented to the minds of other engineers and workmen before it can become a reality. This presentation is usually made through the medium of an engineer's drawing. Here is the function of the engineering draftsman.

Usually the engineer does not make his own drawing but details this work to another engineer—a draftsman, usually younger, of less experience and naturally subordinate to his instructions. I have called a draftsman an engineer because he must have, to a certain degree, the same engineering mentality or mind as has his superior, else he will not efficiently and successfully grasp the conception which his superior holds in mind, and place it for him into an intelligible drawing. I would say, then, that a draftsman, if competent, is a minor or junior engineer, but an engineer, nevertheless.

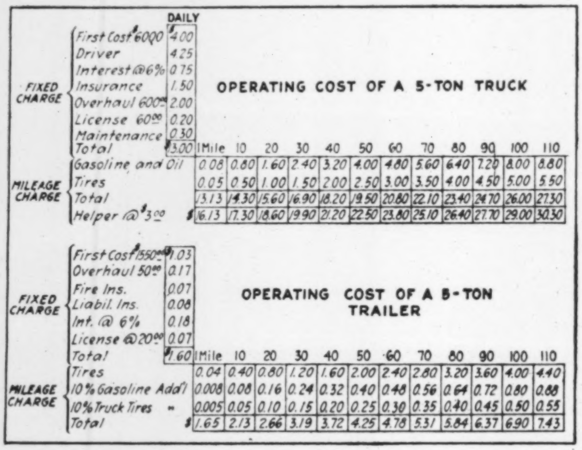
I am not alone in this opinion. For example, in "Design of Plate Girders" by Lewis E. Moore, associate professor of structural engineering at the Massachusetts Institute of Technology, occurs the following: "The draftsman who plans his work with reference to needs of the shop and erection department, while carrying out the intention of the designing engineer, is entitled to a part of the credit for the completed work and may rightfully feel that he is an engineer, not a mere mechanic." **A. F. Fowler.**

Detroit, Mich.

Chart for Estimating Motor Truck and Trailer Haulage Costs

Sir—The writer has read with interest several articles appearing in *Engineering News-Record* relative to the operating cost of a five-ton truck. I am sending you herewith a chart which was compiled originally for the purpose of comparing the operating cost of a five-ton truck and a five-ton truck with trailer. The chart is based on the assumption of a five-year life of the truck, averaging 300 days per year.

It is, of course, impossible to make any rule which will fit all the various conditions encountered in motor-truck haulage, and it has therefore been my intention to derive figures which will fit the majority of cases. I have also tried to divide the operating costs into a fixed charge and a mileage charge, although really all of the charges listed as fixed are dependent upon mileage, with the exception of interest, insurance and license. Gasoline and oil are based on current prices, and the average mileage obtained per gallon. Tires are reduced to a cost per mile by dividing the list price by guaranteed mileage.



OPERATING COST OF A 5-TON TRUCK

		DAILY
FIXED CHARGE	First Cost $6000	$4.00
	Driver	4.25
	Interest @6%	0.75
	Insurance	1.50
	Overhaul 600.00	2.00
	License 60.00	0.20
	Maintenance	0.30
	Total	$13.00

		1 Mile	10	20	30	40	50	60	70	80	90	100	110
MILEAGE CHARGE	Gasoline and Oil	0.08	0.80	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20	8.00	8.80
	Tires	0.05	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50
	Total	13.13	14.30	15.60	16.90	18.20	19.50	20.80	22.10	23.40	24.70	26.00	27.30
	Helper @ $3.00	$16.13	17.30	18.60	19.90	21.20	22.50	23.80	25.10	26.40	27.70	29.00	30.30

OPERATING COST OF A 5-TON TRAILER

FIXED CHARGE	First Cost $1550.00	$1.03
	Overhaul 50.00	0.17
	Fire Ins.	0.07
	Liabil. Ins.	0.08
	Int. @ 6%	0.18
	License @20.00	0.07
	Total	$1.60

		1 Mile	10	20	30	40	50	60	70	80	90	100	110
MILEAGE CHARGE	Tires	0.04	0.40	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40
	10% Gasoline Add'l	0.008	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72	0.80	0.88
	10% Truck Tires "	0.005	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55
	Total	$1.65	2.13	2.66	3.19	3.72	4.25	4.78	5.31	5.84	6.37	6.90	7.43

CHART FOR RAPID ESTIMATING OF TRUCK AND TRAILER COSTS

The operating cost of the trailer is estimated in exactly the same manner as the above. The average increase in gasoline consumption due to the trailer is 10%, and the increase in wear on truck tires is about the same.

The chart was reduced to mileage, in order to esmate rapidly on a known haul. For instance, a case comes up in which two five-ton trucks are engaged in a haul of say 25 miles, or 50 miles for the round trip. A glance at the chart shows a cost of $19.50 per day per truck, or $39.00 for the two.

If conditions are right, the trailer can be used displacing one truck. The cost is then $22.50 for the truck (with helper), and the trailer operation costs $4.25—a total of $26.75. If the resulting saving of $12.25 is credited to the trailer, it is not long in paying for itself.

The costs above may seem low, and unquestionably there are many items which might legitimately be added. The garage charges have been left out, as they vary. Against a large fleet, there may be charged superintendance. Board and lodging of a driver on the road may occur in a few instances. The purpose of the chart, however, is to strike a fair average.

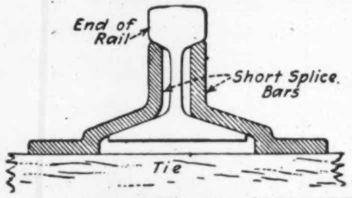
A careful analysis of hauling costs is sometimes disconcerting to the truck operator, as not enough study has been given to this particular problem. Investigations should be made before and not after purchase, as changes invariably prove expensive. The trailer has a large field of usefulness, and only a careful study of hauling conditions is required to open it up.

Wallace Bigelow,
The Miller Equipment Co., Incorporated.
Syracuse, N. Y.

Rail Joint to Carry Rails by the Heads

Sir—After a long journey across the continent, listening to and observing the conditions and reactions of rail joints, a few possibly new thoughts on the subject are not inopportune. In view of multitudinous repetitions of wheel passes—each of minute effect—combining to produce evident effects on the rail, it has occurred to me that in order to receive uniform wear from the wheels a stretch of rails must be homogeneous through the junctions or joints.

Without any attempt to criticize present modes of connecting rails, and as a wholly novel contemplation of the problem, it is suggested that the posture of a rail across a tie should be simulated in connecting rails on a tie — that is, there should be present across the gap at rail ends—and for both rail ends in common—the combined head, web and base of a rail to carry the wheel through the juncture, identically as it is borne by a rail across a tie.



RAIL JOINT GIVES HEAD SUPPORT TO RAIL ENDS

Recent reports of the American Railway Engineering Association on tests of short four-hole angle bars indicate that two-hole angle bars of length equal to tie width, connecting rail ends on a tie, offer probably as much resistance as the rail itself. With the flanges of the splice bars extended laterally and depended below the base of the rail to form feet resting on the tie, the base of the rail would be held out of contact with the tie, and the heads of the two rail ends would be supported by a combined web and base in the same way as the head of a rail crossing a tie. The principle is shown by the accompanying section through the gap at the joint. The wheel drop incidental to the gap at rail ends is negligible, therefore actual continuation of the rail head through the gap is not essential. This method of joining rail ends might be termed a rail-joint chair, and it is the elementary form of many rail-joint inventions. **W. M. Pegram.**

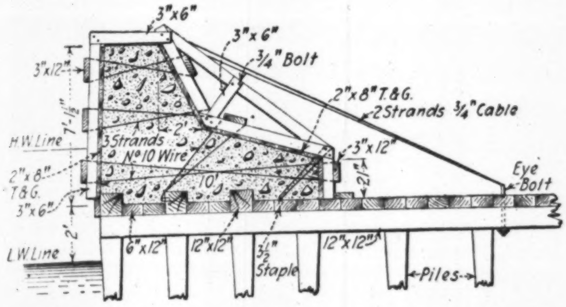
Los Angeles, Calif.

HINTS FOR THE CONTRACTOR

DETAILS WHICH SAVE TIME AND LABOR ON CONSTRUCTION WORK

Unit Form Permits Building Concrete Wall on Pier Edge

CONCRETE bulkhead walls on the water side of piers present some difficulties in construction, on account of the necessity of having outboard bracing, and also because of the possible entrance of water into the forms with the rise of tide or water level. The form shown in the accompanying sketch was used by Henry Steers, Inc., of New York City, in the construction of a pier in Brooklyn and was devised to meet the difficulties.



FORM FOR CONCRETE WALL ON EDGE OF PIER

Forms are built in panels 15 ft. long, are moved from place to place, and are used successfully several times over. Each panel consists of transverse frames, made up of 3 x 6-in. sticks spaced 5 ft. c. to c., with outside and inside lagging of 2 x 8-in. tongue-and-groove planks, the whole resting on the timber framing of the pier proper. The form is held against outward movement by the two strands of ¾-in. cable fastened to the upper bolt of the frame and to an I-bolt back on the pier. The form is wired together, as shown, against interior buckling, and held down to the pier proper by wires attached to staples in the deck.

The sections are quickly erected with the aid of a floating derrick. Concrete is started as the tide recedes below the level of the deck, and it has been found that the 2 x 8-in. tongue-and-groove boards offer sufficient protection to the concrete against scouring action of the rising tide.

The form was described in the "Contractors' Atlas" of June, 1919, by A. R. Moxter, superintendent of construction of Henry Steers, Incorporated.

Short Straight-Edge With Handles for Use on Narrow Widths

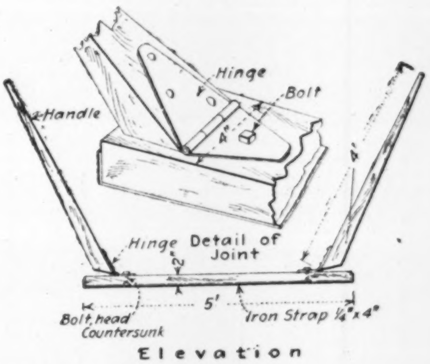
By George W. McAlpin
Point Pleasant, W. Va.

A CONVENIENT, short straight-edge for leveling off concrete paving in narrow widths is shown herewith. With this tool it was found that two men could easily accomplish the work previously done by four, operating the old type without handles.

Other Articles in This Issue of Interest to Contractors:

Storing and Handling High Explosives During the War Page 1242
Enlargement of the Yakima-Tieton Main Canal Page 1255
Sinking and Concreting Mine Shaft 936 Feet Deep Page 1259
Important and Neglected Features of Tire Maintenance Page 1262
Bettering Concrete by a New Mixing Method Page 1266

It is made of a 2 x 4-in. scantling, laid flat, and is provided with an iron strap, ¼ in. thick, on the bottom. The handles are so attached by strap hinges and one bolt that they may be moved in two directions. This permits the operators to work from a standing position, instead of the kneeling position required for operating with efficiency the straight-edge of the ordinary type.



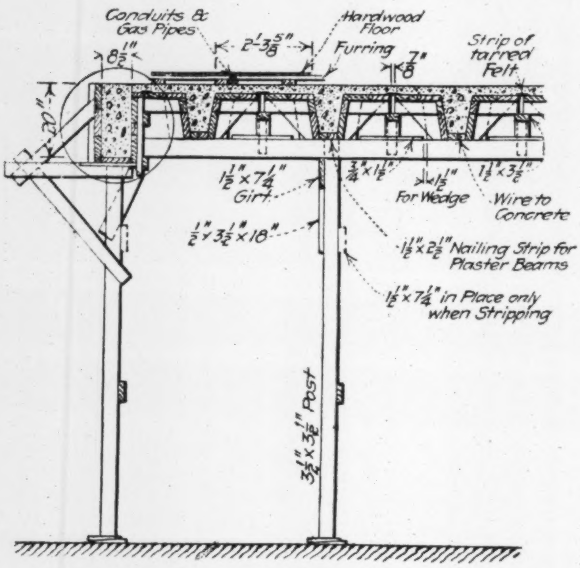
DETAILS OF SHORT STRAIGHT-EDGE—NOTE DOUBLE HINGED JOINTS

The double-hinged joint also permits the usual sawing motion that is employed in the cutting off of concrete surfaces.

STRAIGHT-EDGE WITH HANDLES IN OPERATION ON NARROW PAVEMENT

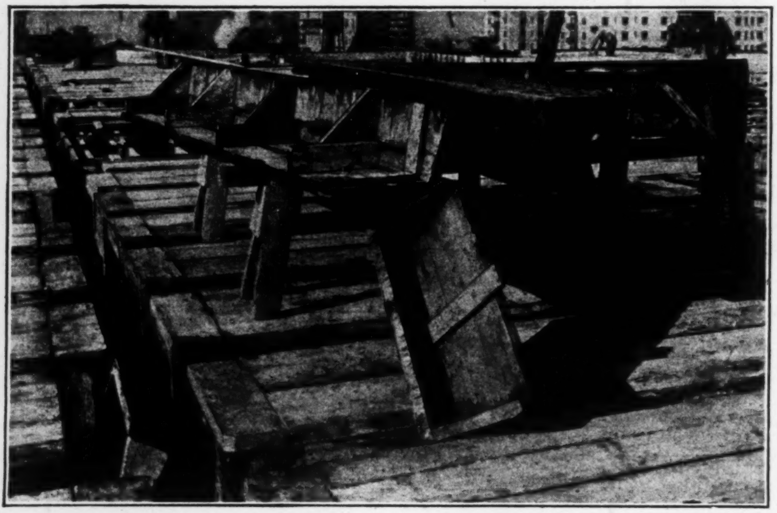
Forms for Concrete Floor Made Up of Wood Frame Sections

SECTIONAL wood forms, of inverted-trough section, were used over and over again in the construction of the floors of a reinforced-concrete apartment house at Salt Lake City, Utah, by Villadsen Brothers, Inc., contractors, of that city. Details of the construction and views in place are given in the illustrations printed herewith.


Conduits & Gas Pipes
$8\frac{1}{2}''$
$2'\text{-}3\frac{5}{8}''$
Hardwood Floor
Furring
$\frac{7}{8}''$
Strip of tarred Felt
20"
$1\frac{1}{2}'' \times 7\frac{1}{4}''$ Girt
$\frac{3}{4}'' \times 1\frac{1}{2}''$
$\frac{1}{2}''$ For Wedge
$1\frac{1}{2}'' \times 3\frac{1}{2}''$
Wire to Concrete
$\frac{1}{2}'' \times 3\frac{1}{2}'' \times 18''$
$1\frac{1}{2}'' \times 2\frac{1}{2}''$ Nailing Strip for Plaster Beams
$1\frac{1}{2}'' \times 7\frac{1}{4}''$ in Place only when Stripping
$3\frac{1}{4}'' \times 3\frac{1}{2}''$ Post

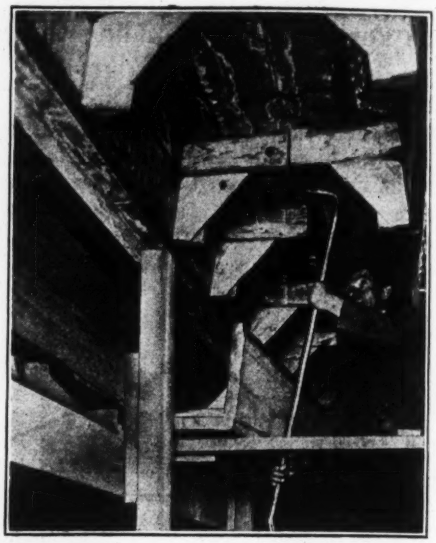
WOOD BOX FLOOR FORMS READY FOR USE
Note small end section where beam joins girder

The floor consists of a 2½-in. slab supported on tapered beams, spaced 3 ft. c. to c. spanning between the girders on the columns. Forms for the beam and slab unit are in about 10-ft. lengths of an inverted "L" shape, making up one of the tapering sides of the beam and the bottom of half of the slab width between beams.



RE-USABLE WOODEN FLOOR BOXES FOR CONCRETE FLOOR

These units are carried on stringpieces and girts at the bottom of the beam section, and at the middle are supported on elevated 1½ x 3-in. stringers which rest on small supports tacked to the stringpieces. A [illegible]-in. opening between adjacent slab forms is covered with a strip of tarred felt over which the concrete is poured.



SPECIAL BARS USED TO REMOVE FLOOR FORM UNITS
Note scaffold to catch forms

The bottom of the beam is carried on a separate strip, which is permitted to remain in place after the forms are removed, to serve as a tacking strip to which are attached the plaster ceiling boards. The ends of the floor-beam forms are beveled, and a separate piece squaring the ends is used to facilitate form removal.

In the stripping, wedges against a small piece on the stringpiece are knocked out, the vertical holding strips are removed, and the forms are taken off with bent bars, as shown in one of the views. Special scaffolding was provided about 2 ft. below the forms on which to drop them in the removal process. The forms were used many times without any considerable intermediate repair being required.

Washing Sand for Concrete

BRITISH practice in preparing fine aggregate for concrete was outlined by P. G. H. Boswell in a paper before the Concrete Institute, as follows: "Some method of 'scrubbing' is the only way to clean ballast effectively from adherent clay and loam. On the other hand, the dust produced in the crushing of aggregate can easily be washed away. If the aggregate is required down to 50-mesh, an upward current of water at ordinary temperatures of about 5 ft. per minute will remove all material smaller than this. If the aggregate is required to be not smaller than 20-mesh, a velocity of about 15 ft. per minute will remove the material not required."

CURRENT EVENTS IN THE CIVIL ENGINEERING AND CONTRACTING FIELDS

NEWS OF THE WEEK

New York, June 26, 1919

Roumania Wants Americans to Rebuild Its Bridges

Commission Now in This Country to Make Arrangements for Delivery of 25,000 Tons of Bridge Steel

Opportunity is afforded American bridge contractors to enter the European field, in the construction of a number of large bridges destroyed in Roumania during the war. There is now at the Hotel Cumberland, New York City, the Roumanian Bridge Commission, sent here by the Roumanian government to get proposals on this bridge reconstruction. The total amount of steel needed is about 25,000 tons, practically all in railway single-track bridges, although some highway bridges are required.

While the Roumanian finances are in process of reconstruction, it is probable that the firms taking over the bridge work will have to arrange for a time at least to finance the projects, but the stability of Roumania seems assured, and the rapid assumption of its financial responsibilities a matter of a short time.

The principal bridge to be replaced is that over the Borcea branch of the Danube, on the line which connects Bucharest with the sea at the port of Constanta. This point of the Danube is divided into two branches, and there is a large bridge with cantilevers of about 400-ft. span in each branch. One of these branches was destroyed by the Roumanians in their retreat from the Dobrudja. The Germans, it is understood, had intended to replace this bridge, and have in their shops in Germany a new bridge of about 2700 tons, of which 2000 tons is ready to deliver. The Roumanians, however, do not choose to do business with the Germans and utilize this structure.

It is announced that spans from 20 to 65 m. are required, a total of about 1500 m. for double-track and highway and 1700 m. for single-track railway bridges. Delivery should be made as soon as possible to Roumanian ports, the principal one of which is Constanta on the Black Sea.

Army Equipment from France To Be Distributed to States

In response to a request from the Department of Agriculture, the War Department has ordered returned from France, as soon as possible, a large quantity of engineering equipment to be distributed by the Department of Agriculture through the Bureau of Public Roads to the states for use in the construction and maintenance of Federal-aid highways. The equipment will be apportioned on the basis of the allotments in the Federal-aid road act in the same way in which the 20,000 Army motor trucks are now being distributed.

Included in the equipment which has been requested are 1500 caterpillar tractors; 400 road rollers, and a large number of concrete mixers, road graders, elevating graders, rock crushers, industrial locomotives, industrial-railway tracks, dump cars, steam shovels, hoisting engines, electric motors, and quantities of smaller equipment. The Bureau of Public Roads will distribute this equipment, when received, on requests from the state departments.

Employment Bureaus

Engineering Societies' Employment Bureau of the four founder societies, conducted by Engineering Council Employment Service, for members and for other professional men introduced by members. Especial attention for those released from Government service. Address, 29 W. 39th St., New York City.

American Association of Engineers, 29 S. La Salle St., Chicago. Service to members only, but Army or Navy Engineers in uniform who are eligible to certified membership may join without payment of entrance fees or dues while in uniform and for six months after discharge.

Engineers' Service Bureau, 57 Post St., San Francisco. Only applications by mail or wire will be considered.

Professional and Special Section, United States Employment Service, 469 Fifth Ave., New York City.

Reëmployment Committee of New York City for Soldiers, Sailors and Marines, 233 Broadway, New York City.

Extend Alaska Railway Location

The Alaskan Engineering Commission has sent out a party to locate the route of the Alaska Government railway on the 100-mile gap from the Susitna River north through Broad Pass, to connect the present line running north from Seward and Anchorage with that running south from Nenana. The party is in charge of T. W. Secrest. William C. Edes is chairman and chief engineer of the commission. The progress of work on this railway was described in *Engineering News-Record* of Jan. 2, 1919, p. 46.

Commerce Chamber Committee Railroad Report

Conclusions Provide for Early Return of Roads to Private Operation With Guaranteed Returns

Emphasizing adherence to a policy of corporate ownership and operation of railroads, the committee on railroads of the Chamber of Commerce of the United States, appointed to investigate and report on remedial legislation, has submitted 10 separate recommendations providing for the return of the railroads to corporate operation as soon as the necessary legislation can be enacted, the consolidation of a limited number of strong competing systems, exclusive Federal regulation of capital expenditures, and guarantee of return on investment through rate regulation. The recommendations of the committee are now being submitted to all members of the Chamber of Commerce in the form of a letter ballot, merely as a means of obtaining tthe opinion of the commercial organizations of the country regarding a final settlement of the railroad situation.

The recommendations of the committee provide for:

Adherence to the policy of corporate ownership and operation, with comprehensive regulation.

Return of roads to corporate operation as soon as remedial legislation can be enacted.

Adherence to the period of Federal control as now fixed unless and until impossibility of remedial legislation in this period clearly appears.

Permission for consolidation in the public interest, with prior approval by Government authority, in a limited number of strong competing systems.

A requirement that railroad companies engaging in interstate commerce become Federal corporations, with rights of taxation and police regulation reserved for states.

Exclusive Federal regulation of capital expenditures, and security issues of railroads engaged in interstate commerce, with provision for notice and hearing for state authorities.

Federal regulation of intrastate rates affecting interstate commerce.

A statutory rule providing that rates in each traffic section shall yield an adequate return on a fair value of the property as determined by public authority.

Payment into a fund of a share of the excess earned by any railroad system under application of the above statutory rule over an equitable minimum return upon the fair value of the property, this fund to be used as Congress directs for strengthening general railroad credit and increasing general railroad efficiency.

A Federal transportation board to promote development of a national system of rail, water, and highway transportation and articulation of all transportation facilities.

In explanation of the recommendation for consolidating a limited number of strong competing systems, the committee points out that the regrouping should be about the present large systems and not by territorial subdivisions of the country, maintaining competition in service and permitting financial aid to weak roads from strong systems.

In connection with the provision guaranteeing return on investment through rate adjustment and the turning over to Congress, to strengthen railroad credit, of income in excess of an equitable return on investment, it is stated that the purpose is to prevent individual companies from obtaining excessive profits at the expense of others and that the proposed rule would not deprive the present prosperous roads of an equitable return, but would at the same time tend to strengthen railroad credit as a whole.

Transport Committee Plans Better Highway Transportation

With the idea of producing better transportation conditions and increasing the use of highway haulage throughout the country, the highways transport committee of the Council of National Defense has sent out two bulletins. One of these consists of a letter to all representatives and senators requesting that they have surveys made of their districts with a view to determining where there is a lack of transportation facilities and a need for rural motor express; the other concerns a nation-wide campaign for the adoption of uniform highway traffic regulations and gives notice of the preparation of directions to traffic. This, it is believed, will decrease the large number of accidents that now occur upon the highways.

In writing to the senators and representatives, attention is called to a number of examples where farm and other products have been ruined on account of inadequate transportation facilities. It is felt that conditions similar to the examples given exist, in all probability, throughout the country. The survey is for the purpose of giving the council the necessary information for establishing motor transportation for such localities. The communication sets forth that the railroads and electric roads which need more traffic will be benefited by the traffic developed and also that the cost of the commodities will be decreased by the increase in the supply.

The traffic regulations referred to are those recently compiled by William P. Eno and submitted for criticism to various traffic associations and highway engineers throughout the country. They give minute directions for the proper procedure in driving motor vehicles on the highways, and for pedestrians in crossing the highways. These have been printed in a folder for distribution. It is hoped by this means to reduce the number of accidents both in cities and country districts.

Arguments Against National Highways Answered

Highway Industries Association Replies to Criticisms of the Proposed System by Secretary Houston

Replying to arguments advanced by Secretary of Agriculture Houston, as reported in *Engineering News-Record* of May 29, 1919, p. 1083, against the proposal to form a Federal Highway Commission to build and maintain a national highway system, the Highway Industries Association calls attention to the impossibility of obtaining such a system by present methods. The fact that the proposed law would not interfere in any way with the coöperative plan now existing between the states and the Federal Government, as suggested by Mr. Houston, is also brought out. Extracts from the association's statement follow:

The National highway bill introduced into Congress by Senator Townsend, providing for the creation of a Federal highway commission and the establishment of a national system of highways, is a piece of legislation designed to bring about the construction of a national highway system in a reasonable length of time, to coördinate all the highway activities of the Federal Government, and to publish statistics and data on highway transportation, construction and maintenance for the benefit of all the people.

Arguments made against this bill in a letter from the Secretary of Agriculture to a city chamber of commerce were: "That the roads in each section of the country are of varying degrees of importance in the service rendered or that may be rendered to any particular locality. That the traffic conditions vary greatly in the different sections. That the state highway departments are better able to classify the roads than anyone else. That under the present Bankhead bill the Government is coöperating with state highway departments in the classification of the roads, and that when the classification has been carefully made, and by agreement between the state highway departments of adjoining states, the roads of first importance generally meet at state boundaries." Having the above points in mind, Mr. Houston stated that he could not see the wisdom of "substituting for the present coöperative program a plan which would commit or limit the Federal Government to the construction of two Federally-owned trunk-line highways in each state."

The national highway bill does not in any way interfere with the plan now existing among the states to coöperate with the Federal Government. It only substitutes for the Secretary of Agriculture the Federal Highway Commission, which, under the law, is charged with the duty of carrying out the provisions of the Federal-aid law as now operated, and all other obligations or contracts entered into by the Secretary of Agriculture with the respective states. The national highway bill is entirely a new piece of legislation. Its object is to build trunk-line highways in each state, to the extent of not less than 2% nor more than 5% of the total mileage of the state, and to join them up with the main trunk-lines of other states, so as to make a complete national system connecting the entire country. It creates a system of national highways, independent of the states—highways that will carry interstate traffic and that are necessary for the welfare of the country as a whole.

Under the present Federal-aid law the Federal Government has no power to select the roads in any one state that will be improved. The initiative is with the state highway departments, and in many instances is really with the counties, which have to put up the state's share of the money.

The only limitations prescribed by the Federal-aid law are that the roads shall be "rural post roads." When a road has met this condition, it is the duty of the Secretary of Agriculture to give his approval to its construction. All Federal-aid projects start with the 48 state highway departments, and such projects are considered in 48 different lights, by 48 different men, holding 48 opinions, and it can be seen that a national plan that would evolve from such a procedure would be most chaotic, to say the least. Furthermore, the personnel of these departments, and with them the state highway systems, are constantly changing. It is also impossible under the Federal-aid law to coördinate the 48 state systems that a plan would be finally evolved that would form a connected system throughout the country in a lifetime.

Many of the states have laid out a system of state highways. Many of the roads as laid out, on which Federal-aid is being expended, should not be and never will be classified as national highways, but they constitute a large portion of the mileage of the plans that have been approved as a general state system, and on which there has already been granted Federal aid.

We have seen the road work of the country expand from the township unit into the county unit; from the county unit into the state-aid unit; from the state-aid unit to the state unit; from the state unit to the Federal-aid unit, and it is but logical and reasonable that the final steps should be taken by establishing a Federal unit.

Many of the highway activities of the states were carried on in coöperation with the agricultural departments of the state or with the agricultural colleges, but it was soon found necessary to provide an independent unit of the state Government to look after this one important development. Likewise, the day has come when the road work of the Federal Government should be separated from the Agricultural Department. The advocates of good roads are only asking in this national highway bill that the roads should be put on an equal footing with the other departments of the Government, so that they can receive proper consideration and study.

Bids for Hetch Hetchy Dam Asked

Bids for the construction of the Hetch Hetchy dam for the San Francisco water-supply will be opened July 30. The dam will be of cyclopean concrete, 212 ft. high above the stream bed, but designed for a possible addition of 100 ft. The thickness will be 320 ft. at the lowest point, 168 ft. at the stream bed and 25 ft. at the 212-ft. height, where the length will be 600 ft. There will be 128,000 cu.yd. of excavation and 360,000 cu.yd. of concrete. The contract provides a bonus of $200 a day for completion in less than the 900-day contract period and a penalty of like amount for noncompletion. The estimated cost of the dam is $4,000,000. M. M. O'Shaughnessy is city engineer.

Public Service Engineers of New York Organize

The engineers of the Public Service Commission, New York City, have formed the Rapid Transit Engineers' Association. It is stated that these engineers have received no increases of pay in the past five years.

To discuss the problem, the foregoing association (whose membership is now about 600) has called a meeting to be held June 26 at the Municipal Building. To this meeting, engineers of other departments of the city Government than the Public Service Commission have also been invited to come.

Imperial Valley Active on All-American Canal

A contract was recently entered into between the United States and the Imperial Irrigation District, and it was ratified by a two-thirds majority of the voters within the district. Under this contract the district undertakes to construct an All-American canal from

Laguna Dam to serve the present irrigated area within the United States in Imperial Valley. It is contemplated that this canal will also serve all of the additional land, to the east, north and west of the present irrigated area, that can be irrigated from the new canal by gravity. A delegation representing the district has been sent to Washington to complete negotiations with the Government preparatory to beginning work.

Labor Advocates Scientific Research

A resolution in favor of a "broad program of scientific and technical research" was adopted by the American Federation of Labor at its Atlantic City convention, concluded this week. The supporting arguments, as well as the resolution itself, follow:

Whereas, scientific research and the technical application of results of research form a fundamental basis upon which the development of our industries, manufacturing, agriculture, mining, and others, must rest; and

Whereas, the productivity of industry is greatly increased by the technical application of the results of scientific research in physics, chemistry, biology and geology, in engineering and agriculture, and in the related sciences; and the health and well-being not only of the workers, but of the whole population as well, are dependent upon advances in medicine and sanitation; so that the value of scietific advancement to the welfare of the nation is many times greater than the cost of the necessary research; and

Whereas, the increased productivity of industry resulting from scientific research is a most potent factor in the ever-increasing struggle of the workers to raise their standards of living, and the importance of this factor must steadily increase, since there is a limit beyond which the average standard of living of the whole population cannot progress by the usual methods of readjustment, which limit can only be raised by research and the utilization of the results of research in industry; and

Whereas, there are numerous important and pressing problems of administration and regulation now faced by Federal, state, and local Governments, the wise solution of which depends upon scientific and technical research; and

Whereas, the war has brought home to all the nations engaged in it the overwhelming importance of science and technology to national welfare, whether in war or in peace, and not only is private initiative attempting to organize far-reaching research in these fields on a national scale, but in several countries Governmental participation and support of such undertakings are already active; therefore be it

Resolved, by the American Federation of Labor in convention assembled, that a broad program of scientific and technical research is of major importance to the national welfare and should be fostered in every way by the Federal Government, and that the activities of the Government itself in such research should be adequately and generously supported in order that the work may be greatly strengthened and extended; and the secretary of the federation is instructed to transmit copies of this resolution to the President of the United States, to the President pro tempore of the Senate, and to the Speaker of the House of Representatives.

American Society of Civil Engineers at Minneapolis

Following the meeting of the American Society of Civil Engineers, at which the development committee report, details of which were given in last week's issue of *Engineering News-Record*, was discussed, members of the society spent four days in visiting engineering works and in various social affairs planned to increase acquaintanceship among the members. At the business meeting, in addition to the development committee discussion, it was announced that the vote taken upon the question of the form in which the list of members should in future be printed resulted in a majority for the plan to consolidate all lists into one. The vote also favored discontinuing the publication of changes of address in the monthly *Proceedings*.

The evening of June 17 was devoted to a reception tendered by the local membership at the Radisson Hotel. Wednesday was entirely given up to an automobile drive around the Twin Cities, with luncheon at the St. Paul Hotel, in St. Paul, and dinner at the St. Paul Town and Country Club, these functions being arranged by the St. Paul Engineers' Society.

Thursday was devoted to an all-day excursion to Lake Minnetonka, which included a two-hour trip on the lake, followed by luncheon at the Lafayette Club. A golf tournament, with prizes donated by the local committee, was held in the afternoon. On Thursday evening Lieut. Col. F. W. Scheidenhelm delivered an illustrated lecture on "The Work of Engineer Troops of the American First Army in France." This was followed by a smoker under the auspices of the Minneapolis Engineers' Club.

On Friday morning the party broke up into small groups for visits to various engineering projects around Minneapolis and St. Paul. At 1.30 p.m. a special train left for Duluth, where the members were received by a large delegation composed of the Duluth Association of Members of the American Society of Civil Engineers and the Duluth Engineers' Club. A steamer was in waiting, and several hours were spent in a cruise about the Duluth-Superior harbor.

At 6.30 a.m. Saturday a special train started from Duluth, via the Duluth, Missabe & Northern Ry., to Hibbing, where the party transferred to flat-cars for a trip down into one of the big open-pit iron mines. Luncheon was served at the Oliver Club, by the courtesy of the Oliver Iron Mining Co., and then, under the auspices of the Engineers' Club of Northern Minnesota, the party went by automobile along the Iron Range 30 miles to Eveleth, thus affording an opportunity to see the development of the Missabe open-pit mines, which produced 60,000,000 tons of ore last year. At Eveleth the special was in waiting to take the party over the Duluth & Iron Range R.R. to the ore-shipping port of Two Harbors, where an inspection was made of the ore docks. The special returned to Duluth at 8.30 p.m., and the party, after a drive around the boulevard on the heights above the city, was entertained at a reception and dance at the Kitchi Gammi Club, the festivities closnig in time to permit the visitors to catch the special leaving at midnight for Minneapolis.

About three hundred members were in attendance at the meetings and inspection trips in St. Paul and Minneapolis, and probably a hundred more joined the party at Duluth.

MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS ON FLAT CARS INSPECTING OPEN-PIT IRON MINE AT HIBBING

Important City Charter Changes in Philadelphia

Notable changes in the charter of the City of Philadelphia have been made in a bill which has passed the Pennsylvania legislature. The old two-chambered council of many members is replaced by a single relatively small council. The councilmen will be paid $5,000 a year. The bureau of health will become a department. There will be a city architect in the mayor's department. To the city-planning commission are given statutory powers.

Street Cleaning and Garbage Changes at Philadelphia

Under the new charter for Philadelphia recently enacted by the legislature, the city will clean its streets and collect and dispose of its garbage, rubbish and ashes, after Dec. 31, 1920, unless the council by a majority vote, with the approval of the mayor, authorizes the letting of contracts for the work. In the latter event, the present contract restriction of one year is removed. In case a contract for more than four years is made, the city has the option of terminating it at the end of that time or any time subsequently, without damages to the contractor for loss of profits for the unexpired portion of the contract.

Indianapolis Asks Bids on Sewage-Disposal Plant

The board of sanitary commissioners of Indianapolis, Ind., has invited bids for the first of the five sections of the new sewage-disposal plant, and will soon invite bids for the second division. The estimated cost of these are $300,000 and $450,000, respectively, while the total cost of the plant will be about $2,000,000. The first division includes the grit chambers and screens, a 60-in. cast-iron siphon, 1000 ft. long, to pass under the White River, and a 78-in. concrete conduit extending 7700 ft. to the pumping station. The second division will include the buildings for the disposal plant at Sellers farm. For handling the sewage there will be six electrically-driven turbine pumps. Charles H. Hurd is consulting engineer to the board.

Large Dam To Be Built For New York Water-Supply

Contract has been awarded the Hugh Nawn Contracting Co., by the New York City Board of Water Supply, for the construction of Gilboa dam, in Schoharie County, New York, a part of the recent addition to the water-supply of New York City. The dam will divert the Schoharie River from emptying into the Mohawk and divert it to the Ashokan reservoir. It is in two parts, a concrete gravity overfall section 1300 ft. long and 160 ft. total height, and an earth embankment 1000 ft. long. There will be formed a reservoir six miles long with 20,000,000,000-gal. capacity. Quantities are estimated as follows: Excavation, 500,000 cu.yd.; rolled embankment, 500,000 cu.yd.; cement, 480,000 bbl.; masonry, 400,000 cu.yd. The contract price was $6,819,910.

Civil Service Examinations

United States

For United States civil service examinations, listed below, apply to the United States Civil Service Commission, Washington, D. C., or to any local office of the commission, for form 1312.

Assistant designing engineer, Naval Ordnance Plant, South Charleston, W. Va., $9.20 per diem. July 8. File applications before July 8.

Assistant inspector of engineering material (aircraft), $5.92 per diem, July 15. File applications before July 15.

United States.—Chief ship draftsman, U. S. Navy Department, $10 to $12 per diem, draftsman, grade A, $8 to $9.60 per diem; draftsman, grade B, $6 to $7.20 per diem; draftsman, grade C, $5.20 per diem. No date specified. Applications should be filed without delay.

United States.—Chief draftsman, general engineering, architectural, power plant, heating and ventilating, electrical, U. S. Navy Department, $10 to $12 per diem; draftsman, grade B, $6 to $7.20 per diem; draftsman, grade C, $5.20 per diem. No date specified. Applications should be filed without delay.

Valuation engineer, $3600-$4800 per year, and assistant valuation engineer, $2500-$3600 per year; technical staff, income-tax unit, Bureau of Internal Revenue, Treasury Department. No date specified.

Master computer, $2400 to $1800 per year, computer (Grade I) $1800 to $1400 and computer (Grade II) $1400 to $900, Ordnance Department. Applications will be received until further notice.

ENGINEERING SOCIETIES

Calendar

Annual Meetings

NEW ENGLAND WATER WORKS ASSOCIATION; Tremont Temple, Boston; Sept. 30, Oct. 1-3, Albany, N. Y.

The Engineering Alumni of the University of Kansas elected the following officers at the fourth annual meeting, held June 16 at Lawrence: President, J. S. Worley; vice-president, W. E. Baldry; secretary-treasurer, George Hood, Kansas University, Lawrence.

The Southern California Association of Members of the American Society of Civil Engineers was addressed June 11 on "Check Dams" by F. H. Olmsted, and on flood-water acts and legislation by Charles E. Haas, the author of the new California conservancy act.

The Cleveland Chapter of the American Association of Engineers elected the following officers at the recent annual meeting: President, F. D. Richards; vice-president, W. P. Blair; secretary, C. M. Williams, and treasurer, A. M. Clark. The chapter is preparing to conduct an investigation of salaries paid technical engineers in Cleveland with a view to working out a schedule of minimum salaries which the county and city will be asked to put into effect.

The Southwestern Society of Engineers, at the recent annual meeting in El Paso, Tex., resolved to organize a publicity committee; to form local sections; to initiate the policy of greater activity in civic affairs; to establish an employment bureau; to make an organized effort to prevent the employment of incompetent men in engineering work, and to approve licensing. It was also resolved that the society is convinced that compensation nearer the modern level of prices is required to retain the services of the best technical men. The board of directors recommended a plan to charter the society as a district of the American Association of Engineers, provided that all of the members of the society go into the association in a body.

The New York Chapter of the American Association of Engineers held a meeting June 25 at which the following papers were presented: "Railroad Engineering," by R. S. Parsons, chief engineer, Erie R. R.; "Highway Engineering," by W. G. Thompson, state highway engineer of New Jersey, and "The Work of the Engineer at the Front with a Combat Division," illustrated, by Col. F. A. Snyder, 103rd United States Engineers.

The Portland Chapter of the American Association of Engineers has effected a permanent organization, with the following officers: President, W. H. Marsh; vice-presidents, A. H. McKeen, T. W. Saul and O. Laurgaard; secretary, R. W. Barnes and treasurer, C. F. Thomas. Tentative plans have been drawn for amalgamation with the Oregon Society of Engineers. They are under consideration by the national board of the American Association of Engineers.

The Engineers' Club of Minneapolis and the Twin City Chapter of the American Association of Engineers have formed a joint engineering committee to assist in the solution of the engineering problems arising in connection with the settlement of the street-railway franchise. F. K. Bennett is chairman of the committee.

The Engineers' Club of Trenton, N. J. gave a reception June 17 to Trenton men who have returned from overseas duty with the engineers.

PERSONAL NOTES

R. T. BETTS, for the past five years deputy chief engineer, Department of Docks, New York City, has resigned to become chief engineer, Robbins-Ripley Co., Inc., 50 Church St., New York City. Mr. Betts has been in the service of the Department of Docks for the past 22 years. He was previously in the Bureau of the Wallabout Improvement, Department of City Work, of Brooklyn, and in water-supply work for the City of Brooklyn. He was graduated from the School of Mines, Columbia College, in 1890.

CAPT. WALTER S. INGALLS, U. S. A., who recently returned from France and received his discharge from the service, has been appointed adjutant general of the State of Arizona. For a number of years previous to his war service he was an engineer in the office of the surveyor general of the state. He is a veteran of the Spanish-American War and has been connected for some time with the Arizona National Guard.

CHARLES C. COOK, has resigned as city engineer of Wheeling, W. Va., after 16 years of service.

HARRY W. BOETZKES, formerly in irrigation, highway and contracting work in the Northwest, with headquarters in Seattle, and since 1917 captain with United States Engineers in France and the Balkan States, has returned, demobilized, with the Roumanian Bridge Commission, and in that connection will make his headquarters in New York City.

CAPT. HARRY TUCKER, Engineers, U. S. A., who recently returned from France and received his discharge from the service, has been appointed associate professor of highway engineering, State College of North Carolina, and becomes acting head of the new department of highway engineering, which has just been created as a subdivision of the civil engineering department.

JAMES E. SELLERS, formerly of San Diego, Calif., and Phoenix, Ariz., has returned to the States after serving for 18 months with the 23rd Engineers. Mr. Sellers was one of the organizers of the Society of the 23rd Engineers, now having a membership of nearly 4000. He will return to Phoenix and resume his engineering practice.

MAJ. ERIC KEBBON, Engineers, U. S. A., who recently received his discharge from the service, has become associated with Welles Bosworth in the practice of architecture, with offices at 527 Fifth Ave., New York City.

WILLIAM MCGIBBON, previously of the State Highway Commission of Iowa, has been appointed county engineer with headquarters at Knoxville, Iowa, succeeding W. O. PRICE, who has been appointed district engineer, with headquarters at Chariton, as noted elsewhere.

W. SYDNEY WAGNER and **ROBERT R. HOUSTON** have been admitted to partnership with William S. Post and J. Otis Post in the firm of GEORGE B. POST & SONS, architects, New York City and Cleveland. The business is to be continued under the present firm name.

LIEUT. JOHN A. FULKMAN, Sanitary Corps, U. S. A., has received his discharge from the service and has resumed his former work as assistant engineer, MORRIS KNOWLES, INC., engineers, Pittsburgh.

LLEWELLYN N. EDWARDS, supervising engineer of bridges, Department of Works, Toronto, Ont., has resigned to become senior highway bridge engineer, United States Bureau of Public Roads, Washington, D. C. He was graduated from the University of Maine in 1898 and engaged in bridge-engineering work. In 1905 he became designer and estimator, office of the bridge engineer, Boston & Maine R.R., and later engaged in similar work for the Chicago & Northwestern Ry. In 1907 he was appointed structural engineer, Grand Trunk Ry. In 1913 he joined the engineering staff of the City of Toronto.

H. A. SEWELL, formerly county engineer, Pend O'Reille County, Washington, has been appointed engineer, Panhandle Highway District of Idaho, with headquarters at Spirit Lake.

JULIUS K. MUNROE, previously of the engineering department, Morgantown & Kingwood Ry., has been appointed state road commissioner of West Virginia, with headquarters at Charleston, succeeding T. S. SCANLON, resigned.

H. G. CLARK, chief engineer, Chicago, Rock Island & Pacific R.R. previous to the recent return of C. A. Morse, has been appointed assistant to the Federal manager, succeeding H. M. SLOANE, resigned to become assistant to the president, Chicago, Milwaukee & St. Paul R.R., as noted elsewhere.

LIEUT. WILLIAM L. STANTON, Engineers, U. S. A., who recently returned from France, has been discharged from the service and is now in the office of the city engineer, Flint, Mich.

I. J. EIDMAN, assistant bridge engineer, Kansas State Highway Commission, has been appointed bridge engineer, South Western Engineering Co., Hutchinson, Kans.

H. M. SLOANE, assistant to the Federal manager, Chicago, Rock Island & Pacific R.R., has resigned to become assistant to the president, Chicago, Milwaukee & St. Paul Railroad.

HARRY S. MARSHALL, has resigned as chief engineer, A. J. Yawger & Co., general contractors, Indianapolis, to become chief engineer in charge of construction, F. K. Vaughn Building Co., Hamilton, Ohio.

LIEUT. HENRY J. HORN, Sanitary Corps, U. S. A., recently returned from France, has received his discharge from the service and has resumed his former work with GANNETT, SEELYE & FLEMING, engineers, Harrisburg, Penn.

R. E. BURGER has resigned as president and general manager of the Richland Public Service Co., of Ohio, to become chief engineer of Henry L. Doherty & Co., public utility operators, New York City.

MAJ. THERON M. RIPLEY, U. S. A., has received his discharge from the service and will return to his duties as division engineer, Division No. 3, State Highway Department of New York, with headquarters at Watertown.

H. A. MARSHALL, acting road engineer, Kansas State Highway Commission, has been appointed chief engineer, South Western Engineering Co., Hutchinson, Kans.

LIEUT. H. E. MILLER, Construction Division, U. S. A., who was recently discharged from the service, has been appointed director of the bureau of engineering and inspection, North Carolina State Board of Health, with headquarters in Raleigh.

HARRY CONRAD, of the firm of COULTER & CONRAD, engineers, Wheeling, W. Va., has been appointed city engineer of Wheeling, succeeding CHARLES C. COOK, resigned.

FRED OLDER, Adrian, Mich., has been appointed city engineer of Ypsilanti, Mich., succeeding W. R. CALDWELL, resigned to become chief engineer of the Palma Construction Co., Ypsilanti, as noted elsewhere.

GEARY KIMBALL, CHARLES SEMPER and C. W. CROSS have been assigned as highway engineers to the Ogden, Utah, branch of District No. 2, United States Bureau of Public Roads.

W. R. CALDWELL has resigned as city engineer of Ypsilanti, Mich., to become chief engineer of the Palma Construction Co., highway contractors, of Ypsilanti.

LIEUT. CHARLES BOYCE, U. S. A., has received his discharge from the service and will report to the American Red Cross at Washington, D. C., to become sanitary engineer.

W. O. PRICE, county engineer, Knoxville, Iowa, has been appointed district engineer, with headquarters at Chariton.

J. F. WITT has resigned as county engineer of Dallas County, Texas, in which position he has served since 1907.

FRED W. SIMONS, city engineer of Rahway, N. J., has been appointed city manager of Elizabeth, N. C.

D. E. GILMER, of Hutchinson, Kans., has been appointed superintendent of construction, Federal-aid roads, Reno County.

FRED HOFFMAN, contractor and engineer of Long Beach, Calif., has been appointed city engineer.

A. R. TOWSE has been elected county engineer of Pensacola, Fla.

OBITUARY

ERWIN F. PAYNE, head of the E. F. Payne Paving & Contracting Co., Cleveland, died recently in that city. He had been at the head of the company for the past 40 years and was actively engaged in the business until his retirement two years ago.

FRANK C. LAMARCHE, general superintendent, South Chicago Shipbuilding Co., died recently in Chicago. He was previously general superintendent of the American Shipbuilding Co., of Cleveland.

West Coast Lumbermen To Hold Annual Meeting

The West Coast Lumbermen's Association announces that it will hold its annual midsummer meeting at Paradise Inn, Mount Rainier National Park, July 30-31. It is expected that lumbermen from both Oregon and Washington, with their families, will attend the convention in large numbers.

A report will be made by Axel Oxholm, who has just returned from the Scandinavian countries, where he studied lumber trade conditions for the United States Department of Commerce. Other speakers will be C. E. Paul, consulting engineer for the National Lumber Manufacturers' Association; Chester J. Hogue, in charge of the West Coast Association's New York office, and L. C. Boyle, attorney for the national organization.

Asphalt Association Announces Increase in Staff

Several additions to its organization have been announced by the Asphalt Association, recently formed, as reported in *Engineering News-Record* of June 19, 1919, p. 1237. The research and testing department of the association is headed by Prevost Hubbard, formerly chief of the research and testing division of the Bureau of Public Roads.

Several field engineers have also been appointed; Fred W. Sarr, formerly second deputy highway commissioner of New York; A. T. Rhodes, who was for several years street commissioner of Worcester, Mass., and, more recently, secretary of the Granite Block Manufacturers' Association, will have charge of the New England territory and other Eastern points; and J. B. Hittell, formerly city engineer of Chicago, who will have charge of the association's work in the Middle Western States. No representative for the district to be controlled from the Atlanta, Ga., office has been named.

Canadian Industrial Congress To Be Held at Calgary

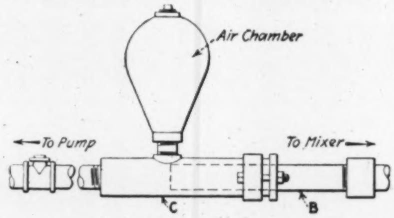
Western Canada is to have an industrial congress which will meet at Calgary, Alta., Aug. 13-14, and will then take a trip through the territory, including other Western Canadian cities. Among the places to be visited will be Medicine Hat, Alberta and Edmonton. The congress will be educational to a large extent, and along industrial lines.

Some of the subjects for discussion are: "Western Markets," "Western Industry," "Pacific Trade and Transportation Routes," "Oriental Commerce," "Future Alignment of Manufacturing, Considered with Reference to the East and West," and the question of building up the Pacific regions and adjacent inland territories. Congress headquarters have been opened at the Palliser Hotel, Calgary, Canada, under the manager, John M. McGreevy. Further information may be obtained there.

Expansion-Joint Air Chamber for Roadbuilders' Pipe Lines

A combined expansion joint and air chamber to prevent water hammer, for pipe lines laid above ground in roadbuilding and other work, is shown in the accompanying illustration. It is claimed that this joint will overcome all the difficulties due to contraction and expansion of pipes which throws them out of line, while the air chamber prevents trouble with water hammer which often breaks pipe and mixer hose when the water is shut off suddenly.

One of these expansion joints is recommended for every 800 to 1000 ft. of pipe. While the combination joint and air chamber can be supplied, it is not necessary to use the air chamber on every joint. Its use upon about every third joint is said to be sufficient.



PIPE LINE EXPANSION JOINT AND AIR CHAMBER

The expansion joint, which allows for 12 in. of expansion or contraction, is formed by having a brass pipe B, which telescopes into the casing C through a gland or stuffing box. The pipe line is connected to each end of the combination, which thus becomes a part of the line.

The combination described is manufactured by the C. H. and E. Mfg. Co., of 384 Clinton St., Milwaukee, Wis.

BUSINESS NOTES

The Oshkosh Mfg. Co., manufacturer of contractors' machinery and equipment, of Oshkosh, Wis., has reported the appointment of Ross Hunter as Eastern sales manager. Mr. Hunter has had long experience in the machinery selling field, his territory covering the entire country. His offices will be at 154 W. 38th St., New York City, where a complete line of Oshkosh contracting machinery will be kept in stock.

The Macon Concrete Roller Co., of Macon, Ga., has been formed to manufacture concrete paving rollers by a process patented by W. L. Ashmore and W. T. Morgan, Jr.

The C. J. Carter Lumber Co., of Kansas City, Mo., The Doniphan Lumber Co., of Kensett, Ark., and The Marsh and Truman Lumber Co., of Chicago, which are all manufacturing and selling interests of Bloxonend flooring, give notice that they have been merged into a single corporation, to be known as the Carter Bloxonend Flooring Co., with home office in Kansas City. The sales office will be located at 1601 McCormick Bldg., Chicago, Ill. The individual lumber business of each of these firms will be continued under the old names as heretofore. C. J. Carter, the president, will have charge of the Kansas City office, while M. G. Truman, the vice-president, will be in charge of the Chicago office.

The McGraw-Hill Co., Inc., of 10th Ave. at 36th St., New York City, reports the removal of the Western office of *Chemical and Metallurgical Engineering* and *Engineering and Mining Journal* from the Newhouse Bldg., Salt Lake City, Utah, to the Rialto Bldg., San Francisco, Calif.

The Austin Co., of Cleveland, Ohio, announces that O. D. Conover, formerly vice-president and chief engineer of the C. W. Price Engineering Co., of New York and Chicago, and production manager of the Ludlum Electric Furnace Co., has resigned the latter position to become associated as production and sales engineer on foundries and steel plants for the Austin Co. Mr. Conover has had experience as engineer in charge of the design and construction of a large number of steel plants, foundaries, electric furnaces, and other equipment, both in this country and abroad.

The Sullivan Machinery Co. has established a branch office at Room 810 Park Bldg., Cleveland, Ohio, under the management of Ralph T. Stone, formerly sales engineer in the New York office.

TRADE PUBLICATIONS

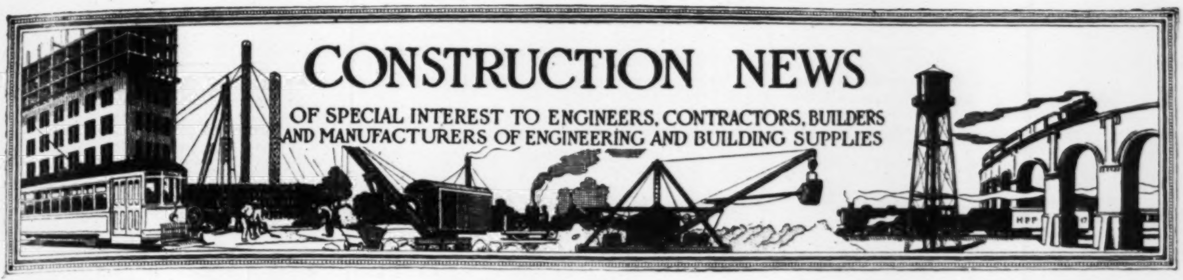
The following companies have issued trade publications:

The Holt Manufacturing Co., of Peoria, Ill.; bulletin, 9 x 12 in., 16 pages, illustrated; describes the various standard sizes of Caterpillar tractors.

The Trailmobile Co., of 571 East Fifth St., Cincinnati, Ohio; catalog 7 x 9 in., 31 pages, illustrated, and three folders 8½ x 11 in., illustrated; describe various forms of trailers manufactured by the company.

The American Manganese Bronze Co., of Holmesburg, Philadelphia, Penn.; catalog, illustrated; contains descriptive matter and illustrations of hydraulic castings, gear wheels, propellers, ingots, valves, bronze forgings, etc. The title of the catalog is "High-Grade Bronzes for Engineering Purposes."

The Tidewater Oil Co., of 11 Broadway, New York City; catalog, 6 x 9 in., 46 pages, illustrated; describes the uses, economy and efficiency of fuel oil and the apparatus necessary for its use.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Few Changes in Price List as Government Control Is Lifted

Some Items Are Lower; Others Have Advanced, Showing No Indication of Predicted General Decline

The end of the War Industries Board Dec. 31 brought few actual changes in the price list. The few declines that have occurred, including those in pig iron, steel, black and galvanized sheets, manila rope, etc., are offset by one or two slight advances—so the changes, as yet, do not indicate any general tendency. Conditions throughout the country point to lower figures, the stopping of night, Sunday, and other overtime work, and the absence of the pressure from the Government indicating that the mills are catching up on orders. Since a large amount of goods manufactured for war purposes has peace-time utility, and since the plants producing them are anxious for a market, more intense advertising and more attractive prices will result to stimulate demand.

The Department of Labor at Washington reports that at the present rate of labor flow from war organizations the supply will very shortly exceed the demand. But a sharp break in the price of both materials and labor is improbable, because of the large potential demand that exists, as well as the pressure from certain quarters for prompt work on public utilities, railroads, highways, bridges, etc., that has been seriously held up.

POTENTIAL DEMAND WILL INFLUENCE SITUATION

The evidence of potential demand for building work alone is shown in the marked falling off of building permits issued in a number of the largest cities in the United States. For the month of November, in five years preceding 1916, the value of the permits varied from $22,000,000 to $43,000,000. In 1916 it rose to $45,000,000, in 1917 it fell to $25,000,000, and for 1918 is reported to be but $8,000,000. Since the signing of the armistice, reports to the Construction News Department of *Engineering News-Record* of bids desired and contracts let have been fewer than in many months since.

A nation-wide investigation by several important agencies is on foot to determine the amount of public and private construction that is immediately available, and the efforts are directed toward having the information ready for the public as soon as possible. As noted elsewhere in this issue, the Department of Labor at Washington is beginning an extensive campaign to start as large an amount of construction, both public and private, as possible.

Many of the industries, fearing the effect on prices by a general unloading of the stock held by the Government, have offered to take over the stocks and dispose of them through their sales organizations. Stability of prices is highly necessary for the best business conditions, and the nearest approach possible to that condition in a transition period is to have the changes made as smoothly as possible. The building trades are working on the problem, and many meetings have been held throughout the country in the past month to seek a proper solution of the problem.

The steel industry had its quarterly meeting with the War Industries Board during the month, and proposed that the board continue to fix prices, offering a list of reductions on the several products of the industry. The board, however, declined to continue the price-fixing policy.

Bankers, in discussing this proposal, say that the price-fixing suggested would be in effect the fixing of minimum prices, whereas the War Industries Board was established to fix maximum prices. The fixing of minimum prices would, in effect, be a complete reversal of the policy that has been in effect, in that during the war a maximum production was necessary with a minimum of consumption, whereas the situation now demands a maximum consumption with less production.

PLATE MILLS STOPPING NIGHT WORK

Plate mills are discontinuing their night work, thus releasing a number of workers, although some large orders for immediate shipment are reported. Shipbuilding is the stabilizer for this industry both in material and labor, so it is not considered probable that there will be immediate difficulties. The expected drop of about 25c. has appeared. The price of sheets has already dropped, and the removal of the Government demand is making it possible for the mills to catch up and make good deliveries. Manila rope is another item in which a reduction is noted, the fall amounting to 13c. in New York and averaging 10c. throughout the country. This is due, however, not so much to a reduction in the demand as to the removal of certain insurance requirements of the Federal Government, making a lower overhead in production costs. The reduction of $3 in pig iron was made in spite of the fact that a large order from England was recently placed at the existing high prices. The announcement has been made that warehouse prices on bars and structural shapes will decline.

Copper has declined from 26c., the price fixed by the Government, to 23c. and a much greater decline is predicted. On Dec. 1 it was estimated that American producers had about 800,000,000 lb. of crude copper in stock and in transit, and this quantity was undoubtedly increased during the month. A price of 20c. has been quoted in England and there are large stocks abroad, making it evident that a still further decline will occur.

A drop in explosives has been reported. At first this seems to be a logical result of the end of the war, but an investigation shows that there has been no advance in explosives during the whole war, the leading explosive manufacturers stating that, by improving processes and producing by-products from what would ordinarily be waste, price stability in that commodity has been made possible.

Congress is taking action to make possible the payment on oral war contracts. The Comptroller of the Treasury ruled that since the armistice was signed it was impossible to substitute formal contracts for the oral contracts. It is estimated that these informal contracts amount to almost $1,700,000,000, representing an amount of tied-up capital that will be a serious factor in the reconstruction problem if it is not released quickly.

Cancellation of Construction Contracts by War Department

Engineering News-Record has on hand a complete list of cancellations by the War Department of construction contracts. The list contains 262 items of contracts in all parts of the country, and gives the name and location of the contract and in a few words states the character of the work covered. This information is available for consultation in the New York office of this journal.

Price advances are indicated by **heavy type;** declines by *italics*

NOTE—On Jan. 7, steel prices, both mill and warehouse, will decline—20c. per hundred on bars and structurals, 25c. on plates.

PIG IRON—Quotations compiled by The Matthew Addy Co.:

	Current	One Month Ago
CINCINNATI		
No. 2 Southern	$37.60	$37.60
Northern Basic	34.80	34.80
Southern Ohio No. 2	35.80	35.80
NEW YORK, Tidewater delivery		
Penna. 2X	39.55	39.55
Virginia No. 2	41.70	41.70
Southern No. 2	41.70	41.70
BIRMINGHAM		
No. 2 Foundry	34.00	34.00
PHILADELPHIA		
Eastern Pa. 2X	39.15*	39.15*
Virginia No. 2	40.50†	40.50†
Basic	36.90*	36.90*
Grey Forge	36.90*	36.90*
Bessemer	39.10*	39.10*
CHICAGO		
No. 2 Foundry Local	34.50	34.50
No. 2 Foundry Southern	39.00	39.00
PITTSBURGH, including freight charge from the Valley		
No. 2 Foundry Valley	35.40	35.40
Basic	34.40	34.40
Bessemer	36.60	36.60

* F.o.b. furnace. † Delivered

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Current	One Year Ago	Current	One Year Ago
Standard bessemer rails	$55.00	$38.00	$65.00	$38.00
Standard openhearth rails	57.00	40.00	67.00	40.00
Light rails, 8 to 10 lb	3.13½	43.50	3.13½	43.50
Light rails, 12 to 14 lb	3.09	39.00	3.09	39.00
Light rails, 25 to 45 lb	3.00	30.00	3.00	30.00

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots together with the warehouse prices at the places named:

	Pittsburgh				San Francisco
	Current	One Year Ago	Chicago	St. Louis	
Standard spikes, 9/16-in. and larger	*$3.70*	$3.90	$4.50	$5.30	$6.15
Track bolts	4.90	4.90	5.50	Premium	7.50
Standard section angle bars		....	4.45	Premium	5.15

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

		7 In. x 9 In. by 8 Ft. 6 In.	6 In. x 8 In. by 8 Ft.
Chicago	Plain	1.48	1.33
San Francisco	Douglas Fir—Green	1.35	.96
San Francisco	Douglas Fir—Creosoted	2.75	1.92

Prices per tie at Missouri mills; St. Louis prices about 25c. higher:

Untreated A Grade White Oak 6x8x8		Untreated A Grade Red Oak 6x8x8	
No. 1	$0.70	No. 1	$0.55
No. 2	.80	No. 2	.65
No. 3	.90	No. 3	.75
No. 4	.98		
7x9x8 white oak			1.05
7x9x8 red oak (No. 4) $0.80		No. 5	.87

Note:—Add 36c. each for treatment

PIPE

STEEL AND IRON PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing card of Jan. 1 for steel pipe and iron pipe:

Inches	Steel Black Per Cent.	Galvanized Per Cent.	Inches	Iron Black Per Cent.	Galvanized Per Cent.
BUTT WELD					
¾ to 3	54	40½	¾ to 1½	36	20
LAP WELD					
2	47	34½	1¼	21	6
2½ to 6	50	37½	1½	28	14
7 to 12	47	33½	2	29	15
13 and 14	37½	...	2½ to 6	31	18
15	35	...	7 to 12	28	15
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½	52	39½	¾ to 1½	36	21
2 to 3	53	40½			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2	45	33½	1¼	22	7
2½ to 4	48	36½	1½	28	14
4½ to 6	47	35½	2	30	17
7 to 8	43	29½	2½ to 4	32	20
9 to 12	38	24½	4½ to 6	31	19
			7 to 8	23	1'
			9 to 12	18	6

From warehouses at the places named the following discounts hold for steel pipe:

	New York	Chicago	St. Louis
Black			
¾ to 3 in. butt welded	40%	41.1%	40%
3½ to 6 in. lap welded	36%	37.1%	36%
Galvanized			
¾ to 3 in. butt welded	28%	26.1%	27%
3½ to 6 in. lap welded	25%	23.1%	24%

Malleable fittings, Class B and C, from New York stock sell at +15% list prices. Cast iron, standard sizes, 5% off.

Note—There is an additional charge of 5% for cartage.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Current	One Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in	$70.70*	$70.70	$58.35	$69.80	$63.00	$85.50	$74.00
6 in. and over	67.70*	67.70	55.35	66.80	60.00	82.50	71.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

* Reduction, probably $3, expected at once.

CLAY DRAIN TILE—The following prices are per 1000 lin. ft.:

Size, In.	New York Current	New York One Year Ago	St. Louis	Chicago	San Francisco
3	$35.00	$35.00	$22.50	$30.00	
4	51.00	50.00	27.00	40.00	$45.00
5	65.00	65.00	45.00	50.00	65.00
6	90.00	90.00	55.00	60.00	90.00
8	130.00	130.00	100.00	80.80	150.00

SEWER PIPE—The following prices are in cents per foot for carload lots

Size, In.	New York Current	New York One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.117	$0.096		$0.125	$0.09	$0.138
4	.117	.096		.125	.15	.138
5	.1755	.144		.175	.1875	.207
6	.1755	.144	$0.16	.175	.225	.207
8	.273	.224	.22	.25	.3475	.2875
10	.4095	.336	.30	.375	.45	.4025
12	.5265	.432	.43	.475	.60	.5175
15	.702	.576	.65	.63	.9375	.78
18	.975	.80	.96	1.00	1.275	1.02
20	1.17	.96	1.14	1.20	1.71	1.20
22	1.56	1.28	1.46	1.60		1.56
24	1.755	1.44	1.64	1.80	2.125	1.80
27	2.60	2.145	2.00	2.75		2.70
30	2.88	2.376	2.70	3.45		3.30
33	3.78	3.15	3.25	4.00		4.20
36	4.305	3.5875	3.55	4.35		4.80

	3	5	8	12	24	36
Boston	$0.12	$0.18	$0.28	$0.54	$1.80	$6.75
St. Paul	.12	.18	.25	.45	2.00	4.75
Seattle	.15	...	.33¾	.64	2.00	
Kansas City	.12	.18	.25	.50	1.80	4.60
Los Angeles	.085	.13¾	.24¾	.44	1.50	
New Orleans	*.108*	.135	.27	.459	1.75¼	...
Cincinnati	.108	.162	.252	.486	1.665	3.99¾

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices per gallon in tank cars 8000 gal. minimum f.o.b. place named:

	Current	One Year Ago
St. Louis, 35% asphalt	$0.09	$0.06½
Chicago, 15–20% asphalt	.10	.06¾
Chicago, 100% dust layer	.11	.08½
Dallas, 40-50% asphalt	.09	.07
Dallas, 60-70% asphalt	.10	.08
Dallas, 75-90% asphalt	.11	.09
San Francisco, 75-95% asphalt	**2.15**	1.90

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
Chicago	Mexican	$35.50	$33.00
San Francisco	California	**17.00**	13.50
Dallas	Texaco and Mexican	32.00	30.00
Seattle	D grade	23.10	...
Denver	Trinidad	59.00	...
Denver	California	39.00	
St. Louis	Stanolind	25.40	22.90
New Orleans	Mexican	*26.00*	*20.00*

PAVING STONE—

New York	Manhattan	$2.80 sq.yd.
	Other boroughs	2.80 sq.yd.
New York	5-in. granite	2.80 sq.yd.
Chicago	About 4x8x4 dressed	2.70 sq.yd.
	About 4x8x4 common	2.35 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	2.75 sq.yd.
Boston	5-in. granite	89.00 per M
St. Paul	Sandstone	1.75 sq.yd.

FLAGGING—

New York	Bronx	$0.20 sq.ft.
	Manhattan	.21 sq.ft.
	Queens, 5 ft. square	.20 sq.ft.
	5x20-in. cross-walk	.70 lin.ft.
Chicago	18 in. wide	.80 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$3.25
New York	4	16	3.50
Chicago	4	16	3.10
Chicago	3½	16	2.95
Chicago	City specifications		3.10
St. Louis	3½	16	2.45
St. Louis	4	16	2.60
St. Louis, Minneapolis spec.	3½		2.40
St. Louis, Minneapolis spec.	4		2.55
Seattle	4	16	**2.55**
St. Paul	Minneapolis specifications		2.50
Dallas	3½	18	3.17
Dallas	4	18	3.56

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.55
Chicago	6 x 18	.95
St. Louis	5 x 16 square edge	.92
St. Louis	5 x 16 bull nose	.97
San Francisco	5 x 16	.65
	5 x 20	.80
Dallas	6 x 20	.45

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00	$1.40	$2.00	$1.50	$1.25	$0.50
Denver	*1.55*	1.45	1.55	1.45	1.10	1.00
Chicago	2.00	1.40		1.40	*1.10*	1.40
Kansas City	2.15	2.15	2.60	2.60	1.00†	.60
St. Louis*	1.76	1.11	1.82	1.11	1.68‡	1.11
Seattle	1.25	.80	1.25	.80	1.25	.80
Dallas	2.00	1.50	2.00	1.50	1.35	1.35
St. Paul	1.25	1.00	*1.35*	1.40	.60	.50
San Francisco	1.20	1.00	1.20	1.00	1.20	1.00
Boston	2.75	1.50	2.75	1.60	1.25	.90
New Orleans	2.82	1.95		1.95	1.88	1.95
Cincinnati	1.35‡	1.56		1.65‡	1.35‡	1.65
Los Angeles	*1.25*		1.40		1.10	

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.70	$1.30	$1.85	$1.40
Chicago	1.60	1.40	1.70	1.40
St. Louis	1.25	1.35	1.25	1.35
Dallas	2.05	1.39	2.05	1.46
San Francisco	1.20	1.00	1.20	1.00
Boston	*1.75*	1.50	*1.75*	1.60
St. Paul	1.15	1.00	*1.25*	1.10
Denver		1.45	1.55	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle	1.50	1.10	1.50	
Cincinnati	1.50	1.75		1.75
Los Angeles	1.50		1.60	

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	16.00		1.75
Boston	22.20	18.20	3.65	3.35
Dallas	16.50	.....	....	2.50
San Francisco	20.00	.....		2.15
St. Paul	25.00	19.00	1.97*	1.93*
New Orleans	19.74	16.45	19.74‡	19.27‡
Cincinnati	14.20	11.95		
Denver	....	26.25‡		2.50*
Los Angeles		.....		2.50*

* 200-lb. barrels. ‡ Per ton

NOTE—Refund of 10c. per bag, amounting to $2 per ton; barrel refund is 10c.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., including bags:

Cincinnati (Utica)	$1.80
St. Paul (Austin)	1.93
Boston (Rosendale)	1.65
Kansas City (Ft. Scott)	1.70
New Orleans	3.52

Return of from 9c. to 10c. allowed per bag.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Current	One Month Ago	One Year Ago
New York	$4.00	$4.00	$2.22
Jersey City	3.64	3.64	2.16
Boston	3.67	3.67	2.37
Chicago	3.05	3.05	2.21
Pittsburgh	3.15	3.15	2.31
Cleveland	3.32	3.32	2.44
Detroit	3.28	3.28	2.40
Indianapolis	3.22	3.22	2.38
Toledo	3.22	3.22	2.40
Milwaukee	3.16	3.16	2.33
Duluth	3.20	3.20	2.51
Peoria	3.16	3.16	2.33
Cedar Rapids	3.28	3.28	2.48
Davenport	3.24	3.24	2.40
St. Louis	3.30	3.30	2.45
San Francisco	3.48	3.48	2.30
New Orleans	3.77	3.77	3.00
St. Paul	3.40	3.40	2.83
Denver	3.67	3.67	3.10
Kansas City	3.30	3.30	2.34
Seattle	3.33	3.33	2.75
Dallas	2.93	2.93	2.60
Los Angeles	3.68	3.38	....
Cincinnati	2.80	2.80	....

NOTE—Bag refund is generally 25c. each.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$1.09	$1.02	$1.03	$1.13	$1.47
049	0.049	1.22	1.40	1.30	1.32	1.43	1.87
068	0.068	1.52	1.73	1.62	1.64	1.79	2.33
093	0.093	1.96	2.23	2.09	2.11	2.41	3.01
126	0.126	2.48	2.82	2.63	2.67	2.92	3.80
153	0.153	2.96	3.38	3.15	3.19	3.48	4.54
180	0.180	3.39	3.85	3.60	3.66	3.99	.....
245	0.245	4.48	5.10	4.75	4.83	5.27	.....
287	0.287	5.18	5.90	5.50	5.58	6.10	7.95
336	0.336	6.00	6.83	6.37	6.47	7.06	.....
395	0.395	6.96	7.89	7.40	7.50	8.19	.....

PAVING

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
036	0.036	$0.74	$0.84	$0.84	$0.80	$0.80	
053	0.053	1.04	1.25	1.25	1.12	1.12	
072	0.072	1.35	1.58	1.53	1.46	1.46	
097	0.097	1.74	1.98	1.98	1.88	1.88	
049	0.049	1.04	1.25	1.25	1.12	1.12	
067	0.067	1.35	1.53	1.53	1.46	1.46	
089	0.089	1.80	1.98	1.98	1.88	1.88	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$31.00	$31.00	$34.00	$38.00	$33.33
26	250	35.23	32.05	32.00	35.00	40.00	34.33
25	300	36.51	33.15	33.25		42.50	35.33
24	340	37.73	34.25	34.50	37.00	.....	37.50
22	450	40.48	36.45	.....	.....	.....	.....

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse Dallas	Warehouse San Francisco
¾ and larger	$2.90	$4.17	$4.09½	$4.17	$4.17	$4.90	$5.15
⅝	2.95	4.23	4.14½	4.22	4.22	4.95	5.20
½	3.00	4.27	4.19½	4.27	4.27	5.00	5.25
⅜	3.15	4.42	4.34½	4.42	4.42	5.15	5.40
¼	3.40	4.67	4.59½	4.67	4.65	6.15	5.65

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas		Chicago	St. Louis	Dallas
¾ in. and larger	$3.07	$3.00	$4.90	⅜	$3.32	$3.25	$5.15
⅝	3.12	3.05	4.95	¼	3.57	3.50	6.15
½	3.17	3.10	5.00				

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$14.00	$14.00	$8.75	No Quotations	
Chicago	11.00	11.00	8.00		$27.50
St. Louis, selected	18.00	18.00	11.00	$28.00	
St. Louis, salmon	12.00*	12.00	8.00	.....	.....
Denver	12.00	12.00	8.50	.....	.....
Dallas	*16.07*	16.30	10.50	*26.20*	...
San Francisco	12.00	12.00	10.00		
Boston	*16–53–17*	18.00	13.25	*28.00*	...
New Orleans	15.98	15.98	9.50		
St. Paul	10.25	10.25	8.70	30.00	37.50
Kansas City	13.00	13.00	11.00	40.00	
Seattle	15.00	15.00	10.00	...	40.00
Cincinnati	16.50–17	16.50	13.50	.....	.....
Los Angeles	14.00	10.00	.....	.....	.....

* Hard brick, $16.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$0.11925	$0.095	$0.07	$0.08	$0.1125	*$0.1005*	.....
6x12x12	.159	.133	.095	.105	.15	*.106*	$0.1512
8x12x12	.....	.1615	.12	.15	.....	*.201*	.1944
10x12x12	.....	.190	.14	.173	.....	.300	.2263
12x12x12	.....	.2375	.195	.208	.....	.325	.2916

	4x12x12	8x12x12	12x12x12
St. Paul	$0.056	$0.11	$0.162
Cincinnati	.086	.165	.218
Seattle	.09	.175	.30
Los Angeles*	.079	.144	*.181*
New Orleans	.14	.20	

* F.o.b. factory, 4, 8 and 10 inch.

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	$3.00	$4.27	$4.19½	$4.27	$4.27	$5.25	$5.05
Channels, 3 to 15 in	3.00	4.27	4.19½	4.27	4.27	5.25	5.05
Angles, 3 to 6 in., ¼ in. thick	3.00	4.27	4.19½	4.27	4.27	5.25	5.05
Tees, 3 in. and larger	3.00	4.27	4.19½	4.27	4.27	5.25	5.05
Plates	3.25	4.52	4.44½	4.52	4.52	5.50	5.28

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$4.65	$5.675	$7.00	$5.57	$5.55	$6.70	$7.00
CONE HEAD BOILER							
¾ in. and larger	4.75	5.775	7.10	5.67	5.65	8.80	7.10
⅝ and 11/16	4.90	5.925	7.25	5.82	5.80	6.95	7.25
½ and 9/16	5.25	6.275	7.60	6.17	6.05	7.30	7.60

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	*$1.35*	*$1.60*	*$1.70*	*$1.95*	*$2.05*	*$2.30*
No. 2 grade	*1.20*	*1.45*	*1.50*	*1.75*	*1.80*	*2.05*

Asbestos asphalt-saturated felt (14 lb. per square) costs $*5.00* per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $*2.10* per roll in carload lots and $*2.35* for smaller quantities.

Shingles, red and green slate finish, cost $*5.50* per square in carloads, $*5.75* in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots N. Y.	Carload Lots Chicago	Less Than Carload Lots N. Y.	Less Than Carload Lots Chicago
Tar felt (14 lb. per square of 100 sq. ft.)	$64.00	*$57.00*	$65.00	*$58.00*
Tar pitch (in 400-lb. bbl.)	21.00	*18.00*	22.00	*19.00*
Asphalt pitch (in barrels)	*36.00*	*36.00*	*41.50*	*41.50*
Asphalt felt	*67.50*	*67.50*	*72.00*	*72.00*

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York Current	New York One Yr. Ago
Blue Annealed						
No. 10	*3.90*	5.52	5.52	6.55	5.52	5.44½
No. 12	*3.95*	5.57	5.52	6.60	5.57	5.49½
No. 14	*4.00*	5.62	5.62	6.70	5.62	5.54½
Black						
Nos. 18 and 20	*4.50*	6.32	6.32	7.30	6.32	6.24½
Nos. 22 and 24	*4.55*	6.37	6.37	7.35	6.37	6.29½
No. 26	*4.60*	6.42	6.42	7.40	6.42	6.43½
No. 28	*4.70*	6.52	6.52	7.50	6.62	6.53½
Galvanized						
No. 10	*5.05*	6.97	6.77	....	6.87	6.69½
No. 12	*5.15*	6.97	6.87	7.85	6.82	6.79½
No. 14	*5.15*	6.97	6.87	8.00	6.97	6.79½
Nos. 18 and 20	*5.45*	7.17	7.17	8.15	7.27	7.09½
Nos. 22 and 24	*5.60*	7.32	7.32	8.30	7.32	7.24½
No. 26	*5.75*	7.47	7.47	8.45	7.47	7.39½
No. 28	*6.05*	7.77	7.62	8.75	7.77	7.69½

LINSEED OIL—These prices are per gallon:

	New York Current	New York One Year Ago	Cleveland Current	Cleveland One Year Ago	Chicago Current	Chicago One Year Ago
Raw in barrel	*$1.59*	$1.25	$1.90	$1.25	*$1.77*	$1.22
5-gal. cans	*1.84*	1.35	2.00	1.40	*1.97*	1.32

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Current Dry	Red Current In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Current Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	14.00	14.50	12.25	12.50	14.00	12.50
25 and 50-lb. kegs	14.25	14.75	12.50	12.75	14.25	12.25
12½-lb. keg	14.50	15.00	12.75	13.00	14.50	12.50
5-lb. cans	.....	......	14.25	14.00	16.00	14.50
1-lb. cans	.....	......	14.25	14.50	17.00	14.50

LUMBER

Pacific Coast—Rough Douglas Fir: F. O. B. mills. Present cargo rate from mills to San Francisco is $7 per M ft.

	8–12–14 and 16 Ft.	9–10–18 and 20 Ft.	22 and 24 Ft.	26 to 32 Ft.
3x3 and 4	$21.00	$21.50	$22.50	$24.50
3x6 and 8	22.00	22.50	23.50	25.50
4x4–6 and 8	22.50	23.50	24.50	26.50
6x6 to 8x8	22.00	23.00	24.00	26.00
3x10 and 12	23.50	24.50	25.50	27.50
3x14	24.00	25.00	26.00	28.00
4x10 and 12	23.50	24.50	25.50	27.50
4x14	24.50	25.50	26.50	28.50

	32-Ft. and Under	34 to 40 Ft.
6x10 to 8x12	$25.00	$27.00
6x14 to 8x14	25.50	27.50
10x10 to 12x12	25.00	27.00
10x14 to 14x14	25.50	27.50

Chicago and St. Louis—Yellow Pine:

	Chicago 20 Ft. and Under	Chicago 22-24 Ft.	St. Louis 20 Ft. and Under	St. Louis 22-24 Ft.
3x 4 to 8x 8	$39.00	$41.00	$35.00	$37.00
3x10 to 10x10	42.00	43.50	38.50	40.00
3x12 to 12x12	44.00	45.50	40.00	41.50
3x14 to 14x14	48.50	50.00	45.00	47.00
3x16 to 16x16	52.00	53.50	48.00	50.00
3x18 to 18x18	56.00	57.00	52.00	53.50
4x20 to 20x20	62.00	63.00	.....	.....

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities

	8 x 8-In. x 20-Ft. and Under Y.P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under Y.P.	Fir
Cincinnati	$42.00	....	38.00	41.00	*37.00*	39.00
Kansas City	39.00	40.50	40.50	38.50	45.50	42.50
Seattle	*19.50*	*19.50*	*19.50*	*19.50*	*19.50*	*19.50*
New Orleans	45.00	....	....	....	50.00	...
St. Paul	....	52.00	48.00	48.00	.....	*48.50*
Denver	43.00	33.50	.....	.....	48.00	39.00
Los Angeles	*	*	*	*	*	*

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	Fir	Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. Y.P.	Fir
Cincinnati	.....	35.00	.....	*40.00*	39.00
Kansas City	46.00	54.75	54.75	53.50	60.00
Seattle	*19.50*	*19.50*	*19.50*	*19.50*	*19.50*
New Orleans	52.00	...	.....	60.00	...
St. Paul	62.50	48.00	43.00	.....	48.50
Denver	43.25	32.50	32.50	35.00	*31.00*
Los Angeles	39.00	*33.00*	34.00	*	*

*Los Angeles: Base price of fir is $32; of hemlock, $34; redwood, $35.

Dallas—Yellow Pine:

2x4 to 2x12—12, 14 and 16	$38.40
2x4 to 2x12—10, 18 and 20	41.00
2x4 to 2x12—22 and 24	43.00
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
x10, 10x10 and 3x10	54.00
8x12 and 3x12	56.00

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.50	$4.37	$4.37	$4.35	$4.75
Cut	5.00	6.50	6.50	5.75	

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.35½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl.	$0.04½	None
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	0.04½
Soda ash, in 400-lb. bbl.	.03	.03½
Liquid chlorine in 100-lb. cylinders Lime is quoted separately	.16	.16

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$4 to $5	$4 to $5	$4 to 5

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	+17½%
Galvanized cast steel rigging	2½%
Bright plow steel	30%
Bright cast steel	17½%
Bright iron and iron tiller	List

San Francisco: Galvanized, +5%; bright, 12½% off.
Chicago: Galv., +20%; bright, 20% off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ½-in., 8 ft., ⅝-in., 6; ¾-in., 4½; 1-in., 3½; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	*$0.25*	Denver	*$0.26*
New York	.23	Kansas City	*.22½*
Cincinnati	*.23½*	New Orleans	*.23*
Chicago	*.21½*	Los Angeles	*.24*
St. Paul	*.24*	Seattle	*.24*
San Francisco	*.22*	St. Louis	*.22½*

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	80%	Black Powder
New York	......	$0.29½	*$0.34½*	......	*$2.40*
Boston	*$0.23½*	*.26½*	*.31½*	*$0.35½*	*2.35*
Cincinnati	*.18½*	*.22½*	*.26½*	......	*2.35*
Kansas City	*.20½*	*.25½*	*.30½*	*.38½*	*2.45*
New Orleans	*.20½*	*.24½*	*.28½*	....	.
Seattle	.....	*.25½*	*.32½*	.....	.
Chicago	*.18½*	*.22½*	*.30*	*.36*	*2.35*
St. Paul	*.19*	*.24½*	*.30½*	....	*2.45*
St. Louis	*.19*	*.25½*	*.30½*	*.36½*	....
Denver	*.17½*	*.24*	*.29*	*.35*	*2.60*
Dallas	*.21*	*.25*	*.29*	*.39*	....
Los Angeles	.23	.29	.37	....	3.10

POLES—Price of Western red cedar poles is as follows:

	New York Current	New York One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft.	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft.	7.65	7.45	6.85	6.10	6.85
7-in. x 35-ft.	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft.	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft.	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft.	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft.	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$9.00
12-in. butts, 6-in. tops, length 30-40 ft.	11.50
12-in. butts, 6-in. tops, length 41-50 ft.	12.50
14-in. butts, 6-in. tops, length 51-60 ft.	21.00
14-in. butts, 6-in. tops, length 61-71 ft.	23.50

	Dallas
6-in. x 20-ft.	$4.60
6-in. x 30-ft.	7.10
8-in. x 30-ft.	8.45
8-in. x 35-ft.	10.38

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	Chicago	St. Louis
No. 1 railroad wrought	*$28.30*	$28.00	$33.00
Stove plate	*20.21*	*21.00*	25.[illegible]
No. 1 machinery cast	*29.30*	27.00	20.50
Machine shop turnings	*13.14*	*13.00*	18.50
Cast borings	*13.14*	14.00	18.50
Railroad malleable cast	*24.25*	*26.00*	32.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	San Francisco Black	Seattle Black
[illegible]	$10.75	*$8.50*	$8.55
[illegible]	10.05	*7.80*	8.25
[illegible]	9.90	*7.65*	8.30

Pittsburgh base, $5.05 per 100 lb.

PROPOSALS

For Proposals Advertised See Pages 83-85 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Jan. 7	Inverness, Miss.	Dec. 19
Jan. 7	Hallock, Minn.	Jan. 2
Jan. 8	Geneva, Neb.	Jan. 2
Jan. 10	Jacksonville, Fla.	Jan. 2
Jan. 10	Houston, Tex.	Dec. 12
Jan. 15	Kansas City, Mo.	Jan. 2
Jan. 31	Poteau, Okla.	Dec. 26
	Adv. Dec. 19 and 26.	

SEWERS

Bids Close		See Eng. News-Record
Jan. 3	Philadelphia, Pa.	Jan. 2
Jan. 9.	Globe, Ariz.	Dec. 30
	Adv. Dec. 19 and 26.	

BRIDGES

Bids Close		See Eng. News-Record
Jan. 6	Tulsa, Okla.	Dec. 12
	Adv. Dec. 12, 19, 26, and	Jan. 2
Jan. 6	Cleveland, Miss.	Jan. 2
Jan. 10	Little Rock, Ark.	Dec. 26
Jan. 22	Ft. Smith, Ark.	Jan. 2
Feb. 3	Charlotte Harbor, Fla.	Jan. 2

STREETS AND ROADS

Bids Close		See Eng. News-Record
Jan. 4	Johnstown, Pa.	Dec. 19
Jan. 5	Tallahasse, Fla.	Jan. 2
Jan. 6	Mangum, Okla.	Dec. 19
Jan. 6	Tulsa, Okla.	Dec. 12
	Adv. Dec. 12, 19, 26, and	Jan. 2
Jan. 6	Seattle, Wash.	Dec. 26
Jan. 6	Holbrook, Ariz.	Dec. 26
Jan. 8	Riverside, Cal.	Dec. 26
Jan. 9	Glendale, Cal.	Jan. 2
Jan. 14	Bay City, Tex.	Dec. 26
Jan. 15	Blytheville, Ark.	Dec. 5
Jan. 20	Oswego, Kan.	Jan. 2
Jan. 24	Topeka, Kan.	Jan. 2

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Jan. 7	Albany, N. Y.	Dec. 12
	Adv. Dec. 12, 19, 26, and	Jan. 2
Jan. 9	Bridge Junction, Ark.	Dec. 12
Jan. 11	Greenfield, Ind.	Dec. 26
Jan. 11	Blythe, Cal.	Jan. 2
Jan. 14	Albany, N. Y.	Dec. 26
	Adv. Dec. 19, 26, and	Jan. 2
Jan. 15	New Ulm, Minn.	Dec. 26
Jan. 15	York, S. C.	Dec. 26
Feb. 3	Madisonville, Ky.	Dec. 12
	Adv. Dec. 5, 12 and 19.	

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 4	Brooklyn, N. Y.	Jan. 2
Jan. 6	Brooklyn, N. Y.	Jan. 2
Jan. 6	Lyons, Ga.	Dec. 26
Jan. 9	Detroit, Mich.	Dec. 26
Jan. 11	College Station, Tex.	Jan. 2
Jan. 14	Cherokee, Ia.	Dec. 19
Jan. 30	Phœnix, Ariz.	Jan. 2
Feb. 3	St. Paul, Minn.	Oct. 31
Mar. 15	Culver, Ind.	Dec. 26

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Jan. 3	Post Office—Newburyport, Mass.	Dec. 5
Jan. 6	Post Office — Lancaster, S. C.	Dec. 5
Jan. 6	Post Office—Caribou, Me.	Dec. 5
Jan. 6	Hangars, Pavement and Beach — Spec. 3432 — Galveston, Tex.	Dec. 19
Jan. 6	Railroad — Spec. 3718 — Bellevue, D. C.	Dec. 19
Jan. 6	Railroad Track—Spec. 3265 —Hingham, Mass.	Dec. 19
Jan. 6	Kitchen and Diet Equipment—Spec. 3622—Norfolk, Va.	Jan. 2
Jan. 6	Completion of Building — Spec. 3479 — New London, Conn.	Jan. 2
Jan. 6	Administration Building — Spec. 3608 — Yorktown, Va.	Jan. 2
Jan. 6	Houses — Spec. 3696 — Indianhead, Md.	Jan. 2
Jan. 6	Wells and Pumps — Spec. 3577 — North Ft. Worth, Tex.	Jan. 2
Jan. 7	Bridge—Washington, D. C.	Jan. 2
Jan. 7	Post Office — Woodbury, N. J.	Dec. 5
Jan. 7	Post Office—Fremont, O.	Dec. 5
Jan. 7	Altering Post Office—Canton, O.	Dec. 26
Jan. 7	Post Office and Court House —Alexandria, La.	Dec. 5
Jan. 8	Post Office—Prescott, Ark.	Dec. 5
Jan. 8	Post Office—Cody, Wyo.	Dec. 5
Jan. 8	Post Office — Waterloo, N. Y.	Dec. 5
Jan. 8	Power House, Etc. — Spec. 3741—Mare Island (Vallejo P. O.), Cal.	Jan. 2
Jan. 9	Post Office—Orange, Tex.	Dec. 5
Jan. 9	Post Office — State College, Pa.	Dec. 5
Jan. 9	Post Office and Court House —Durango, Colo.	Dec. 5
Jan. 10	Post Office — Front Royal, Va.	Dec. 5
Jan. 10	Post Office—Vineland, N. J.	Dec. 5
Jan. 10	Altering Lobby—New York, N. Y.—Adv. Dec. 19 and 26.	Dec. 26
Jan. 13	Additional Buildings—Spec. 3611—San Diego, Cal.	Dec. 19
Jan. 13	Post Office—West Point, Ga.	Dec. 5
Jan. 13	Post Office and Custom House—Ft. Fairfield, Me.	Dec. 5
Jan. 13	Post Office and Court House —Globe, Ariz.	Dec. 5
Jan. 13	Altering Post Office and Custom House—Petersburg, Va.	Jan. 2
Jan. 14	Hygienic Laboratory — Washington, D. C.	Jan. 2
Jan. 14	Post Office — Southbridge, Mass.	Dec. 5
Jan. 14	Post Office—Cherokee, Ia.	Dec. 5
Jan. 14	Post Office—McKees Rocks, Pa.	Dec. 5
Jan. 15	Altering Post Office—Portsmouth, Va.	Dec. 26
Jan. 15	Post Office — Long Island City, N. Y.	Dec. 5
Jan. 15	Post Office—Kenton, O.	Dec. 5
Jan. 15	Post Office — Bellefourche, S. D.	Dec. 5
Jan. 15	Post Office — Winchester, Mass.	Dec. 5
Jan. 16.	Post Office—Eldorado, Kan.	Dec. 5
Jan. 16	Post Office—Shawnee, Okla.	Dec. 5
Jan. 17	Post Office—Franklin, Pa.	Dec. 5
Jan. 17	Post Office—Cohoes, N. Y.	Dec. 5
Jan. 17	Post Office—Buffalo, Wyo.	Dec. 5
Jan. 20	Post Office — Harrisonville, Mo.	Dec. 5
Jan. 20	Post Office—Owego, N. Y.	Dec. 5
Jan. 20	Post Office—Sunbury, Pa.	Dec. 5
Jan. 20	Post Office—Decatur, Ala.	Dec. 5
Jan. 20	Post Office — Shelbyville, Ind.	Dec. 26
Jan. 23	Post Office—Salem, Va.	Jan. 2
Jan. 23	Post Office — Russellville, Ark. Adv. Jan. 2	Jan. 2
	Adv.	Jan. 2
Jan. 28	Dredging—Key West, Fla.	

MISCELLANEOUS

Bids Close		See Eng. News-Record
Jan. 9	Structural Steel — New York, N. Y.	Jan. 2
Jan. 24	Sheet Steel Rivets—Los Angeles, Cal.	Jan. 2
Feb. 19	Gantry Crane — Seattle, Wash. Adv. Jan. 2	Jan. 2

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Lockport—City retained Hill & Ferguson, engrs., 100 William St., New York City, to make general survey, reports, etc., for improving water-works system.

Fla., Sarasoto—See "Sewers."

Mich., Saginaw—R. F. Johnson, comr. light, water and sewers, soon receives bids installing auxiliary pumping unit in West Side pumping station; also laying water mains in Porter St. from Bristol St. north, and in Niagara St. from Court to Mackinaw Sts. About $25,000. Part of work will be done by day labor. H. H. Eymer, City Hall, engr. Noted Dec. 5.

Ill., Witt—City had plans prepared for distribution system. About $80,000. Miller & Holbrook, 418 Milliken Bldg., Decatur, engrs.

Ia., Clarinda—City having plans prepared extending and improving water-works system. Work involves intake pumps, rapid filter, high filter, high pressure pumps and pipe line. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Dec. 19.

Kan., Parsons—Missouri, Kansas & Texas R.R. had plans prepared for building filtration plant in yards near station. J. J. Johntz, Parsons, engr.

S. D., Mitchell—City receives bids in January improving water-works system. About $100,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Sept. 26.

Mont., Whitefish—City election Jan. 6 to vote on $20,000 bonds to build water-works system.

Tex., Dallas—City plans election in April to vote on $3,000,000 bonds to build reservoir. G. D. Fairtrace, city engr.

Okla., Ada—City election Jan. 20, to vote on $85,000 bonds to extend water-works. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs. Noted Dec. 19.

Utah, Tremonton—City voted $50,000 bonds to build and extend pipe line from springs to present diversion system.

Ariz., Prescott—City plans to reconstruct distribution system and build new water system to include storage reservoir, distributing reservoir, canal, headgate and supply pipe line. About $300,000. H. Phillips, International Life Bldg., St. Louis, Mo., consult. engr.

BIDS DESIRED

Fla., Jacksonville—Until Jan. 10, by City Comrs., delivering and erecting complete, 1 surface condensing equipment with auxiliaries and equipment, capacity 120,000 lb. steam per hour in 1 unit, or 2 units 60,000 lb. each per hour. L. E. Murphy, Engineers' Bldg., engr.

Minn., Hallock—Until Jan. 7, by village, building 60,000 gal. steel water tank. F. J. Wickie, clk.

Neb., Geneva—Until Jan. 8, by C. Underwood, city clk., building dug well 10 ft. inside diameter, 82 ft. deep, with two 8 in wells extending from depth into water bearing stratum 34 ft. deep; centrifugal pump not less than 300 gal. capacity against total head of 210 ft.; electric motor 30 hp., 220 volts, 60 cycle, 3-phase to be direct connected to pump; piping from pump to existing discharge line with branch to water mains. About $6300. Noted Nov. 28.

Mo., Kansas City—Until Jan. 15, by Fire & Water Bd., building 17,000,000 gal. rein.-con. reservoir in North Terrace Park. About $1,250,000 available. Work involves 80,000 cu.yd. earth excav. Noted Nov. 14.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mich., Port Huron—City let contract furnishing and installing two 6,000,000 gal. centrifugal pumps and two 200 h.p. motors at city water-works, to Fairbanks Morse Co., Lafayette Blvd., Detroit. About $10,200. Noted Nov. 21.

★Wyo., Worland—Town Council let contract building and extending water mains, to La Fountain & Alsup, Cheyenne. About $18,044. Work involves 2700 ft. 4-6 in. c.i. pipe, 500 ft. collecting gallery, 600 ft. 12 in. pipe, main portion to be laid under river, 3 fire hydrants, three 4-in. valves with boxes, four 6-in. valves with boxes, manholes and all accessories. Noted Nov. 21.

★Cal., Martinez—City let contract building 1,500,000 gal. rein.-con. reservoir, irregular in shape, part of it in excav., 18 x 24 ft. rein.-con. pump house and 50 ft. steel standpipe, 2 ft. diameter, to M. P. Holmes, Martinez, $31,180; 2 triplex pumps with 270 gal. capacity per min., driven by electric motors, to Fairbanks, Morse & Co., 651 Mission St., San Francisco, $$6015.

Sewers

PROPOSED WORK

N. Y., Schenectady—L. E. Sebring, city engr., soon lets contract for 9000 ft. 24 in. tile sewer to be laid in old bed of Erie canal from Washington Ave. to Church St.

Pa., Pittsburgh—City passed ordinance to build 12 and 15 in. terra cotta sewer on Pear Way and Edgebrook Ave. from existing sewer on Pear Way to Saw Mill Run. About $28,000. N. S. Sprague, city engr.

Sewers (Continued)

Fla., Moore Haven—See "Streets & Roads."

Fla., Sarasota—City voted $45,000 bonds for building additions to sewerage and water systems. Noted Dec. 5.

Mich., Detroit—City plans to build trunk line sewers in Linwood and Lonyo Rds., to serve newly annexed territory. About $7,500,000. C. W. Hubbell, city engr.

Ia., Marshalltown—City receives bids in spring building storm sewers in various streets. About $30,000. O. G. Hern, City Hall, engr.

Minn., Morris—City plans to build 6000 ft. 10-15 in. tile sewers in various streets. F. J. Haight, city mgr.

Tex., Laredo—City having plans prepared building sanitary sewerage system. F. A. Jones Eng. & Constr. Co., Interurban Bldg., Dallas, engrs. About $200,000.

Okla., Ada—City election Jan. 29, to vote on $10,000 bonds to extend sewers. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs.

Ariz., Phœnix—City plans to build drainage system to lower ground water level in city. Work involves 10 mi. various size tile pipe and 150 manholes. About $150,000. H. Phillips, International Life Bldg., St. Louis, Mo., consult. engr.

Wash., Seattle—A. H. Dimock, city engr. submitted plans to Bd. Pub. Wks., laying 6500 ft. sewer pipe in Hinds St. About $28,000.

Ore., Salem—City will spend $15,000 to build sewers. W. S. Kelton, city engr.

Cal., Redwood City—City having plans prepared for enlarging outfall sewer and building septic tank. A. Dimmitt, city engr.

BIDS DESIRED

Pa., Phila.—Until Jan. 3, by Bureau of Charities, building sewerage and drainage systems in buildings "D," "E," "J," "K" and "I" and their connecting corridors for the Philadelphia Institution for Feeble-Minded, Byberry. W. Krusen, dir. P. H. Johnson, 728 Presser Bldg., 1713 Sansome St., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—E. Riegelmann,, pres. Brooklyn Boro., let contract repairing sewer in 49th St. from 1st to 2nd Aves., to P. J. Dolan Contg. Co., 82 South 3rd St. About $11,000.

★N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., let contract building combined sewer in Genessee St. from Liberty to North Conduit Aves. and storm sewer in Genessee St. from North Conduit to South Conduit Aves., to J. Ferry & Son, 97 Louisiana Ave., Brooklyn, $363,820. Noted Dec. 19.

★Mich., Port Huron—City let contract building 800 ft. sewer and outlet in Merchant and Rawlings Sts. from Pine Grove Park to River at foot of Rawlings St., segmental block sewer, 48 in. diameter, concrete outlet, containing 36 cu.yd. concrete, driving six 14 ft. wooden piles, to J. Kaumeier, Port Huron, $13,500. Work involves 800 ft. 48 in. segmental block and 3800 cu.yd. earth trenching. Noted Dec. 12.

★Minn., St. Paul—City let contract to O'Neil & Preston, Cretin and Jefferson Sts., building sewers in Snelling Ave., from point 75 ft. north of Randolph St. to 75 ft. south of Jefferson Ave., cost, $3322; in Page St. from Humboldt Ave. to State St., South Robert St. from Morton St. to Page St. and in Gorman Ave. from Morton to Page St., $6255; in Lafons St. from Lexington Ave. to Griggs St., $3485. Noted Dec. 5.

★Ont., Ottawa—City plans to build sewerage system to include 12-36 in. pipe and pumping unit. About $16,000. Work will be done by day labor.

Bridges

PROPOSED WORK

N. J., Trenton—Bd. Freeholders, Mercer Co., plans to build 3 pier rein.-con. bridge, 80 ft. long, 40 ft. wide, over Sanhican Creek. About $20,000. H. Harris, 750 Stuyvesant Ave., engr.

Utah, Bluffdale—Comrs. Salt Lake Co., (Salt Lake City) plan to build rein.-con. bridge and approaches over Jordan River here. About $10,000. R. E. L. Callier, City & County Bldg., Salt Lake City, engr.

Utah, Midvale—Comrs. Salt Lake Co. (Salt Lake City) plan to build rein.-con. bridge and approaches here. About $10,000. R. E. L. Callier, City & County Bldg., Salt Lake City, engr.

Utah, Riverton—Comrs. Salt Lake Co. (Salt Lake City) plan to build rein.-con. bridge over Jordan River here. About $10,000. R. E. L. Callier, City & County Bldg., Salt Lake City, engr.

Ore., Moro—State Highway Comn., Salem, plans to build bridge having two 126 ft. wood deck spans on concrete piers, over John Day River, between Sherman and Gillman Counties. About $20,000. L. W. Metzger, Chamber of Commerce, Salem, engr.

Ore., Moro—State Highway Comn., Salem, plans to build 7 arch rein.-con. bridge, 580 ft. long, over Deschutes River, in Sherman Co. About $75,000. L. W. Metzger, Chamber of Commerce, Salem, engr.

Ore., Oregon City—State Highway Comn., Salem, plans to build bridge over Willamette River, here. About $200,000. L. W. Metzger, Chamber of Commerce Bldg., Salem, engr.

BIDS DESIRED

Fla., Charlotte Harbor—Until Feb. 3, by Comrs. De Soto Co. (Arcadia), building 3000 lin.ft. rein.-con. bridge over Charlotte Harbor in Charlotte Harbor Special Rd. & Bridge Dist. between here and Punta Gorda; also rubbing and finishing 1400 lin.ft. rein. bridge partially constructed, and completing causeway construction; monolithic beam and slab structure on concrete piles. E. V. Camp, Box 421, Atlanta, Ga., engr. Advertised in this issue.

Miss., Cleveland—Until Jan. 6, by Comrs. Bolivar Co., building 3 steel bridges, 2 over Sunflower River and 1 over Bogue Falaya Creek, to be 300-400 ft. long. About $50,000. P. B. Woollard, clk.

Ark., Ft. Smith—Until Jan. 22, by Comrs. Sebastian Bridge Dist., building rein.-con. arch bridge and approaches over Arkansas River at Garrison Ave. About $500,000. Work involves 20,000 cu.yd. concrete, 1,550,000 lb. rein.-steel, 8270 sq.yd. wood block or asphalt pavement, 25,000 lb. miscellaneous metal, 22,000 cu.yd. earth embankment; advertised in this issue. Noted Dec. 5.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wis., Sheboygan—Bd. Pub. Wks. let contract completing steel bridge over Sheboygan River on 14th St., consisting of one fixed and one bascule span and necessary piers, abutments and approaches, to Wausau Iron Wks., Wausau. About $62,700. Noted Dec. 19.

Structural Steel

PROPOSED WORK

Ill., Chicago—See "Buildings."

BIDS DESIRED

Miss., Cleveland—See "Bridges."

Reinforced Concrete

PROPOSED WORK

Ill., Chicago—See "Buildings."

Ia., Des Moines—See "Industrial Works."

Utah, Bluffdale—See "Bridges."

Utah, Midvale—See "Bridges."

Utah, Riverton—See "Bridges."

BIDS DESIRED

Fla., Charlotte Harbor—See "Bridges."

Ark., Ft. Smith—See "Bridges."

Streets and Roads

PROPOSED WORK

Pa., Coatesville—City plans to issue $130,000 bonds to improve various streets. W. Harry, city engr.

Pa., Pittsburgh—City Planning Comn. approved plans for widening, grading, paving, repaving, curbing, guttering and improving following streets: Diamond St. from Grant to Smithfield Sts., $415,000; 2nd Ave. from Liberty Ave. to Grant St., $1,400,000; East Ohio St. from Heinz St. to city limits, $500,000; East St. from Tripoli to Royal Sts., North Side, $250,000; Mt. Oliver St. from South 18th St. to point north of Loyal way, South Side, $85,000; East Carson St. from Smithfield St. bridge to South 7th St., $100,000; Brownsville Ave. from Carson St. to Warrington Ave., $250,000; William St. from Brownsville Ave. to Bailey Ave., South Side, $100,000; Boundary St. from Saline to Irondale Sts., $11,400; Boulevard between Heths Run bridge and Washington Blvd., also acquisition of property adjacent to Butler St. extension between Heths Run Bridge and Washington Blvd., $230,000; abolishing grade crossing on 2nd Ave. and relocating streets from Greenfield to Hazlewood Aves., $350,000, also building new boulevard to be known as Monongahela Blvd., from Oakland Squirrel Hill to East Liberty, $2,500,000. N. S. Sprague, city engr. Noted Dec. 5.

W. Va., Middlebourne—Tyler Co. soon receives bids for 1 mi. standard cement road from here to Salem, 14 ft. wide. About $27,753. G. R. Clarke, co. engr.

W. Va., New Martinsville—Comrs. Wetzel Co. plan election to vote on $500,000 bonds to complete all Class A roads in county. J. R. Wilson, Hundred, engr.

South Carolina—Automobile Assn. presented plan to General Assembly, Columbia, for issuance of $25,000,000 bonds to build 1500 mi. road throughout state.

Ga., Griffin—Comrs. Spaulding Co. plan to build 1 mi. concrete road on Dixie Highway, from Griffin city limits to Georgia Experimental Sta.

Ga., Savannah—Chatham Co. plans election to vote on $1,000,000 bonds to build roads in country.

Florida—State Highway Comn., Jacksonville, plans to build roads as follows: Road No. 2—Alachua Co. from Columbia Co. line to Marion Co. line, $40,000; brick road in High Springs Dist., $40,000; east and west highway in Baker Co., $50,000; east and west highway, in Columbia Co., $10,000; Rd. No. 1 and 2, Dade Co., $60,000; brick road from Bermont to Ft. Myers, De Soto Co., $85,000; road in Gadsen Co., $5000; Air Pike Rd., Hernando Co., $32,000; road from Chocktawhatchee River to Walton Co., in Holmes Co., $11,000; road from Tallahassee to Marianna, Jackson Co., $30,000; Dixie Highway, Jefferson Co., $40,000; road from Bristol to Gadsen, Liberty Co., $16,000; Rd. No. 1 east of Madison, Madison Co., $10,000; Milton-Bradentown Rd., brick, Manatee Co., $86,000; road from Jacksonville to Waycross, $50,000; road in Okaloosa Co., $20,000; road from Kissimmee to Loughman, Osceola Co., $120,000; road from St. Cloud to Melbourne, $20,000; road from Frostproof to De Soto Co. line, Polk Co., $30,000; road from San Mateo to Volusia Co. line, Putnam Co., $10,000; road in Santa Rosa Co., $19,999; also bridge from Pensacola to Moline, Escambia Co., $29,000; bridge across Chocktawhatchee River to Walton Co., $30,000.

Fla., Moore Haven—City soon lets contract paving various streets and installing sewers in same. Bonds for $30,000 voted for project. Noted Aug. 1.

Michigan—State Highway Dept., Lansing, plans to build Old Saginaw Turnpike from Clarkston to Flint Rd. About $250,000. F. R. Rogers, chn.

Mich., Pontiac—Oakland Co. plans to build Auburn Ave. Rd. About $200,000. P. M. Law, County Bldg., engr.

Mich., Pontiac—City plans to pave Henry Clay Ave. from Frank Blvd. to Green St. About $11,427. H. H. Barnett, city engr.

Wis., Janesville—Rock. Co. receives bids in spring for 4 mi. concrete road. About $120,000. C. Moore, co. highway comr.

Wis., Sheboygan—City plans to pave 21,500 yd. Georgia Ave. S., from 6th to 17th Sts., and ½ mi. North 10th St., concrete. C. N. Boley, city engr.

Wis., Waukesha—City plans to pave 7 blocks on State St. and College Ave. About $15,000. W. Powrie, city engr.

Minn., Anoka—City receives bids in spring paving 23 blocks. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, consult. engr.

Minn., St. Paul—City rejected bids furnishing material and grading and improving Seminary St. from Lexington Ave. to Chatsworth St. O. Claussen, city engr. Noted Dec. 5.

Kan., Leavenworth—Comrs. Leavenworth Co. receive bids in spring for 29½ mi Fort to Fort Highway, 18 ft. wide, concrete. About $700,000. L. C. Clark, co. engr. Noted Dec. 19.

Mo., Malden—Cotton Hill Twp. voted $75,000 bonds for road improvements. A like sum will be spent by state for road work improvements in this township; 24 mi. hard roads are to be built as soon as money is available.

Streets & Roads (Continued)

Mo., St. Louis—Good Rds. Comn. of Federation of Missouri Commercial Clubs has decided to ask next legislature to authorize $50,000,000 bond issue for improvement of public roads. A. K. Donlin, care of St. Louis Chamber of Commerce, secy.

Tex., Corsicana—State Highway Comn., Austin, appropriated $155,000 to build 42 mi. of Henry Exall Highway, concrete, 16 ft. wide, through Navarro Co. Rd. Comrs. of county have appropriated $130,000 for same purpose. G. Chappell, co. engr., is preparing plans.

Tex., Houston—Harris Co. soon receives bids improving Main St. to county line. About $60,000.

Tex., Huntsville—Walker Co. having plans prepared for improving roads. About $187,000. Noted Apr. 4.

Utah, Provo—City plans to hard surface ⅞ mi. Academy Ave. from Center St. to 3rd St. Bonds for $15,000 voted for project.

Wash., Seattle—City rejected bids received Dec. 14, filling and paving Holgate St., et al. Contract was not awarded as stated in our issue of Dec. 26.

Wash., Seattle—A. H. Dimock, city engr., submitting plans to Bd. Pub. Wks., repaving 34,000 sq.yd. 1st Ave. through business district brick; cost, $177,000; paving 27,300 sq.yd. Leary and Harbor Aves., concrete, $120,000 and $85,000 respectively.

Cal., Bakersfield—City plans to pave Sumner, Oak and 17th Sts. from A to O Sts., about 25 blocks, with concrete and asphalt, cement curbs and side walks, concrete gutters, wrought iron and corrugated iron culverts. F. S. Benson, city mgr.

BIDS DESIRED

Fla., Tallahassee—Until Jan. 5, by State College for Women, building 1500 lin.ft. driveway. About $12,000. J. G. Kellum, bus. mgr.

Kan., Oswego—Until Jan. 20, by E. A. Milliken, clk., La Bette Co., building Ozark Trail, 10 mi. gravel road feather edge and 10 mi. gravel on crushed rock base. About $175,000. W. J. King, co. engr.

Kan., Topeka—Until Jan. 24, by Shawnee Co., building 9.85 mi. Topeka-Lawrence Co. Rd. on Fort to Fort Highway, 18 ft. roadway, 2 course concrete, 2 in. top course on 6 in. base. J. E. Williams, Topeka, engr. Noted Dec. 26.

Cal., Glendale—Until Jan. 9, by City Clk., grading, paving, building cement curbs and sidewalks, etc., on East Bway., from Glendale Ave. to Verdugo Rd., 7400 ft. long, 2 strips of 5 in. concrete pavement, 16½ ft. wide. About $30,000 bonds will be issued for project.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Me., Auburn**—City will pave various streets by day labor. About $15,000.

★**Fla., Ft. Pierce**—St. Lucie Co. let contract building 4 mi. roads, to D. T. McCarty and C. S. Sullivan, Ft. Pierce. About $31,000. Noted Dec. 19.

★**Ill., Lincoln**—City let contract paving various streets, to G. K. Rhodes. About $75,000.

★**Tex., Lockhart**—Caldwell Co. let contract building about 4 mi. State Highway No. 3, to W. T. Montgomery, Alamo Bank Bldg., San Antonio. About $21,750.

Wash., Seattle—City received bids regrading approaches on 10th Ave. N. E. and East 40th St., from Stewart Constr. Co., Amer. Bank Bldg., $59,882; James Constr. Co., Seattle, $68,902; Puget Sound Bridge & Dredge Co., Central Bldg., $76,222. Work involves 775 lin.ft. armor concrete, 16,350 cu.yd. excav., replacing 635 sq.yd. asphalt concrete, 295 sq.yd. 6 in. concrete base and 55,000 lb. reinforcing steel.

Cal., Porterville—City let contract grading and paving Olive, Main, Sunnyside and Putnam Aves., 5 in. concrete base, 1½ in. Warrenite wearing surface and corrugated iron culverts, to S. P. Worswick Co., I and San Diego Sts., Fresno, $107,664. Noted Dec. 5.

Railways

PROPOSED WORK

New Jersey—Raritan River R. R., Jersey City, received approval from Pub. Utilities Comn. to issue $160,000 stock; proceeds will be used to improve road and purchase equipment. T. Filskov, South Amboy, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Maryland**—United Rys. & Electric Co., Continental Bldg., Baltimore, let contract double tracking 1 mi. line to marine yards of Bethlehem Shipbuilding Corp., Sparrows Point, to Central Constr. Co., 7th and Emerald Sts., Harrisburg, Pa. About $145,472. Project includes earth excav., slag excav., earth fill, stone ballast and grade crossing over Pennsylvania R.R. tracks, etc.

Excavation and Dredging

PROPOSED WORK

N. Y., New York—Dredging—Comr. Docks & Ferries, Pier A, foot Battery Pl., North River, rejected only bid received Dec. 23, dredging about 20,000 cu.yd. at southern side of Pier No. 64, foot of West 24th St., North River, same being in excess of appropriation. Noted Dec. 26.

BIDS DESIRED

Mo., Kansas City — Excavation — See "Water-Works."

Cal., Blythe—Levee—Until Jan. 11, by Dirs. Palo Verde Joint Levee Dist., building with dragline dredger equipment about 4 mi. levees and drainage canals, 12 mi. north of Blythe; also 4 mi. of similar work 6 mi. south of here. Each project involves about 180,000 cu.yd. removing silt and sand. J. C. Allison, Calexico, engr.

PRICES AND CONTRACTS AWARDED

★**Pa., Wilkes-Barre**—Dredging—City received bids dredging and widening Solomon's Creek, from M. T. Malloy, Sugar Notch, $43,520; G. W. Rockwell, $44,215; B. G. Coon, $49,400. Noted Dec. 5.

★**Mo., Jefferson City** — Levee — Bd. Supervs. Capital DD., Cole Co. (Jefferson City) and Moniteau Co., (California) let contract grading, clearing and building 6½ mi. levee along Marion, involving 250,000 cu.yd. excav., to Pope Constr. Co., Jefferson City, $20⅞ per cu. yd.

Cal., El Centro—Excavation—Imperial Irrigation Dist. rejected bids received Dec. 27, excavating on Demara Cut on Main Canal below Alamo Mocho in Mexico and enlarging main canal at various points and training and revetment of canal banks. Work will be done by day labor. C. K. Clarke, Calexico, ch. engr. Noted Dec. 12.

Industrial Works

PROPOSED WORK

Mass., Boston—Trustees Electric Garage, care of A. F. Bowditch, engr., 44 Bromfield St., plan to build 2 story, 90 x 91 ft. and 232 x 233 ft. brick, steel and concrete garage at 57-93 West Dedham St. About $175,000.

Mass., New Bedford—Parsons Steam Laundry Co., 270 Acushnet St., receives bids in spring for 3 story, 80 x 80 ft. brick and concrete addition to laundry, concrete flooring and concrete foundation. About $50,000.

R. I., Pawtucket—Royal Weaving Co., Central Ave., plans to build 2 story, 75 x 120 ft. brick and concrete addition to mill, concrete flooring and concrete foundation. About $54,000. D. Seabury, 12 East Ave., engr.

Conn., Durham—Merriam Mfg. Co. having plans prepared by C. S. Palmer, archt., 191 Church St., New Haven, for plant to replace one destroyed by fire. Plans include brick and timber office building, 40 x 100 ft. stamping room, 30 x 230 ft. soldering room and 45 x 110 ft. storage kiln. About $40,000. Noted Nov. 14.

Conn., Parkville (Hartford P. O.)—Jewell Belting Co., 55 Trumbull St., Hartford, plans to build 1 and 7 story, 100 x 450 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, here. About $100,000. H. Wolcott, Elmwood, engr.

Conn., Stamford—H. & H. Fdry. Co., 770 Pacific St., having plans prepared for 1 story, 100 x 400 ft. brick and concrete foundry on Pacific St. About $40,000.

N. Y., Brooklyn—Englander Spring Bed Co., 88 35th St., having plans prepared by Buchman & Kahn, archts., 56 West 45th St., New York City, building 2-story, 200 x 200 ft., steel and brick factory, rein.-con. flooring, concrete foundation, Johnson, Stuart and Varick Aves. and Long Island R. R. Noted Sept. 19.

N. Y., Brooklyn—W. S. Hawes Fdry. & Equipment Co., 44 Steuben St., having plans prepared by L. Allmendinger, archt., 20 Palmetto St., for two 1 story 50 x 100 ft. brick and steel shops, concrete foundation. About $30,000.

N. Y., New York—B. Altman & Co., 5th Ave. and 34th St., having plans prepared by F. G. Frost, archt., 19-25 West 44th St., for 6 and 9 story, 75 x 200 ft., steel and brick garage, warehouse and storage plant, rein.-con. flooring, concrete foundation, 36th and 37th Sts. between 2nd and 3rd Aves. About $250,000.

N. Y., Poughkeepsie—Poughkeepsie Cutlery Wks. plans to build 4 story, 75 x 125 ft., brick addition to factory on Cherry St. About $50,000.

N. J., Newark—E. I. du Pont de Nemours & Co., 278 Passaic St., soon receives bids building 1-story, 100 x 200 ft., steel and brick storehouse. About $55,000. C. K. Weston, Du Pont Bldg., Wilmington, Del., publicity agt. Noted Dec. 26.

N. J., Trenton—State plans to purchase building on New York Ave. and convert same into garage and warehouse; also construct new building. About $70,000 will be expended on project. F. H. Bent, Bound Brook, archt.

Md., Baltimore—M. McI. Dukehart & Co., 641 Light St., purchased site on Key Highway and plans to build 1 and 2 story, 210 x 269 ft., concrete and brick plant. Cost between $75,000 and $100,000.

Ga., Savannah—Forest City Ice Cream Co., 241 Whitaker St., plans to build plant. About $100,000. B. J. Ford, mgr.

Ga., Thomasville—Flowers Ice Cream Co. plans to build bakery here. About $35,000.

O., Cleveland—Giates Silver Co. plans to build brick and concrete warehouse and storage at 727 Bolivar Rd. About $50,000. J. Katsarsy, 303 Erie Bldg., archt.

Ind., Hartford City—Ft. Wayne Corrugated Paper Co., Murray and Barr Sts., Ft. Wayne, plans to build 2-story addition to factory here. About $75,000. Address D. S. Griffith.

Mich., Detroit—F. Stearns & Co., Jefferson Ave., had plans prepared by A. Kahn, archt., Marquette Bldg., for 8 story, 100 x 110 ft. rein.-con. and steel plant, rein.-con. flooring and concrete foundation, on Jefferson Ave. and Belvue St. Noted Dec. 19.

Ill., Chicago—Bunte Bros., 730 West Monroe St., plans to build candy factory on Franklin and Ohio Sts. About $1,500,000.

Ill., Chicago—Channel Chemical Co., 1419 Carrol Ave., plans to purchase site and build factory. About $500,000.

Ill., Chicago—B. A. Eckhart Milling Co., 1300 Carroll Ave., plans to build addition to flour mill on Carroll and Sheldon Aves. About $100,000.

Ill., Chicago—Illinois Packing Co., 3950 Normal Ave., had plans prepared by Henshein & McLaren, engrs., 1600 Old Colony Bldg., building 4 story, 85 x 145 ft. brick and timber packing plant, rein.-con. flooring and concrete foundation at 925 West 37th St. About $125,000.

Ill., Chicago—J. F. Jelke Co., 759 South Washtenaw St., plans to build new butterine factory on Washtenaw and Polk Sts., or addition to existing plant.

Ill., Chicago—Natl. Biscuit Co., 112 West Adams St., plans to build several mill construction additions to existing plants.

Wis., Cudahy—Federal Rubber Co. plans to build 6-story, 250 x 300 ft. brick and concrete factory. A. A. Frank, genl. mgr.

Wis., Racine—Maibohm Motor Co., 15th and Clark Sts., plans to rebuild 1 story, 80 x 600 ft. brick and steel factory recently destroyed by fire. About $96,000. Austin Co., Peoples Natl. Bank Bldg., Jackson, Mich., engrs.

Wis., West Allis—Sterling Wheelbarrow Co. receives bids in spring building 1 story, 125 x 300 ft. brick and steel addition to machine shop, rein.-con. flooring concrete foundation. Klug & Smith, 69 Wisconsin St., Milwaukee, archts.

Ia., Des Moines—Kurtz Hardware Co., 312 Walnut St., having plans prepared for 6 or 7 story, rein.-con. plant on 3rd St.

Ia., Ft. Dodge—Minneapolis & St. Louis R.R., Transportation Bldg., Minneapolis, Minn., plans to build a 1 and 2 story terminal plant to include machine shop, boiler plant and power house. J. H. Reinholdt, Minneapolis, Minn., ch. engr.

Ia., Sioux City—Western Terminal Elevator Co., recently incorporated, plans to build a 1,000,000 bu. elevator. About $650,000. M. King, 634 Davidson Bldg., pres.

S. D., Sioux Falls—Standard Oil Co. plans to build 1-story, 60 x 100 ft. addition to warehouse. About $25,000. C. B. Thayer, mgr. Shlinze & Bailey, 53 West Jackson Blvd., Chicago, archts.

Industrial Works (Continued)

Tex., Ft. Worth—Gulf Well Machy. Co., 1718 Congress Ave., Houston, plans to construct plant here to manufacture oil well machinery; also build forge shop, power house, garage and office. About $225,000.

Cal., Los Angeles—Keystone Iron & Steel Wks., 973 North Main St., having plans prepared by A. C. Martin, archt., 430 Higgins Bldg., building 375 x 1100 ft., brick, rein.-con. and steel plant on Sante Fe Ave. to include machine shop, foundry, warehouses, offices, etc. About $100,000.

Cal., San Pedro—Union Ice Co., 660 South Alameda St., Los Angeles, having plans prepared by C. M. Gay & Son, engrs., 2650 Santa Fe Ave., building 1 story, 50 x 100 ft., timber building on Mesa Ave. About $30,000.

N. S., Halifax—Halifax Meal Co., Upper Water St., plans to build 1 story garage. About $38,000.

Que., Montreal—Pyrene Mfg. Co. of Canada, Ltd., 3 St. Nicholas St., having plans prepared for factory. About $25,000.

Que., Three Rivers—St. Maurice Lumber Co., 2 Notre Dame St., plans to build pulp and paper plants. About $500,000. R. F. Grant, mgr.

Ont., Merritton—Woodruff Mfg. Co. soon lets contract building 3 story brick factory. T. H. Wiley, 128 St. Paul St., St. Catharines, archt.

B. C., North Vancouver—Capilano Timber Co., 510 Hastings St. W., Vancouver, plans to build saw mills here. About $60,000. G. G. Johnson, mgr.

B. C., Prince Rupert—Mullen Contg. Co. having plans prepared for addition to shipyard and dry docks. About $500,000. J. Mullen, mgr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Lawrence—H. Webster, Orchard St., let contract building 90 x 93 ft. concrete garage, 20 ft. high, rein.-con. flooring, concrete foundation, to E. A. Dick Co., 93 Greenwood St. About $42,000.

★N. Y., Brooklyn—J. A. Voorhees, 1655 Cropsey Ave., will build 1 story, 100 x 115 ft., steel and brick garage, rein.-con. flooring and concrete foundation, Bay 19th St. and Bay Ave. About $25,000. Work will be done by day labor.

★Pa., Phila.—See "Buildings."

★O., Cleveland—Domestic Coke Corp., 1208 Engineers Bldg., let contract building rein.-con., steel and brick by-products coke plant on Howard Ave., consisting of 120 ovens, also office building, to Semet-Solvay Co., Milton Rd., Syracuse, N. Y. About $3,000,000.

★O., Cleveland—U. S. Copper Co., Guardian Bldg., let contract building 1 and 2 story, brick, steel and rein.-con. brass and copper tube mill, rein.-con. flooring, on West 73rd St. and Wheeling & Lake Erie R. R., to Hunkin Conkey Co., 601 Century Bldg. About $75,000. Noted Dec. 5.

★Wis., Cudahy—Cudahy Bros. let contract building 4 story, 80 x 200 ft. rein.-con. and steel cold-storage warehouse, to W. F. Tubesing Co., 139 Chestnut St., Wauwatosa. About $150,000.

★Wis., Racine—Simms Fdry. Co., 10th St. and St. Paul R. R., let contract building 1 story, 50 x 85 ft., brick and steel foundry, concrete foundation, on 9th St., to L. Nelson Co., Racine. About $25,000 plus 10%.

★Ont., Hamilton—Zimmerman Mfg. Co., 330 Dundurn St., S., let contract building 3 story brick addition to plant, to Stewart Bros., 1 Hyde Park Ave. About $50,000. Noted Nov. 14.

★Alta., Redcliffe—Dauntless Mfg. Co. let contract building steel plant, to F. Zeighan, c/o Dauntless Mfg. Co. About $50,000.

Buildings

PROPOSED WORK

Mass., North Attleboro—Bank—Manufacturers' Natl. Bank plans to alter. About $60,000.

R. I., Westerly—Bank and Office—Washington Trust Co., Main St., having plans prepared by York & Sawyer, archts., 50 East 41st St., New York City, for 3 story, 60 x 104 ft. on Broad and Main Sts. About $60,000.

Conn., Bridgeport—Home—E. B. Caldwell, Jr., archt., 886 Main St., receives bids in spring building 4 story, 80 x 102 ft. brick, steel and timber, concrete flooring and concrete foundation, on Main and Thomas Sts., for Baptist Christian Union, 886 Main St. About $100,000.

Conn., Bridgeport — Hotel — Salvation Army, 82 Elm St., receives bids in spring for 5 story, on Elm near Main Sts. About $100,000.

Conn., Hartford—Market—R. N. Clark, city engr., receives bids in spring building 1 story brick and timber, concrete flooring and concrete foundation, on Main, Wells and Elm Sts. About $100,000. Noted Aug. 29 under Industrial Works.

Conn., Hartford—Prison—State Comn. will submit plans to Legislature for approval of $2,000,000 bonds to build state prison. L. W. Robinson, 42 Church St., New Haven, archt. Ford, Buck & Sheldon, 60 Prospect St., consult. engrs.

Conn., West Hartford—High School—Town receives bids in spring for 2 story, 100 x 100 ft. brick, steel and timber, rein.-con. flooring and concrete foundation, on South Main St. About $100,000. C. S. Lane, 1631 Boulevard, chn. bldg. com. Noted Sept. 12.

N. Y., Johnson City—Church—First Methodist congregation considering tentative plans for church. About $125,000.

N. Y., New York—Hospital—Knickerbocker Hospital, 128th St., had plans prepared by Helmle & Corbett, archts., 190 Montgomery St., Brooklyn, for 7 story, 150 x 200 ft. steel and brick, concrete foundation, 130th St. and Convent Ave. About $500,000.

N. Y., Rochester—Bathhouses—City soon lets contract building 1 story, 24 x 400 ft., brick and tile at Durand Eastman Park and 2 story, 40 x 80 ft., stucco, at Lake Beach in 23rd Ward. F. F. Elwood, city engr.

N. J., Atlantic City—Hotel—Brighton Realty Co. had plans prepared building 2 story concrete addition to Ambassador Hotel, Brighton Ave. About $75,000.

N. J., Boonton—School—Bd. Educ. having plans prepared by W. Potter, acht., 1 Union Sq., New York City, for 2 story, 110 x 150 ft., steel and brick, concrete foundation, on Old Boonton Rd. and Lathrop Ave. About $125,000.

N. J., New Brunswick—School—Bd. Educ. having plans prepared by A. Merchant, archt., 363 George St., for 3 story, 175 x 175 ft., brick on Livingston Ave. About $400,000. M. Bauer, clk.

N. J., Trenton—Hotel—C. F. Hildebrecht, 12 Parkside Ave., plans to build on West State St., to be 1 block in depth and 65 ft. wide. A. Swan, 506 Riverside Ave., archt.

N. J., Trenton—School—State Bd. Educ. plans to build school for deaf. I. H. Bent, Bound Brook, engr.

Pa., Westchester—Hospital—Chester Co. Hospital having sketches prepared by H. J. Harper, archt., Church Bldg., 10th and Market Sts., Wilmington, Del., for 1 and 3 story, brick and stone addition on East Marshall St. About $300,000. Address W. Potts, care of Bd. Trustees.

O., Cleveland—Bath House—City plans to build brick, steel and rein.-con. at Gordon Park. About $350,000. F. H. Betz, 604 City Hall, archt.

O., Cleveland—Club House—Cleveland Federation of Labor, 310 Prospect Ave., plans to build 10 story, rein.-con., steel, brick and stone, on East 18th St. and Prospect Ave. About $500,000. W. S. Lougee, 500 Marshall Bldg., engr., prepared plans.

O., Cleveland—Commercial—H. S. Rwitz & Co., 2112 Ontario St., plans to build 5 and 6 story, rein.-con., steel and brick, on East 40th St. About $500,000.

O., Cleveland—Market—Lakewood Market House Co., c/o W. R. Powell, archt., 702 Rose Bldg., receives bids in spring for 2 and 6 story, 78 x 381 ft., brick, steel and concrete market house, rein.-con. flooring, at 11826 Detroit Ave. About $50,000. Allen-Osborn, 700 Rose Bldg., engrs.

O., Cleveland—Office—West Superior Co., care of J. Larange, Williamson Bldg., receives bids in spring building 17 story, 44 x 82 ft., rein.-con., steel and brick on West 3rd St. and Superior Ave. About $1,000,000. Lehman & Schmidt, 210 Electric Bldg., engrs.

O., Cleveland Heights (Warrensville P. O.)—Schools—Bd. Educ. receives bids in spring building addition to schools on Noble, Fairfox and Roxboro Rds. About $125,000 each. F. C. Warner, 768 Hippodrome Annex, Cleveland, archt. and engr. Noted Apr. 11.

O., Zanesville—Y. M. C. A., Main St., plans to construct 4-story, 135 x [illegible] ft., brick, steel and rein.-con. building. About $250,000. A. A. Hanson, c/o owner, archt.

Ind., New Albany — Temple — Masonic Temple Assn. had plans prepared by C. E. Martindale, archt., 1200 Fletcher Trust Bldg., Indianapolis, for 4 story, 75 x [illegible] ft. About $75,000.

Mich., Detroit — Mercantile — Newcomb Endicott Co., 190-200 Woodward Ave., had plans prepared by H. S. Angell, archt., 722 Free Press Bldg., for 12 story, 60 x 110 ft. brick and rein.-con., rein.-con. flooring and concrete foundation, on Woodward and Grand River Aves.

Mich., Flint—Store—J. E. Burroughs and J. C. Zimmerman had preliminary plans prepared for building on Saginaw St. About $260,000.

Mich., Port Huron—Theater and Office—W. H. Reid plans to build brick, rein.-con. and steel, concrete foundation, on Military St. About $200,000.

Ill., Chicago—Church—Fourteenth Church of Christian Scientist, 1639 Montrose Ave., receives bids in spring building 1 story, 106 x 143 ft. steel, rein.-con. flooring, at 4450 North Paulina St. About $200,000. N. M. Dunning, 310 South Wabash Ave., archt.

Ill., Chicago — Club — Calumet Country Club, 95th St. and Cottage Grove Ave., plans to build concrete golf club.

Ill., Chicago—Office—S. W. Strauss & Co., 6 North Clark St., plans to build 12 story, 80 x 160 ft., steel on Madison and Clark Sts. About $2,500,000.

Ill., Chicago—Office and Store—A. S. Best, Wabash and Randolph Sts., plans to build 8 story, 89 x 96 ft., rein.-con. About $300,000.

Ill., Chicago—Temple—Englewood Lodge, A. F. & A. M., 6730 Wentworth Ave., plans to build 3 story, 75 x 150 ft., brick and steel. About $175,000.

Ill., Chicago—Temple—Logan Square No. 891, A. F. & A. M., 3117 Logan Blvd., plans to build 4 story, 54 x 100 ft., brick and steel on Fullerton Ave. at Logan Sq. About $100,000.

Ill., Mt. Carmel—Bank—Amer. Natl. Bank receives bids in spring building 2 story, 45 x 80 ft. About $50,000. J. M. Mitchell, secy. C. Shopbell, Furniture Bldg., Evansville, Ind., archt.

Wis., Milwaukee—Bank—Wisconsin Natl. Bank, East Water and Wisconsin Sts., plans to build. About $1,000,000. Marshall & Fox, 721 North Michigan Ave., Chicago, archts.

Wis., Racine—Bank—Racine City Bank, 1345 Washington Ave., plans to build 3 story, 40 x 90 ft. on Washington Ave. Cost, between $45,000 and $70,000.

Wis., Sheboygan — Exchange — Citizens Telephone Exch., 706 8th St., receives bids in spring building 4 story brick and concrete. W. C. Weeks, 720 Ontario Ave., archt. Noted Dec. 19.

Wis., Waukesha—High School—Bd. Educ. receives bids in spring for 2 and 3 story, 150 x 220 ft. brick, steel and rein.-con., concrete foundations, on Grand and Carroll Sts. About $230,000. Van Ryn & De Gelleke, Caswell Blk., Milwaukee, archts.

Ia., Des Moines—School—Bd. Educ. soon receives bids building 2 story, rein.-con. and brick. About $150,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., archts.

Ia., Waterloo—School—Bd. Educ. receives bids in spring building 3 story, 50 x 180 ft., rein.-con. and brick. About $150,000. J. G. Ralston, 417 Syndicate Bldg., archt. Noted Aug. 29.

Minn., Hawley—School—Bd. Educ. receives bids in spring building 2 story, 67 x 118 ft., brick and stone. About $50,000 K. T. Snyder, 933 Plymouth Bldg., archt. Noted Mar. 28.

Minn., St. Paul—School—Bd. Educ. plans to build rein.-con. and brick sub-normal school on 14th St. between Robert and Jackson Sts. About $300,000. C. A. Hausler, City Hall, city archt.

Neb., Lincoln — Church — Westminster Presbyterian congregation plans to build here. About $75,000.

S. D., Sioux Falls—Hospital—Madison Hospital Assn. receives bids in spring. Perkins & McWayne, Paulton Bldg., archts. About $75,000.

Mont., Billings—Bank and Office—Merchants Natl. Bank, Northern Bldg., having plans prepared by Weary & Alford, archts., 1007 Michigan Ave., Chicago. About $300,000. R. J. Covert, pres.

Buildings **(Continued)**

Mo., St. Louis—Hospital—Deaconess Hospital Assn., 4125 West Belle Pl., soon receives bids building on Oakland and Berthold Aves. Cost, between $750,000 and $1,000,000. W. Wedemeyer, Wainwright Bldg., archt. Noted Dec. 19.

Mo., St. Louis—Zoo—City plans to issue $300,000 bonds to build zoo to include bird house, bears' dens and shelter houses for other animals. Address Citizens Bond Issue Com., City Hall.

Tex., Ft. Worth—Hall—Carpenter's Union plans to build 3 story, brick, at Jones and 3rd Sts. T. F. Bays, 3301 Ave. N, mgr. About $80,000.

Tex., Ft. Worth—Office—W. Capps plans to build 5-story addition at 5th and Throckmorton Sts. About $65,000.

Tex., Paris—Church—First Methodist congregation purchased site on Lamar Ave. and Clarksville St. and plans to build. About $100,000.

Idaho, Nampa — Hospital — Sisters of Mercy had plans prepared by Tourtellotte & Hummel, archts., Overland Bldg., Boise, for 40 x 152 ft. brick and concrete, concrete foundation. About $50,000.

Ariz., Eagar—Church—Latterday Saints congregation having plans prepared by S. A. Shreeve, archt., Col. Hudson Bldg., Ogden, Utah, for church. About $75,000.

Ariz., Nogales—Market—City plans to build. About $50,000.

Wash., Seattle—Hospital—J. W. Wilkins, M. D., Cobb Bldg., plans to build 3 story, 72 x 34 ft., brick, with wing 34 x 34 ft., on 16th Ave. and John St. About $60,000. J. R. Nevins, Hoge Bldg., archt.

Cal., Los Angeles—Office—See "Industrial Works."

BIDS DESIRED

N. Y., Brooklyn—Hospital—Until Jan. 4, by Carleson & Wiseman, archts., 226 Henry St., building 4 story, 75 x 100 ft., steel and brick, concrete foundation, Bushwick Ave. and Cedar St., for Bushwick Maternity Hospital, 761 Bushwick Ave. About $70,000.

N. Y., Brooklyn—Theatre—Until Jan. 6, by M. Montrose & Sons, archts., 533 Nostrand Ave., building 1 story, 120 x 171 ft., steel and brick, concrete foundation, Fulton St. and Howard Ave., for H. Weingarten, 1901 Bway. About $70,000.

Tex., College Station—Administration, etc.,—Until Jan. 11, by Bd. Dirs. Agricultural & Mechanical College of Texas, building 60 x 100 ft. administration building and 65 x 130 ft. physics building, rein.-con. and brick, rein.-con. flooring. About $75,000 and $60,000, respectively. W. B. Bizzell, pres. Noted Nov. 21.

Ariz., Phœnix—School—Until Jan. 30, by Trustees Phœnix School Dist., building 2 story, 80 x 120 ft., brick, concrete foundation. About $150,000. Marsh, Howard & Wallingford, 211 Bway. Central Bldg., Los Angeles, Cal., archts.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Hartford**—Office—Phœnix Mutual Insurance Co., 49 Pearl St., let contract building 6 story, 135 x 150 ft. brick and concrete, concrete foundation, on Elm St., to M. Eidlitz & Son, 30 East 42nd St., New York City. About $500,000. Noted Dec. 12.

★**N. Y., New York**—Church—Seventh Church of Christ Scientist, 606 West 110th St., let contract building 1 story, 67 x 94 ft., stone and marble, at 516-22 West 112th St., to Burke Bros. Constr. Co., 62 West 45th St. About $50,000. Noted Dec. 19.

Pa., Phila.—Fire and Police Stations—City received bids building 1 and 2 story, brick and stone fire and police stations, power house and stables, at 24th and Ritter Sts., from F. G. Stewart, 1619 Sansom St., $304,245, and E. Fay & Son, 2 South Mole St., $307,000. P. H. Johnson, Land Title Bldg., archt.

★**S. C., Rock Hill**—Dormitory, etc.—Winthrop College plans to build 3 story by day labor. About $100,000. Noted Oct. 17.

★**Fla., Tampa**—Temple—Latin Labor Unions plan to build 3 story, 50 x 95 ft. with 95 x 100 ft. adjoining structure. Work will be done by day labor under supervision of Labor Temple Assn. Bonfey & Elliott, Petteway Bldg., archts

★**O., Akron** — Office — Wellman, Seaver, Morgan Co., 7004 Central Ave., Cleveland, let contract building 4-story, 40 x 60 ft., brick, steel and rein.-con., to Hunkin-Conkey Co., 601 Century Bldg., Cleveland. About $60,000. Noted Sept. 26.

★**O., Cleveland**—Salesroom—J. H. Donahey, Plain Dealer Bldg., let contract building 1-story, 54 x 179 ft., brick and timber, rein.-con. flooring, at 2002 Euclid Ave., to E. Paulson Co., 429 Erie Bldg. About $50,000.

Federal Government Work

PROPOSED WORK

Mass., Boston—Steel Stock and Storage Shed—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3737.

Mass., Chelsea—Kitchen Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install; Spec. 3730. About $6500.

Conn., Stamford—Channel and Harbor Improvements, etc.—River & Harbor Com., Wash., D. C., plans to improve channel and harbor and build new breakwater. About $183,000.

N. Y., Fire Island—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build. Bids will be received at local Navy Yard; Spec. 3728.

N. Y., Fort Lafayette—Lighting System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3729. Bids will be received at local Navy Yard.

N. J., Trenton—Deepening Channel—House Rivers & Harbors Com. of Congress appropriated about $2,000,000 for dredging and deepening channel in Delaware River between here and Philadelphia, Pa.

D. C. Bellevue—Fuse and Primer House—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3737.

Va., Hampton Roads—Extending Pneumatic Tube System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received no bids Dec. 23, building at Naval Operating Base; Spec. 3658. About $30,000. Noted Dec. 12.

Va., Quantico—Extension to Garage—Bureau Yards & Docks, Navy Dept., Wash., D. C., received no bids; Spec. 3672. About $10,425. Noted Dec. 5.

Ga., Brunswick—Artesian Well—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3732.

Cal., San Diego — Barracks — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 7 barrack buildings at Marine Corps Base; Spec. 3733.

BIDS DESIRED

Conn., New London—Completion of Buildings—Until Jan. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., completing building for nets; Spec. 3479. About $9000.

Md., Indianhead—Houses—Until Jan. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building type B apartment houses; Spec. 3696. About $60,000; $10 deposit required for plans and spec. Noted Dec. 5.

D. C., Wash.—Bridge—Until Jan. 7, by Dist. Comrs., Dist. Bldg., building bridge on Concord Ave. between 3rd and 4th Sts., N. W.

D. C., Wash.—Hygienic Laboratory—Until Jan. 14, by J. A. Wetmore, superv. archt., treas. dept., Wash., building laboratory and installing equipment in same. Noted Nov. 21.

Va., Norfolk—Kitchen and Diet Equipment—Until Jan. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3622. About $25,000. Noted Nov. 7.

Va, Petersburg—Altering Post Office and Customhouse—Until Jan 13, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C.

Va, Salem—Post Office—Until Jan. 23, by J. A. Wetmore, superv. archt. treas. dept., Wash., D. C., building here

Va., Yorktown—Administration Building—Until Jan. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3608. About $57,000. Noted Oct. 31.

Fla., Key West—Dredging—Until Jan. 28, by U. S. Eng. Office, Jacksonville, dredging in Key West Harbor; advertised in this issue. Noted Dec. 26.

Ark., Russellville—Post Office—Until Jan. 23, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building here; advertised in this issue.

Tex., North Ft. Worth—Wells and Pumps—Until Jan. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building two 10 in. wells and installing pumping machinery; Spec. 3577. About $35,000. Noted Dec. 5.

Cal., Mare Island—(Vallejo P. O.)—Power House, etc.—Until Jan. 8, by Mare Island Navy Yard, building power house, cottage and sewer ejector at Beach Radio Sta.; Spec. 3741. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass, Chatham—Boiler House, Heating and Draining Systems, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, building boiler house, pumping house and installing heating, drainage and gasoline systems,

(1) net price and time following portions of the work; boiler house, electrical work in boiler house, and all work described under heating, except that heating in pump house and extension of heating lines from pump house to 5 ft. outside of building is not included in (1),

(1a) net price and time for portions of work described in (1) complete, except that roof of boiler house is to be covered with asbestos ready-to-lay roofing in place of asbestos shingles,

(1b) net price and time to be added to or deducted from (1) if foundation walls of boiler house are made of concrete (similar to footings) from footings to 3 in. above floor, in lieu of brick as shown,

(2) net price and time for portions of work specified under drainage, complete,

(3) net price and time for following portions of work complete, pump house, electrical work in pump house, heating in pump house and extension of heating lines from pump house to 5 ft. outside of building, and all work described under gasoline storage and supply system. Bidders may submit proposals upon any or all of above items, from

Coleman Bros., 1 Marginal St., Chelsea, (1) $33,250 (30 days); (1a) $33,000; (1b) deduct $50; (2) $2525; (3) $9300.

F. A. Dayes & Sons, 24 Pearl St., Provincetown, (3) $11,584.60 (60 days).

C. Meads & Co., 38 Park Row, New York City, (1), (2) and (3) $52,340.

Westcott & Mapes, 207 Orange St., New Haven, Conn., (1) $37,065 (45 days); (1a) deduct $232; (1b) add $265; (2) $6205 (60 days); (3) $14,452 (60 days). Noted Dec. 12.

★**N. Y., Bensonhurst**—Repairing Marine Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to A. M. Hazell, 26 Cortland St., New York City, $17,873. Noted Nov. 14.

★**N. Y., Montauk**—Completion of Administration Building, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract completing administration building, 2 blower houses, dirigible and fabric buildings under contract No. 2975, to Marble Arch Co., Bway. and 216th St., New York City, $14,000 (45 days). Noted Dec. 12.

N. Y., Rockaway—Tanks—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, installing gasoline piping tanks, etc., at Naval Air Sta., work complete, from C. Mead & Co., 38 Park Row, New York City, (1) $21,120; C. E. Eng. Co., 417 Canal St., New York City, (1) $24,100 (120 days); Austin Heating Corp., 105 Chambers St., New York City, (1) $22,355 (120 days), (2) $23,375 (90 days). Noted Dec. 12.

★**N. Y., Wards Island**—Kitchen and Diet Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to S. B. Sexton Stove & Mfg. Co., 500 West Conway St., Baltimore, Md., $22,986 (85 days). Noted Dec. 19.

Pa., Phila.—Kitchen and Mess Hall Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, installing in Naval Hospital, League Island, work complete, from S. B. Sexton Stove & Mfg. Co., 500 West Conway St., Baltimore, Md., $19,947 (60 days); Rod Iron Range Co., 6 Portland St., Boston, Mass., $21,546 (60 days); Duparquet, Huot & Moneuse, 108 West 22nd St., New York City, $26,514 (60 days). Noted Dec. 12.

Federal Government Work (Continued)

Pa., Phila.—Water Supply, Sewer and Drainage System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at Grays Ferry Rd.,

(1) net price and time for work complete, not including water supply, sewerage and drainage systems to recreation building, garage and greenhouse,

(2) amount and time to be added to net price and time under (1) for water supply, sewerage and drainage systems from points 5 ft. outside of building walls of recreation building to various systems required,

(3) amount and time to be added to net price and time under (1) for water supply, sewerage and drainage system from points 5 ft. outside of building walls of garage to various systems required,

(4) amount and time to be added to net price and time under (1) for water supply, sewerage and drainage systems from points 5 ft. outside of building walls of greenhouse to various systems required, from

B. Pizzinot, Pitman, N. J., (1) $30,500, (2) $500, (3) $2000, (4) $1500 (125 days).

E. C. Fish Co., 407 Real Estate Trust Bldg., (1) $32,650 (70 days), (2) $605 (5 days), (3) $480 (5 days), (4) $735 (5 days).

W. Steele & Sons, 1600 Arch St., (1) $35,472 (75 days), (2) $1430, (3) $3728, (4) $2249. Noted Nov. 28.

Md., Indianhead—Annex to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, building at Naval Proving Ground, work complete, from De Kimpe Constr. Co., Dispatch Bldg., Union Hill, N. J., $25,800 (150 days). Noted Dec. 12.

★D. C., Wash—Grading—Dept. Pub. Bldgs. & Grounds let contract grading on and about site of Arlington Memorial Amphitheatre, Arlington Natl. Cemetery, to G. B. Mullin & Co., 1751 A St., S. E., $18,000.

Va., Alexandria—Pier and Bulkhead—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, building at Naval Assembling Plant,

(1) net price and time for work complete,

(2) net price and time for work complete as required in (1) but omitting sheet pile bulkhead and removal of old pier piles and timbers. Round piles on each side of pier, to which the bulkhead wale timbers are secured shall not be included in this item,

(3) net price and time for work complete, as required in (1) but omitting sheet pile bulkhead. Round piles on each side of pier, to which bulkhead wale timbers are secured shall not be included in this item,

(4) net price and time for work complete, as required in (1) but omitting removal of old pier piles and timbers,

(5) net price and time for sheet pile bulkhead complete. This item shall include round piles on each side of pier, to which bulkhead wale timbers are secured,

(6) unit price added or deducted from (1-5), inclusive, for each pile (round) in excess of or less than number required by drawing based on length of 50 ft. in place,

(7) unit price added or deducted from (1-6), inclusive, for each linear foot of pile (round) in place in excess of or less than the length specified,

(8) unit price added or deducted from (1, 4 and 5) for each 1000 ft. B. M. sheet piling in place, in excess of or less than quantity required as per length specified in Paragraph 39,

(9) net price and time for removing all old pier piles and timbers mentioned in Paragraph 48, from

McLean Constr. Co., Fidelity Bldg., Baltimore, Md., (1) $36,711 (90 days), (2) $27,750, (3) $28,750, (4) $36,000, (5) $10,500, (6) add or deduct $30, (7) add $0.70, (8) add or deduct $125, (9) $2000.

McHard & Barton Co., 171 Madison Ave., New York City, (1) $37,600 (100 days), (2) $29,900 (90 days), (3) $31,100 (90 days), (4) $36,600 (100 days), (6) $22, (7) $0.30, (8) $100.

Hyde & Baxter Co., 711 13th St. Wash., D. C., (1) $38,852, (100 days), (2) $29,152 (80 days), (3) $31,360 (90 days), (4) $36,450 (90 days), (5) $10,080, (6) add $35, deduct $20, (7) add or deduct $0.70, $0.40, (8) add $100 or deduct $60, (9) $4000 (30 days). Noted Dec. 5.

Va., Yorktown—Wood Pier and Approach—Bureau Yards & Docks, Navy Dept., Wash., D. C., receives bids Dec. 23, building at Navy Mine Depot,

(1) net price and time for work complete,

(2) net price and time added or deducted from net price and time for work complete as required in (1) for each 60 ft. of single track trestle approach more or less than length of approach specified,

(3) unit price added or deducted from items (1) and (2) for each pile in excess of or less than number required by drawings and specifications, and based on the length specified,

(4) unit price added or deducted from (1), (2) and (3) for each linear foot of pile in excess of or less than specified length, from

McLean Contg. Co., 1412 Fidelity Bldg., Baltimore, Md., (1) $309,975 (135 days), (2) add $2400, deduct $2400, (4) add $1.95, deduct $0.30.

Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $318,745 (150 days); (2) add $3280, deduct $3000; (3) add $125, deduct $90; (4) add $1.40, deduct $1. Noted Dec. 12.

W. Va., South Charleston—Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, building 4 officers' quarters at Naval Ordnance Plant,

(1) net price and time for four buildings (three type B, and one of Type A) (work complete),

(2) net price and time for each additional building, type A,

(3) net price and time for each additional building type B.

(4) net price and time for three buildings of type B, complete, from

Wills Egelhoff Co., 101 Park Ave., New York City, (1) $72,855 (120 days), (2) $17,220 (30 days), (3) $18,560 (30 days), (4) $55,680 (120 days).

H. F. Friestedt, 327 South La Salle St., Chicago, (1) $87,341 (120 days), (2) $23,125, (3) $23,705, (4) $67,575.

★W. Va., South Charleston—Structural Steel—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Air Sta., to Amer. Bridge Co., Wilkins Bldg., Wash., D. C., $2,484,000. Noted Dec. 12.

S. C., Paris Island—Extension to Heating System and Power Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at Marine Barracks,

(1) net price and time for work complete,

(2) net price and time for work complete at main station,

(3) net price and time for work complete at training camp, from

Baker, Dunbar Allen Co., Stock Exch. Bldg., Phila., (1) $136,400 (120 days), (2) $93,600 (120 days), (3) $44,700 (100 days).

Premier Eng. Co., 56 West 45th St., New York, (1) $140,000 (125 days), (2) $97,000 (125 days), (3) $43,000 (120 days).

Thompson Bros., 123 North 15th St., Phila., (1) $141,564 (125 days), (2) $100,000 (125 days), (3) $44,796 (135 days). Noted Dec. 12.

Fla., Miami—Septic Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, building at Naval Air Sta., work complete, from Ward & Pride, 307 Bisbee Bldg., Jacksonville, $12,107 (80 days); St. John Constr. Co., Townley Bldg., $12,466 (100 days); A. Blair, 11 South Lawrence St., Montgomery, Ala., $13,141 (115 days). Noted Dec. 5.

★Ala., Mobile—Repairing Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract repairing wharf at U. S. Quarantine Sta., to M. T. Judge, c/o Peoples Bank of Mobile, $18,366.

Ill., Chicago—Repairing and Re-covering Dome—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids repairing and re-covering dome of post office here, from W. J. Scown Bldg. Co., 36 West Randolph St., $16,800; Frandsen Constr. Co., 64 West Randolph St., $19,190; Chicago Fire Window & Cornice Co., 440 North Halstead St., $19,998.

★Ill., Great Lakes—Psychiatric Ward—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building in Emergency Hospital, to Hanson Bros. Co., 127 North Dearborn St., Chicago, $11,846 (45 days). Noted Dec. 12.

★Cal., San Francisco—Reservoir—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 2,000,000 gal. rein.-con. reservoir at Naval Training Sta., Goat Island, to Schultz Constr. Co., 46 Kearney St., $44,842 (100 days). Noted Dec. 5.

Miscellaneous

PROPOSED WORK

Park—Jersey City, N. J.—City Comn. plans to purchase additional land in front of City Hospital and will convert same into park. About $131,000 appropriated for project.

Sea Wall—Tampa, Fla.—City soon receives bids building 600 ft. seawall at De Soto Park. R. D. Martin, city engr.

Approach—Detroit, Mich.—Dept. Parks & Blvds., 822 Farwell Bldg., having plans and estimates made for improving and adorning approach to Michigan Central Sta. About $83,000. C. F. Hubbell, city engr.

Docks—Orange, Tex.—City plans election to vote on $150,000 bonds to build addition to docks.

Flume, etc.—Monti, Utah—Town Council plans to enlarge present flume and distribution lines and build hydroelectric plant. About $10,000.

Bulkheads—Warrenton, Ore.—City soon lets contract building bulkheads on Skipanon Waterway. Work includes 6800 lin.ft. 2 pile, and 4350 lin.ft. 3 pile bulkheads, and 135,000 lin.ft. piling, and 48,000 lb. iron. Baar & Cunningham, Spaulding Bldg., Portland, engrs.

Dry Docks—Prince Rupert, B. C.—See "Industrial Works."

BIDS DESIRED

Structural Steel—New York, N. Y.—Until Jan. 9, by Pub. Serv. Comn., 49 Lafayette St., for supplying and erecting structural steel for Sect. 6, Route 8, part of 14th St.-Eastern Rapid Transit R. R.

Gantry Crane — Seattle, Wash. — Until Feb. 19, by Port Comn. of Port of Seattle, Bell Street Warehouse, Bell St., furnishing and installing gantry crane, Smith's Cove Impvt., Pier B. T. S. Lippy, secy.; advertised in this issue.

Sheet Steel, Rivets, etc.—Los Angeles, Cal.—Until Jan. 24, by J. P. Vroman, secy. dept. pub. wks., 645 South Olive St., furnishing sheet steel, rivets and pipe sections for penstock for power house No. 2, San Francisquito Canyon. About $75,000. Noted Dec. 5.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Fill—New Bedford, Mass.—Phila. & Reading Coal & Iron Co., Walnut St., let contract filling in slip for additional coal pockets, to F. C. Taylor, 130 Middle St., Fairhaven. About $18,000.

★Auto Eductor, Steam Roller, etc.—Brooklyn, N. Y.—E. Riegelmann, pres. Brooklyn Boro., let contract furnishing and delivering auto eductor, for Bureau of Sewers, to Otterson Auto Eductor Co., 817 Fairbanks Bldg., Springfield, O., $8000; 1 steam asphalt roller, to Good Roads Machy. Co., 50 Church St., New York City, $2580; 6 back dumping dirt trucks, to Shadbolt Mfg. Co., 68 Flushing Ave., $3900; 2 tar melting and gravel heating trucks, to C. Hvass & Co., Inc., 511 East 18th St., New York City, $1180. Noted Dec. 26.

★Semi Trailers—Brooklyn, N. Y.—E. Riegelmann, pres. Brooklyn Boro., let contract furnishing and delivering 4 semi trailers for Bureau of Highways, to Shadbolt Mfg. Co., 68 Flushing Ave., $5000. Noted Dec. 26.

Blanket—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., received bids building concrete and rip rap stone blanket over portion of 7th-Lexington Ave. Rapid Transit R.R. at old slip, Route No. 28, from Morris & Cumings Dredging Co., 17 State St., $254,950; New Jersey Shipbuilding & Dredging Co., foot of East 28th St., Bayonne, N. J., $329,500; Phœnix Constr. Co., 41 Park Row, $367,281. Noted Dec. 19.

★Steam Roller—New York, N. Y.—H. Bruckner, pres. Bronx Boro., let contract furnishing and delivering one 5-ton steam asphalt roller, to Good Roads Machy. Co., 50 Church St., $3000. Noted Dec. 26.

Station Finish—Phila., Pa.—Dept. of City Transit, 754 Bourse Bldg., received bids furnishing and placing steel frame work and railings, concrete floors and parapets, side enclosures, etc., for 4 station platforms, with connecting passages between platforms and station buildings of Frankford Elevated Ry., at Orthodox-Margaret Sts. and Ruan-Church Sts., together with 1 over passage bridge and stairs, from W. Steele & Sons, 16th and Arch Sts., $98,950; F. J. Boas, 201 North Broad St., $122,500; Keystone State Constr. Co., Franklin Bank Bldg., $138,200. Noted Dec. 5.

★Piers — Three Rivers, Que. — Three Rivers Shipyards, Ltd., 570 Notre Dame St., let contract building three piers, to Arcand & Penault, Three Rivers. About $15,000. Noted Dec. 19.

Water-works (Continued)

Thatcher Constr. Co., 8 Marine Bldg., Toledo, O., (1a) $20,000 for laying; pipe at cost plus 10%; (1c) $45,000; (1e) $37,500. Thatcher & Breyman patent joint; other joint at 200-300 ft. intervals with Thatcher & Breyman joints at cost of joints plus 25%; Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa., (2) $211,235; (2a) $209,735; (2b) $195,485; Rice Constr. Co., Wyandotte, (2) $242,496; (2a) $238,496; (2b) $230,096; A. Bentley & Sons Co., 201 Belmont Ave., Toledo, O., (2) $249,350; (2a) $243,555; (2b) $233,505. Noted Dec. 19.

★**Okla., Lawton**—City let contract building filtration plant, to Selden-Breck Constr. Co., Fullerton Bldg., St. Louis, Mo. About $157,000.

★**N. B., St. John**—City let contract building water mains, to Bedford Constr. Co., East St. John. About $16,000.

Sewers

PROPOSED WORK

Conn., Bridgeport—City plans to build Black Rock intercepting sewer and laterals and auxiliary pumping station at Harborview Ave. and Gilman St. About $160,000 appropriated for project. J. A. McElroy, city engr.

Ga., Lagrange—See "Streets and Roads."

Mich., Ford—(Wyandotte P. O.)—Village had plans prepared by M. L. Brown & Son, engrs., 824 Chamber of Commerce Bldg., Detroit, trenching, laying pipe and backfilling complete sewerage system, involving 2022 ft. 24-33 in. concrete pipe, 49,663 ft. 8-22 in. vitr. pipe and 400 ft. 12 in. concrete outlet pipe to replace present outlet. About $150,000. Noted Dec. 19.

Ill., East St. Louis—See "Streets and Roads."

Ariz., Douglas—City plans election in February to vote on $100,000 bonds to build storm drain system. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, Cal., engrs.

Wash., Spokane—City having plans prepared building downtown intercepting gravity sewer in Main Ave., from Lincoln to Stevens Sts., Stevens St., from Main to 1st Aves., 1st Ave. from Stevens to Howard Sts., Riverside Ave., from Stevens to Bernard Sts., Bernard St. from Riverside to Sprague Aves., Washington St., from Riverside to Sprague Aves. About $200,000. Work involves 4000 ft. 30-63 in. rein.-con. pipe and about 25,000 cu.yd. earth and rock excav. A. D. Butler, city engr.

Ore., Portland—City plans to build Peninsula Dist. sewerage system during 1919; 1st unit to cost $750,000, embracing Portsmouth, Piedmont, Kenton and Alberta Dists.; ultimate cost, $3,000,000. Sewers will also be laid in Glesan St. from 10th St. to Willamette River and in Quimby St.

Cal., Los Angeles—City plans to install vitr. or cement pipe sewers, brick manholes, junction chambers, lamp holes, etc., in 29 streets. About $140,250. W. T. Knowlton, sewer engr.

Que., Lachine—See "Industrial Works."

Ont., Hamilton—City plans to build storm sewers in various streets east of Ottawa St. About $117,000.

BIDS DESIRED

N. Y., Long Island City—Until Jan. 15, by M. Connolly, pres. Queens Boro., building sewers in 80th St. from Liberty to Atlantic Aves., Atlantic Ave. from 80th to 76th St., 76th St. from Atlantic to 93rd Aves., 93rd Ave. from 76th St. to Elderts Lane, Elderts Lane from 93rd to Jamaica Aves., 78th St. from Atlantic to Jamaica Aves. and Jamaica Ave. from Elderts Lane to the Crown, about 200 ft. east Elderts Lane, Queens and Brooklyn Boroughs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ill., Warsaw**—City let contract building sewer, to J. J. Jobst, 1098 Jefferson St., Peoria. About $30,000.

★**Ia., Waterloo**—Waterloo Gasoline Engine Co., Miles St., let contract building storm sewers, to Blackhawk Constr. Co., 313 Lafayette Bldg. About $8000.

★**Ark., Morrillton**—Comrs. Sewer Dist. No. 2 let contract building sewer involving 15,900 lin.ft. vitr. pipe, 51 manholes, rein.-con septic tank, etc., to S. R. Morgan & Co., Little Rock. About $16,000. Noted Dec. 19.

★**Cal., Los Angeles**—Capital Issues Com. let contract building sewers in Main St. and Florence Ave. Sewer Dist. to M. Chutuk, 1506 Pleasant Ave., $32,200. Work involves 16,598 ft. 6 in., 18,852 ft. 8 in., 1310 ft. 10 in. and 2146 ft. 12 in. vitr. or concrete pipe, 78 6 x 12 in., 50 6 x 10 in. and 876 6 x 8 in. Y's, 796 6 in. bends, 41 brick manholes, 14 junction chambers, 16 flush tanks, 71 manhole covers and 16 manhole buckets. Noted Dec. 19.

★**Ont., Brantford**—See "Streets and Roads."

Bridges

PROPOSED WORK

Conn., Hartford—City had plans prepared building 300 ft. bridge, 10 ft. wide over New York, New Haven & Hartford R. R. yards, from North Front St. to Riverside Park. Cost between $40,000 and $60,000. R. W. Clark, city engr. New York, New Haven & Hartford R. R. will bear part of cost.

N. Y., Corning—Bd. Pub. Wks. having plans prepared for rein.-con. bridge over Chemung River at Pine St. About $160,000. W. O. Drake, comr.

N. Y., Watertown—City plans to rebuild Court St. bridge. About $300,000. City, New York Central R.R. and Black River Traction Co. will each bear ⅓ of cost. E. W. Sayles, city engr.

N. Y., Watertown—City plans election soon to vote on bond issue to build rein.-con. bridge over Black River on Pearl St., Sewalls Island. About $50,000. E. W. Sayles, city engr.

N. J., Jersey City—Hudson Co. Blvd. Comn. plans to paint and repair Central R. R. bridge over Hudson Co. Blvd., Pennsylvania R. R. bridge over Hudson Co. Blvd. and Park Ave. viaduct; also open 2 dead ends of streets in Bayonne that run into Boulevard. About $16,000.

N. J., Trenton—See "Streets and Roads."

Pa. New Castle—Lawrence Co. soon lets contract building 1 through span steel bridge, 218 ft. long, 38 ft. roadway, over Neshannock Creek on Mill St. J. R. Lamoree, co. clk.

Pa., Phila.—City receives bids about Mar. 1, building rein.-con. bridge over Schuylkill River. About $800,000. C. E. Albright, city engr.

Pa., Pittsburgh—City plans to build bridge over 33rd St. on Bigelow Blvd. About $12,000. N. S. Sprague, city engr.

W. Va., Fairmont—Baltimore & Ohio R.R., Baltimore, Md., plans to build steel approach on solid concrete base, to present bridge over Monongahela River, here. About $30,000. J. H. Lang, Baltimore, Md., asst. engr.

O., Youngstown—City had preliminary plans prepared building 3100 ft. concrete viaduct with steel spans, 60 ft. wide, over river and railroad tracks, on Division St. About $1,000,000. New York Central Lines, Erie and Pennsylvania Railroads will be asked to appropriate toward cost. F. M. Lillie, city engr.

O., Youngstown—City having plans prepared building 1500 ft. steel bridge, 60 ft. wide, over tracks and yards of Baltimore & Ohio, Pennsylvania and Lake Erie & Eastern Railroads from Forest Ave. to Tube St. F. M. Lillie, city engr.

Mich., Detroit—City had plans prepared building 2200 ft. steel framed cantilever type bridge from Grand Blvd. to Belle Isle, 55 ft. wide, rein.-con. floors, to consist of 19 spans; middle roadway 29 ft. wide with 12 ft. sidewalk on each side. About $2,751,000. M. E. Cooley, Ann Arbor, engr.

Kan., Girard—Crawford Co. soon lets contract building rein.-con. bridge over Cow Creek near Pittsburg, to include 2 rein.-con. abutments, 2 rein.-con. piers and three 54 ft. rein.-con. girder spans. C. C. Everitt, clk.

Kan., St. Johns—Stafford Co. soon lets contract building 7 bridges. K. Harris, clk. Noted Nov. 7.

Wash., Spokane—City having preliminary plans prepared for bridge over Hangman Creek on West Riverside Ave., to have 400 ft. fill. Will use steel from dismantled Monroe St. bridge. Retaining walls and piers to cost $25,000. L. Funk, comr.

Wash., Yakima—See "Streets and Roads."

Ont., Hawkesbury—Dept. Pub. Wks., Ottawa, plans to build bridge here. About $30,000.

Ont., Ottawa—City plans to issue $150,000 debentures to build bridge over Rideau Canal at Somerset St.

BIDS DESIRED

Kan., Wichita—See "Streets and Roads."

Nev., Fallon—Until Jan. 27, by State Highway Dept., State Printing Office Bldg., Carson City, building 87 ft. bridge over Truckee Carson Canal near here, involving 175 cu.yd. excav., 504 lin.ft. concrete piles, 126 cu.yd. Class A concrete and 202 lin.ft. iron pipe railing; also 162 ft. bridge over Carson River, Churchill Co., involving 20 cu.yd. excav., 824 lin.ft. rein.-con. piles, 52.5 cu.yd. Class A precase concrete, 134.2 cu.yd. Class A concrete in place and 324 lin.ft. iron pipe railing.

Nev., Winneucca—Until Jan. 27, by State Highway Comn., State Printing Office Bldg., Carson City, building 144 ft. bridge over Humboldt River, Humboldt Co., involving 20 cu.yd excav., 1000 lin.ft. concrete piles, 46.7 cu.yd. Class A precase concrete, 107 cu.yd. Class A concrete, 288 lin. ft. iron pipe railing, etc.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★**N. J., New Brunswick**—Bd. Freeholders Middlesex Co. let contract building electric lift drawbridge over Delaware and Raritan canal, to Linde & Griffith, foot 4th Ave., Newark, $128,575. Noted Dec. 12.

★**Okla., El Reno**—Canadian Co. let contract building 7 bridges, to G. M. Stone. About $12,580.

Structural Steel

PROPOSED WORK

Pa., New Castle—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

N. Y., Binghamton—See "Miscellaneous."

Reinforced Concrete

PROPOSED WORK

N. Y., Long Island City—See "Industrial Works."

N. Y., Phoenix—See "Industrial Works."

N. Y., Watertown—See "Bridges."

Pa., Phila.—See "Bridges."

Ill., Chicago—See "Buildings."

Kan., Girard—See "Bridges."

Neb., Omaha—See "Industrial Works."

Tex., San Antonio—See "Industrial Works."

Ariz., Flagstaff—See "Industrial Works."

Wash., Spokane—See "Sewers."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Plymouth**—See "Industrial Works."

★**Conn., New Britain**—See "Industrial Works."

★**Cal., Sacramento**—See "Industrial Works."

Streets and Roads

PROPOSED WORK

Conn., Hartford—City plans to pave various streets with sheet asphalt, 2½ mi. long, 30-40 ft. wide. R. W. Clark, city engrs.

N. Y., Lockport—City had plans prepared improving 1.13 mi. Gooding and West Jackson Sts. from Grant St. to city line, brick and Hillside brick on all grades over 5% and concrete on grades less than 5%. J. F. Freshee, city engr.

N. Y., Rochester—See "Miscellaneous."

N. Y., Watertown—Bd. Pub. Wks. having plans prepared improving Brainard, Rutland, Massey, Cadwell and Gotham Sts. and Clinton Ave., bituminous macadam. About $20,800. E. W. Sayles, city engr.

N. J., Hackensack — Bd. Freeholders Bergen Co., having plans prepared by R P. McClave, engr., improving Bullsbury Rd., Fairview.

N. J., Jersey City—See "Bridges."

N. J., North Bergen—Town soon receives bids improving 23rd, Hill and Savage Sts. S. Maulbeck, 927 Union St., engr. Noted June 20.

N. J., Secaucus—Town plans to improve Front St. About $10,000.

Streets and Roads (Continued)

N. J., Trenton—Mercer Co. (Trenton) and Monmouth Co. (Freehold) having plans prepared by H. F. Harris, co engr., 759 Stuyvesant Ave., improving 6½ mi. gravel road, 18 ft. wide, from Hightstown to Red Bank. G. D. Cooke, engr., Red Bank, preparing plans for bridges.

Ga., Lagrange—City plans to issue $70,000 bonds to pave and build sewers in various streets. S. Sargent, city engr.

Ga., Macon—Bibb Co. (Macon), and Macon Co., (Montezuma), plan to issue $1,200,000 bonds to build roads, schools and courthouse.

La., Franklinton—Washington Co. voted $500,000 bonds to build roads.

O., Dayton—Montgomery Co. having plans prepared by S. R. Sharts, co. engr., building brick, concrete or macadam roads to include 2.64 mi. Dayton-Chillicothe Pike 16 ft. wide, cost, $50,000; 3.25 mi. Cincinnati Pike, 16 ft. wide, $95,000; 6 mi. Eaton Pike, 16 ft. wide, $180,000.

O., Youngstown—City plans to repave 1700 ft. Market St., from La Clede Ave. to Southern Blvd., 36 ft. wide, cost $17,000; 2050 ft. Market St., from Warren St. to La Clede Ave., 36 ft. wide, $20,000. F. M. Lillie, city engr.

Mich., Pontiac—City receives bids about Apr. 1, grading and paving Henry Clay Ave. from Frank Blvd. to Green St., rein.-con. About $11,427. H. H. Barnett, city engr. Noted Jan. 2.

Illinois—State Highway Comn., Springfield, having plans and surveys made building and improving 600 mi. road. Plans include 98 mi. Lincoln Highway, 65 mi. Dixie Highway, 15 mi. Chicago-Waukegan Rd., 200 mi. Chicago Springfield Rd., 91 mi. road from Springfield to East St. Louis and 131 mi. Natl. Trail. Noted Nov. 28.

Ill., Danville—Vermilion Co. plans to widen 5 mi. of existing 10 ft. brick pavement to 18 ft. on Sects. A and D, of Dixie Highway north of here. About $70,000. H. E. Bilger, Springfield, rd. engr.

Ill., East St. Louis—War Civics Com. plans to expend $1,000,000 to improve streets and sewers, eliminate grade crossings and build comunity centres, etc. H. Bartholomew, Federal Bldg., city engr.

Ill., Springfield—City having plans prepared by W. Seeley, city engr., for 65 block wood block pavement in down town district, brick pavement on 6th St., from North to South Grand Ave., also brick pavement, on several residential blocks, etc. Cost between $300,000 and $400,000.

Ill., Woodstock—Div. Highways, Dept. Pub. Wks. & Bldgs., receives bids in spring building ⅜ mi. road on Route 15, southwest of here and ⅜ mi. on Route 17, northeast of Harvard, 15 ft. wide, McHenry Co. About $24,000. H. E. Bilger, Springfield, rd. engr.

Wis., Milwaukee—City Planning Comn. will soon submit plan to City Council for connecting Highland Park Blvd. and Grand Ave. with 80 ft. driveway and bridge over Watertown Plank Rd. G. Staal, city engr.

Wis., Racine—Racine Co. plans to build 12th St. Rd., east from west line of Yorkville Twp., 16 ft. wide, cost, $57,000; 12th St. Rd. west from Beaumont Rd., 16 ft. wide, $28.318; 12th St. Rd. west from east line of Yorkville Twp., 16 ft. wide, $10,000; all concrete.

Ia., Atlantic—Comrs. Cass Co. plan to build White Poll Rd. About $44,000. State and Federal Government will appropriate toward cost.

Minn., Alexandria——Douglas Co. soon receives bids building Federal Aid Project No. 27, 16 mi. highway involving 144,543 cu.yd. excav., 19,001 cu.yd. loading and hauling surfacing materials, culverts, etc.; also State Rd. No. 1, involving 29,812 cu.yd. excav., 3284 cu.yd. loading and hauling gravel surfacing materials, culverts, etc. C. T Jensen, co. aud.

Minn., Duluth—Comrs. St. Louis Co. plan to build 10 county roads. About $20,000 has been appropriated for project. R. W. Acton, co. engr.

Minn., St. Paul—City plans to pave Concord Ave. from South Park St. to city limits. About $200,000. J. R. Stevenson, city clk.

Kan., Dodge City—Ford Co. having plans prepared by Ruckel Eng. Co., engrs., Garden City, paving 11 mi. Santa Fe Trail from here to Gray Co. line, monolithic brick, 20 ft. wide. H. N. Kinkhead, clk.

Kan., Girard—Comrs. Crawford Co. having plans prepared by W. J. Arnold, engr., for 11 mi. hard surface roads. C. C. Everett, city clk.

Kan., Hutchinson—Reno Co. having surveys made for 54 mi. brick highways; cost, $1,404,000; plans include 20 mi. road from here to Sterling. G. L. McLane, city engr.

Ark., Walnut Ridge—Lawrence Co. had preliminary plans prepared for 10.48 mi. road from here to Sedgwick, waterbound macadam, concrete culverts and bridges. About $96,058. F. A. Pritchell, Walnut Ridge, engr.

Tex., Columbus—Colorado Co. had plans prepared building road through county to be known as Houston-San Antonio Highway. About $300,885 available for project.

Tex., McKinney—Collin Co., Plano Rd. Dist., plans to hold election Jan. 25 to vote on bonds to build roads; also plans to issue $200,000 bonds to build roads in Clear Lake Dist.

Tex., Rockwall—Rockwall Co. plans election to vote on $500,000 bonds to build roads.

Tex., Snyder—Scurry Co. having plans prepared by H. E. Elrod, archt., Interurban Bldg., Dallas, for 125 mi. graveled road. About $200,000 available. Noted Dec. 19.

Colorado—State Highway Comn., State Museum Bldg., Denver, soon receives bids building roads in following counties:

El Paso Co., 1½ mi. road near Colorado Springs, cost, $31,000.

Pueblo Co., 2 mi. road near Pueblo on Sante Fe Trail, $44,000.

Boulder Co., 1 mi. road near Boulder and Longmont, $20,000.

Summit Co., 15 mi. Blue River Rd., $13,000.

Logan Co., ½ mi. road near Sterling, $11,000.

Morgan Co., ½ mi. road east of Ft. Morgan, $11,000.

Weld Co., 1 mi. road south of Greeley, $21,000.

Otero Co., 1 mi. road near Rocky Ford and La Junta, $22,000.

Adams Co., 2 mi. concrete road or concrete base with some other material between Denver and Brighton, $43,000.

Delta Co., ½ mi. concrete road or concrete base with some other material at Delta, $11,000.

Mesa Co., ½ mi. concrete road or concrete base with some other material at Grand Junction, $11,000.

Montrose Co., ½ mi. road at Montrose, $11,000.

Huerfano and Las Animas Counties, grading and surfacing 60 mi. road between Pueblo and Trinidad, $330,000.

Ouray Co., rock work and grading 2 mi. Red Mountain Rd., $18,000.

Larimer Co., rock and earth grading 20 mi. Big Thompson Canon Rd., 16 ft. wide, $90,000. J. E. Maloney, Denver, engr.

Wash., Spokane—Comrs. Yakima Co. had plans prepared for 3½ mi. road, from Sunnyside to Outlook, cost $80,000; also 3½ mi., from Parker to Pilands bridge, $60,000.

Wash., Yakima—Comrs. Yakima Co. soon let contract grading and hard surfacing 7½ mi. road to Naches, cost $225,000. Bids for several concrete culverts will be called for separately.

Oregon—State Highway Comn., Salem, plans to expend $125,000 for Roseburg-Myrtle Rd., Coos and Douglas Counties, cost, $125,000; also build road from Port Orford to Brush Creek, Port Orford Co., $85,000.

Oregon—State Highway Comn.. Room 1301 Yeon Bldg., Portland, soon lets contract grading 6.4 mi. Columbia River Highway between Hood River and Mosier, involving 266,027 cu.yd. earth excav. and 200 ft. of tunnel, paving 18 mi. Pacific Highway between Salem and Aurora, involving 169,000 sq.yd. pavement; also grading 1 mi. Columbia River Highway in Gilliam Co. from Blalock to Arlington. About $700,000. Noted Dec. 26.

Ore., Oregon City—Clackamas Co. plans to build Pacific Highway between Multnomah Co. line and west end of suspension bridge. About $35,000.

Ore., Portland—City had plans prepared extending Overlook Blvd. from north line of Skidmore St. to south line of Griswold Ave., 1000 ft. long, 60 ft. wide. O. Laurgaard, city engr.

Cal., Los Angeles—City plans to lay asphalt and concrete paving and build granite block and concrete gutters, cement curbs and cement walks on 31 streets and alleys, total length 45,819 lin.ft. About $280,982. A C. Hansen, city engr.

Que., Lachine—See "Industrial Works."

Ont., Hamilton—City plans to pave roads. About $227,000. E. R. Gray, engr.

Ont., London—City plans to build roads. About $400,000. S. Baker, clk.

Man., Swan River—City plans to repair roads. About $108,000. J. Armstrong, c

BIDS DESIRED

N. Y., New York—Until Jan. 16, by H. Bruckner, pres. Bronx Boro., repairing with asphalt block pavement and resetting curb where necessary throughout Bronx Boro.

S. C., Charleston—Until Jan. 21, by J. H. Dingle, city engr., for 20,000 sq.yd. sheet asphalt pavement; advertised in this issue.

Indiana—By Bd. Co. Comrs. building roads in following counties:

Jan. 15, Marion Co., Indianapolis, gravel road between Wayne, Washington and Pike Twps; L. K. Fesler, aud.

Feb. 5, Carroll and Cass Counties, Delphi, gravel road on Caroll-Cass county line; H. D. Good, aud.

Kan., Wichita—Until Feb. 3, by H. M. Barrett, clk., Sedgwick Co., grading, draining and surfacing Central Ave. Rd. with 18 ft. concrete pavement. Plans include 46 bridges and culverts. About $250,000. M. Roseberry, co. engr. Noted Dec. 19.

Tex., Brownwood—Until Jan. 13, by Brown Co., building highway No. 2 R. E. Lee, co. judge.

Nevada—Until Jan. 27; by State Highway Comn., State Printing Office Bldg., Carson City, building 4.16 mi. road between Bulkhead and Hudson Aurora Rd., Route 3, Lyon Co. Work involves 13,500 cu.yd. excav., 320 cu.yd. Class A concrete, 20 cu.yd. Class B concrete, 442 lin.ft. 15-24 in. corrugated metal pipe, etc.

California—Until Jan. 13, by State Highway Comn., Forum Bldg., Sacramento, grading 15.2 mi. road and paving 11.4 mi. road, Portland cement concrete, between Tecate Divide and easterly boundary, San Diego Co., involving 66,000 cu.yd. excav., 11,140 cu.yd. Class A Portland cement concrete pavement, 390 cu.yd. Class A Portland cement concrete for culverts and monuments, 2949 lin.ft. 18-30 in. corrugated metal pipe. A. B. Fletcher, engr. Noted Nov. 21.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Bayonne—City let contract improving Ave. C and 19th St., to Culligan & Machansky, 473 Bway., $44,830. Work involves 100 sq.yd. new concrete base, 1000 sq.yd. dressing down old concrete base, 7000 sq.yd. asphalt pavement, etc. Noted Nov. 14.

W. Va., Huntington—Cabell Co. received only bid paving 2.32 mi. road from Milton to Putnam Co. line and 3300 ft. stretch in Barboursville, 16 ft. wide on 5 in. concrete base, from Harrison & Dean, 322½ 9th St., $0.60 per cu.yd. for excav., $0.85 sq.yd. for paving, $0.15 per lin.ft. for low curbing and $0.18 per lin.ft. for high curbing.

S. C., Charleston—Sanitary & Drainage Comn. received bids grading and paving 3.7 mi. road, 20 ft. wide, 8 in. center and 6 in. sides, from Simons & Mayrant Co., Peoples Bldg., $3.13 per sq.yd.; Charleston Eng. Co., 58 Broad St., $3.41 per sq.yd.; Waterfront Foundation Co., Broad St., $3.67 per sq.yd. Work involves 35,000-58,000 sq.yd. concrete. Noted Dec. 26.

★Ala., Wedowee—Randolph Co. let contract building 20 mi. road between here and Rock Mills, to Stanley & Singer, Lafayette.

★Okla., Hominy—City let contract paving various streets, to J. Stanton, 6th and Kiowa Sts., Leavenworth, Kansas. About $108,000. Noted Dec. 28.

★Okla., Miami—City let contract paving 2nd, 3rd, Main and H Sts., asphaltic concrete, to F. P. McCormick, Tulsa, $61,790.

★Wash., Seattle—City let contract regrading approaches on 10th Ave. N. E. and 40th St., and building concrete retaining wall, etc., to Stewart Constr. Co., Amer. Bank Bldg., $59,882. Work involves 775 lin.ft. armored concrete, 16,350 cu.yd. earth excav., 55,000 lb. reinforcing steel, 635 sq.yd. replaced asphalt and 295 sq.yd. 6 in. concrete base. Noted Jan. 2.

★Cal., Los Angeles—City let contract paving Fountain Ave. to E. Schelling, 4316 Figueroa St., $11,071. Work involves 55,732 sq.ft. rough grading at $0.03 per sq.ft.; 55,732 sq.ft. finish grading, oiling and rolling, 0.05 per sq.ft.; 3772 lin.ft. cement curbs, $0.42 per lin.ft.; 19,860 sq.ft. cement walks, $0.15 per sq.ft.; 8681 sq.ft. concrete gutters, $0.20 per sq.ft.; rein.-con. culverts and catch basin, $200.

Streets and Roads (Continued)

★**Cal., Visalia**—Tulare Co. let contract grading 6½ mi. highway from Porterville to 1 mi. north of Poplar, to A. F. Shafer, Bakersfield. About $65,000; grading $0.50 per cu.yd.; concrete paving $4.69 per cu.yd. Noted Dec. 19.

★**Cal., Visalia**—Tulare Co. let contract grading and building 4 in. concrete pavement with oil surface on 1½ mi. south division of county highway in Lindsay, 15 ft. wide, to Concrete Pipe & Constr. Co., Porterville, $0.80 per cu.yd. grading and $4.50 per cu.yd. concrete work. Noted Dec. 12.

★**Cal., Visalia**—Tulare Co. let contract grading and building culverts along 8 mi. Dry-Creek-Quail Flat Rd., to J. W. Lovelace, Visalia, $12,887.

★**Ont., Brantford**—Lansdowne Park Co., Lansdowne Park, let contract building walks and sewers, to Johnson Bros., Market St. About $80,000.

Railways

PROPOSED WORK

New York—Black River Traction Co., 753 West Main St., plans to issue $300,000 bonds; part of proceeds will be used to build extension to line forming belt line from Pearl St. through Starbuck Ave., then back to West Main St.; also double tracking line through Public Sq. down Court St. to Main-Leroy St. switch, etc. L. Schwerzman, genl. mgr.

Maryland—United Rys. & Electric Co., Continental Bldg., Baltimore, plans to build new street car route to Sparrows Point to serve northeastern section of city. W. W. Wyser, engr.

West Virginia—Kanawha & Michigan Ry. plans to build terminal facilities at Charleston to be used jointly by itself, Coal & Coke and Chesapeake & Ohio Railways; also remodel and enlarge roundhouse and shop of Coal & Coke Ry. About $75,000. The company will install 90 ft. double-track cinder pit and 80 ft. turntable. C. M. McVay, Charleston, ch. engr.

Ontario—Brantford Municipal Ry., 303 Colborne St., Brantford, plans to vote on $125,000 bonds to extend and improve railway system in Brantford. H. F. Leonard, city clk.

Ontario—Grand Trunk R. R., McGill St., Montreal, Que., plans to build 20 mi. line from Algoma to Cutler and repair road towards Sault Ste. Marie. H. R. Safford, Montreal, Que., ch. engr.

British Columbia—Canadian Pacific Ry., Union Sta., Toronto, Ont., having plans prepared by C. T. McNaoo, engr., Revelstoke, for extending line at Kelowna. About $25,000. A. F. Stewart, Toronto, ch. engr.

Excavation and Dredging

PROPOSED WORK

N. Y., Albany—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., soon receives bids driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport, Contr. No. 200, cost, $257,993. Work involves 5300 cu.yd. earth excav., 770 cu.yd. earth fill, 2900 cu.yd. mass concrete, 460 lb. steel, 22,000 ft. timber, 2300 sq.ft. ¼ in. steel sheet piling, 77,000 sq.ft. ⅜ in. steel sheet piling, 79,300 sq.ft. driving steel sheet piling, 500 cu.yd. wash wall, 22,700 sq.ft. tar felt waterproofing, 730 cu.ft. removing concrete, coffer dams, etc.; completing canal from Kings Bend to Lehigh Valley R.R. crossing at Rochester, Contr. No. 190, cost, $284,753. Work involves 61,000 cu.yd. earth excav., 20,000 cu.yd. earth fill, 875 cu.yd. mass concrete, 640 lin.ft. wood piling, 420 lin.ft. 12 in. tile, 52,400 cu.yd. wash wall, 620 cu.yd. lining, 1100 lin.ft. wooden fence, 1000 lin.ft. raising, aligning and painting existing fence, etc.; completing concrete prism lining at Cartersville and building stream entrance near Knapps bridge, Contr. No. 201; cost, $48,455. Work involves 8870 cu.yd. earth excav., 3960 cu.yd. earth fill, 2400 cu.yd. mass concrete, 3220 sq.yd. concrete excav., 160 cu.yd. 3rd class riprap, 360 cu.yd. wash wall, 2250 sq.ft. wire mesh reinforcement, 50 lin.ft. cutting steel sheet piling, etc.

Ia., Jefferson—Ditch—Comrs. Green Co. (Jefferson) and Calhoun Co. (Rockwell City) rejected bids building Joint D. D. No. 8, Greene Co. and No. 55 Calhoun Co. involving 21,400 ft. 16-38 in tile. B. S. McCully, co. aud. Noted Dec. 19.

Minn., Marshall—Ditch—Comrs. Lyon Co. (Marshall) and Yellow Medicine Co. (Granite Falls) had plans prepared by F. D. Minium, engr., New Ulm, building judicial ditch 25 mi. long, 8-28 ft. wide at bottom, 8-24 ft. deep. Work involves 6-42 in. tile and 2,750,000 cu.yd. floating dredge and dry land excav. About $745,360.

Mo., Grant City—Excavation—Worth Co. D. D. No. 1 had plans prepared excavating 13 mi. drainage ditch in Worth Co. Work to be done by drag line or floating dredge. About $175,000. Address W. C. Okey, Grant City. C. E. Jacoby Eng. Co., 527 Shukert Bldg., Kansas City, engrs.

Mo., Kirksville — Ditch — Bd. Supervs. Adair Salt River D.D. rejected bids received Dec. 16 building 5½ mi. drainage ditch. J. E. Bonnell, Brockton, Ill., ch. engr. Noted Dec. 12.

Mo., Richmond—Drainage—Keeney Creek D. D. had plans prepared for drainage ditch, levees and flood in Say Co. Work to be done by floating dredge or drag line. About $150,000. C. Pigg, Orrick, secy. C. E. Jacoby Eng. Co., 527 Shukert Bldg., Kansas City, engrs.

Mo., Richmond—Drainage—Ray D. D. plans to build 7 mi. drainage ditch, levees and flood way in Ray Co. About $225,000. Address W. Esslinger, Hardin. C. E. Jacoby Eng. Co., 527 Shukert Bldg., Kansas City, engrs.

Wash., Newport — Irrigation — Pend Orielle Irrigation Dist. plans to irrigate between 2,500,000 and 3,000,000 acres of land with waters of Pend Orielle River. About $250,000,000. Project includes 18 mi. tunnel.

BIDS DESIRED

Ga., Carnesville—Drainage—Until Jan. 15, by Comrs. Middle River Dist., Franklin Co. for drainage system involving 1,000,000 cu.yd. excav. W. R. Little, secy.

S. D. Madison—Ditch—Until Jan. 27, by L. F. Hartwick, aud. Lake Co. building Ditch No. 20, involving 600 ft. open ditch, 14,550 ft. 6-18 in. tile. M. Cosgrove, chn.

Utah, Delta—Excavation—Until Jan. 13, by Millard Co. D. D. No. 3, furnishing and laying 2,800,000 lin.ft. drain tile, digging 2,800,000 ft. drain tile trench and 1,380,000 cu.yd. excav. for open drain. M. A. Abbott, secy. Caldwell & Richards, 520 Vermont Bldg., Salt Lake City, engrs.

Cal., El Centro—Irrigation—Until Jan. 22, by Dirs. Imperial Irrigation Dist., Masonic Temple, building rein.-con. headgate structure at Sharps Heading, 9 mi. southeast of Calexico. F. H. McIver, secy. Los Angeles Bd. Pub. Wks. Noted Sept. 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Minn., Olivia**—Ditch—Comrs. Renville Co. (Olivia), Chippewa Co. (Montevideo) and Kandiyohi Co. (Willmar) let contract building Judicial Ditch No. 21, to Olson & Johnson, Minneapolis, $17,404. Work involves 32,200 ft. 6-22 in. tile.

★**Mo., Caruthersville**—Excavation—Pemiscot Co., D. D. No. 8, let contract improving and extending old drainage system, to R. M. and G. A. McWilliams, 1537 McCormick Bldg., Chicago, $0.12 per cu.yd. Work includes building 27 mi. of main ditch from 8-15 ft. deep, 30-70 ft. wide at bottom and from 8-10 ft. deep and involves 3,086,600 cu.yd. dry earth excav. Noted Sept. 12.

★**Ark., Arkadelphia**—Ditch—Ross D. D., Clark Co., let contract building 2 ditches, to Sternberg Bros., Natl. Bank of Commerce Bldg., St. Louis. About $200,000. Work involves 31 mi. open ditches and 1,705,200 cu.yd. floating dredgework. Noted Dec. 5, 1918.

★**Tex., Beaumont**—Dredging, etc.—C. L. Scherer, city engr., let contract for 12,000 yd. dredging and 500 ft. concrete quay wall, to J. Jacobson, Beaumont. Noted Dec. 26.

Industrial Works

PROPOSED WORK

Me., Portland—D. E. McCann & Sons, 63 Preble St., plan to rebuild garage and machine shop. About $60,000.

N. Y., Binghamton—City plans to purchase rock-bottom dam and power site and build lighting plant and install equipment. About $100,000. W. E. Weller, city engr.

N. Y., Long Island City—White Co., Park Ave. and 57th St., New York City, having preliminary plans prepared by Watson Eng. Co., engrs., 1101 Hippodrome Bldg., Cleveland, for 1½ story, 200 x 600 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, on Thompson, Nott, Mount and School Sts., here. About $500,000.

N. Y., Phoenix—Sweet Paper Co. plans to build rein.-con. machine room to replace one destroyed by fire. Cost betwen $75,000 and $85,000.

N. J., Bound Brook—A. A. Marlow & Sons plan to build liquid sulphur dioxide and chemical plant.

Pa., Marietta—See "Contracts Awarded."

Pa., Phila.—Snyder & Co., 134 North 10th St., soon receives bids building 5-story, 31 x 105 ft., brick and terra cotta warehouse and show room. About $50,000.

Va., Norfolk—I. Fass, foot of Water St., Portsmouth, soon lets contract for building and equipping 1 story, 111 x 115 ft. brick ice and cold storage plant. About $125,000. Noted Dec. 19.

W. Va., Charleston—See "Railways."

N. C., Asheville—City plans to build abattoir. About $30,000. B. M. Lee, city engr.

Ga., Atlanta—R. C. Turner, city electrician, remommended that city issue $70,000 bonds to build electric light plant. H. L. Collier, city engr.

Mich., Ironwood—M. P. Jacobsen & Co., 17 West South Water St., Chicago, having plans prepared by C. J. Anderson, archt., Ironwood, building 2 story, brick and rein.-con. storage and sales building here. About $30,000.

Ill., Chicago—Pennsylvania Ry., Union Sta., having plans prepared by R. G. Pierce, archt., 10 South La Salle St., building 2-story, 50 x 90 ft. brick and rein.-con. machine shop, rein.-con. flooring and concrete foundation on 14th St. and Pennsylvania tracks. About $40,000. E. R. Barry, div. engr.

Ill., Chicago—Wisconsin Steel Co., 606 South Michigan Ave., plans to build by-products plant to include 88 oven coke plant, one 500,000 and two 1,000,000 gal. storage tanks and 5 small brick and concrete buildings. Cost over $2,000,000. Contract for foundations for buildings let to Sumner-Sollitt Co., 79 East Adams St.

Wis., Milwaukee—P. Schwab Co., 16th and Canal St., receives bids in March building 2 story, 50 x 150 ft. rein.-con., steel and brick factory, brick foundation. About $30,000.

Ia., Clinton—Klein Paper Co., 19th Ave. and 5th St., had plans prepared by J. Morrill Co., archts., Howes Blk., for brick and steel paper mill. About $100,000. Noted Aug. 1.

Minn., Hibbing—Hibbing Electric Light Co., plans to build 2 story, rein.-con., brick and steel plant south of Great Northern R.R. tracks. About $400,000. C. Foster, mgr.

Minn., Minneapolis—See "Buildings."

Minn., Winnebago—F. Duncanson having plans prepared by W. F. Keefe, archt., 1192 Portland Ave., St. Paul, building 2 story, 50 x 200 ft., rein.-con. and brick warehouse. About $50,000.

Kan., Atchison—Bailor Plow Co., 13th and Utah St., plans to build new factory. About $250,000. E. V. Jones, secy.

Neb., Lakeside—Omaha Potash & Refining Co. plans to build plant 20 mi. south of here. About $500,000.

Neb., Omaha—Skinner Mfg. Co., 14th and Jackson Sts., having plans prepared by H. Lawrie, archt., 619 Paxton Blk., building 6 story, 132 x 132 ft., rein.-con. manufacturing plant on 13th and Jackson Sts. P. F. Skinner, pres.

Mo., St. Louis—Hussmann Refrigerator Co., 911 North Bway., receives bids about Mar. 1. for 1 story, 130 x 200 ft. brick, concrete and steel factory, rein.-con. flooring and concrete foundation on Leffingwell Ave. and North Market St. About $50,000. H. J. Schulte, 1517 North 23rd St., archt.

Tex., Bay City—Broun & Powell, Henrietta, plan to build 10 stand cotton gin. About $30,000.

Tex., Dallas—Star Cash Stores Co., 3003 Elm St., soon lets contract building 2-story, 50 x 165 ft., concrete and brick warehouse on Marilla, Pearl and Taylor Sts. About $25,000. F. J. Woerner, Sumpter Bldg., archt.

Tex., San Antonio—Allensworth—Carnahan Co., 117 Military Plaza, plans to build 2 or 3 story, rein.-con. warehouse. Cost between $25,000 and $35,000. W. E. Simpson, 516 Hicks Bldg., engr.

Industrial Works (Continued)

Ariz., Flagstaff—T. E. Pollock having plans prepared by Lescher & Kibbey, archts., Bank of Arizona Bldg., Phoenix, for 1 story, 175 x 175 ft. rein.-con. warehouse. About $100,000.

Ore., Crane—See "Miscellaneous."

Que., Chicoutimi—Price Bros. & Co., 56 St. Peter St., Quebec, plans to build pulp mill here. About $1,000,000. W. Price, 145 Grand Alee, Quebec, pres.

Que., Lachine—Municipal Council plans to improve electric light system, complete paving on St. Joseph St. extend aqueduct and sewers, etc. E. Luduc, secy. and treas.

Ont., Elora—Elora White Lime Co. plans to build crusher plant. About $60,000.

Ont., Sandwich—Dominion Forge & Stamping Co., Walkerville, will have plans prepared for plant. About $150,000. W. Herdegen, mgr.

Ont., Strathroy—Dominion Canners having plans prepared building brick plant. About $150,000.

Ont., Toronto—Canadian Wood Products Co., 1000 Gerrard St. E., having plans prepared building 2 story, brick factory. About $60,000.

Ont., Windsor—Flexible Metallic Packing Co., Adrian, Mich., plans to build plant here on McDougal Ave. About $80,000. W. A. Leitch, 269 Victoria Rd., local supt.

B, C., Smithers—Bulkley Valley Farmers' Institute plans to build flour mill and warehouse here. About $60,000. A. Croteau, Telkwa, secy.

B. C., Vancouver—Morrison Steel & Wire Co., Hawkes St., having plans prepared for rebuilding plant destroyed by fire. Loss, $100,000.

BIDS DESIRED

Va., Norfolk—Until Jan. 15, by B. Mitchell, archt., Seaboard Natl. Bank Bldg., building 1 and 2 story plant near Berkley St., consisting of 4 buildings, for Norfolk Glass Mfg. Co., 564 Church St. About $200,000. Noted Dec. 26.

Mich., Detroit—Until Jan. 12, by P. R. Rossello, archt., 406-7 Congress Bldg., building 4-story, 80 x 80 ft. brick and rein.-con. factory, rein.-con. flooring and concrete foundation on Learned and 3rd Sts., for N. Rosen, 1121 Seminole Ave. Noted Dec. 12.

PRICES AND CONTRACTS AWARDED

(★Indicatates award of contract)

★**Mass., Plymouth**—Amer. Woolen Co., 245 State St., Boston, let contract building 4 story, 50 x 102 ft., rein.-con. addition to Puritan Mills here, to Turner Constr. Co., 244 Madison Ave., New York City.

★**Conn., New Britain**—Stanley Rule & Level Co., 111 Elm St., let contract building 1 story, 100 x 300 ft., rein.-con. storage building, rein.-con. flooring and concrete foundation, on Berlin Ave., to J. H. Grozier Co., 721 Main St., Hartford. About $95,000.

★**N. Y., New York**—Bordens Condensed Milk Co., 108 Hudson St., let contract building 2 story, 60 x 79 ft., steel and brick garage, rein.-con. flooring, concrete foundation, at 15-21 Renwick St., to Miller Reed Co., 103 Park Ave. About $38,000.

★**N. J., Jersey City**—Central R. R. of New Jersey, 143 Liberty St., New York City, let contract building 2 concrete thawing houses in yard here, to Pre Cast Concrete Co., 1270 Bway., New York City; cost plus 10 per cent.

★**Pa., Marietta**—Pennsylvania R. R., Broad St. Sta., Phila., let contract building foundation for engine house and shops here, to J. Goll & Son, 1539 Filbert St., Phila. Bids for superstructure will be received about Feb. 15. Total cost, $500,000. Noted Oct. 3.

★**Md., Baltimore**—M. McI. Dukehart & Co., 641 Light St., let contract building 1 and 2 story, 210 x 269 ft., rein.-con. steel and brick pump and engine manufacturing plant, brick and concrete foundation, on Key Highway, to J. E. Marshall & Son, 121 Mercer St. Cost between $75,000 and $100,000. Noted Jan. 2.

★**O., Cleveland**—Ohio Metal Briquetting Co., 907 Schofield Bldg., let contract building 1 story, 52 x 177 ft., brick, rein.-con. and steel factory, rein.-con. flooring, at 401 Literary Rd., to Crowell Lundoff Little Co., 5716 Euclid Ave. About $30,000. Noted Nov. 7.

★**Ill., Hillsboro**—Amer. Zinc, Lead & Smelting Co., 1000 Pierce Bldg., St. Louis, Mo., will build 4 story, 40 x 60 x 40 ft. brick and concrete packing house, rein.-con. flooring and concrete foundation. Work will be done by day labor. About $25,000. C. A. Wettengel, purch. agt.

★**Ia., Dubuque**—Liberty Tractor Co., 803 Main St., let contract building 1 story factory, to A. Zwack, 13th and Clay Sts. About $25,000.

★**Neb., Omaha**—Overland Tire & Rubber Co., 1019 W. O. W. Bldg., let contract building 2 story, 80 x 300 ft. rein.-con. and brick factory on 30th and Taylor Sts., to Vaughn Constr. Co., Keeline Bldg.

★**Mo., St. Joseph**—Swift & Co., Union Stock Yards, Chicago, let contract building 3 story, 51 x 52 ft. brick and rein.-con. power house, to Lehr Constr. Co., 1712 Frederick Ave. About $40,000.

★**Mo., St. Louis**—Best Clymer Mfg. Co., Virginia and Davis Aves., let contract building 3 and 4 story, 50 x 236 ft., brick, rein.-con. and steel addition to factory, rein.-con. flooring and concrete foundation, at 400-418 Poepping St., to H. G. Clymer, Wainwright Bldg. About $30,000.

★**Mo., St. Louis**—See "Miscellaneous."

★**Cal., Los Angeles**—Globe Grain & Milling Co., 901 East 3rd St., let contract building two 40 x 80 ft. and 40 x 60 ft., rein.-con. and timber hydrogen and oxygen plants, on 51st St. and Santa Fe Ave., to Leonardt & Peck, 721 H. W. Hellman Bldg. About $25,000; percentage basis.

★**Cal., Los Angeles**—S. Van Nuys, Van Nuys Bldg., let contract rebuilding 4 story, 74 x 165 ft., brick and timber factory on San Pedro St., to J. P. Alpeter, Fox Ferguson Bldg. About $35,000.

★**Cal., Sacramento**—Northern California Milk Producers Assn., California Fruit Bldg., let contract building rein.-con. creamery, to Clinton Constr. Co., 357 Pine St., San Francisco. About $125,000. Noted July 4.

Buildings

PROPOSED WORK

Mass., Wakefield—High School—Town Com. receives bids in spring. About $275,000. Hartwell, Richardson & Driver, 27 State St., Boston, archt. Noted Jan. 17.

Conn., Hartford — Office — Connecticut General Life Insurance Co., 64 Pearl St., having plans prepared by J. O. Rogers, archt., 470 4th Ave., New York City, building on Elm St. About $500,000.

N. Y., Cohoes—School—Bd. Educ. plans to build 2 story, steel and brick, concrete foundation. About $210,000. Tucker & Marsh, 101 Park Ave., New York City, archts.

N. Y., New York—School—New York State Veterinary College, 338 West 26th St., having preliminary sketches made by Cady & Gregory, archts., 40 West 32nd St., for 4 story, 74 x 95 ft., steel and brick, concrete foundation, on 1st Ave. and 27th St.

N. J., Bayonne—School—Bd. Educ. soon receives bids building addition to P. S. No. 11, 23rd St. and Ave. A. About $65,000. Noted Dec. 5.

N. J., Glassboro—School—State Bd. Educ., Trenton, purchased site and plans to build Normal School here. About $300,000. F. H. Bent, Bound Brook, archt.

N. J., New Brunswick—School—Bd. Educ. had plans prepared by A. Merchant, archt., 363 George St., for 3 story, 175 x 175 ft., brick and concrete, on Livingstone Ave. About $400,000. A. L. Smith, pres. Noted Jan. 2.

Md., Baltimore—Store and Office—Safe Deposit & Trust Co., 13 South St., plans to alter and build 5 story, rein.-con., steel and brick addition on Charles and Clay Sts. About $50,000. J. J. Nelligan, pres. T. W. Pietsch, 1210 Amer. Bldg., archt.

S. C., Greenville—Schools—City plans election to vote on $150,000 bonds to build schools. W. F. B. Haynesworth, city engr.

Ga., Macon—See "Streets & Roads."

Ala., Florence—Opera House—Princess Amusement Co. had plans prepared by G. D. Waller, archt., Florence, for 67 x 125 ft., brick and concrete; concrete flooring. About $50,000.

Ky., Dawson Springs—Hotel, etc.—Karlsbad Hotel Co. of America plans to build 8 story, 450 x 650 ft. rein.-con. and brick hotel, to include casino, sanitarium, clubhouse, bath house, etc. About $4,000,000. W. W. Ahlschlager, 133 West Washington St., Chicago, archt.

O., Sandusky—Hotel—D. Olmstead, c/o H. L. Stevens & Co., archts., Karpen Bldg., Chicago, had plans prepared building 6 story, 75 x 130 ft., brick and rein.-con., rein.-con. flooring and concrete foundation. About $200,000.

Mich., Detroit—Theater—H. Koppin, Breitmeyer Bldg., having plans prepared by E. G. Kiehler and C. H. Crane, archts., 2525 Dime Bank Bldg., for 2 story, brick, rein.-con. and steel, concrete foundation, on Gratiot Ave. and Raynor St. About $75,000.

Mich., Grand Rapids—Convent—Dominican Sisters soon receive bids building T-shaped convent to be 4 story, 40 x 380 ft., 34 x 160 ft., 68 x 140 ft., 34 x 192 ft. and 68 x 140 ft., brick and rein.-con., concrete foundation. About $350,000. Noted Nov. 28.

Ill., Chicago—Bank and Office—J. K. Cady, archt., 179 West Washington St., receives bids in February, building 2 story, 35 x 95 ft. rein.-con., rein.-con. flooring and concrete foundation on Crawford Ave. and 12th St., for J. J. Kostner, 1404 Independence Blvd. About $65,000.

Ill., Chicago—Hospital—Chicago Union Hospital, 834 Wellington St., having plans prepared by Wheelock & Shank, archts., 64 West Randolph St., building two 4 story, 45 x 90 ft. and 45 x 102 ft., brick and rein.-con. additions, rein.-con. flooring and concrete foundation. About $200,000.

Ill., Chicago—Hotel—W. W. Ahlschlager, archt., 133 West Washington St., receives bids about Jan. 15, for 10 story, 70 x 135 ft. rein.-con. and brick, rein.-con. flooring and concrete foundation on Garfield Ave. and Lincoln Park W., for Lott Hotel Co., 2100 Lincoln Park W. About $750,000. Noted Dec. 12.

Ill., Chicago—Hotel and Baths—Kercher Hotel & Bath Co., 505 South Wabash Ave., plans to build 12 story, 80 x 170 ft., rein.-con., steel and brick, rein.-con. flooring, concrete foundation, at 414 South Wabash Ave. Cost over $1,000,000. W. W. Ahlschlager, 133 West Washington St., archt.

Ill., East St. Louis—International Y. M. C. A., 19 South La Salle St., Chicago, plans to build two buildings, one for white boys, cost, $50,000, and one for negroes, $25,000. T. F. Evans, secy.

Wis., Milwaukee—Hospital—City having plans prepared by C. E. Malig, city archt., for two 2 story, 54 x 100 ft. rein.-con., steel and brick wings to hospital on 19th Ave. and Mitchell St. About $175,000.

Wis., Milwaukee—School—Bd. Educ., 10th and Prairie Sts., plans to build 2 story, 180 x 19 ft. rein.-con., steel and brick, concrete foundation on Greenbush Ave. About $250,000. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Minn., Minneapolis—School, Hall, etc.—University of Minnesota plans to build addition to high school, cost, $50,000; addition to Shevin Hall, $25,000; veterinary building at University Farm, $25,000; business building, $260,000. G. H. Hayes, comptroller.

Kan., Atchison—Armory—Atchison Co. plans election to vote on $100,000 bonds to build 100 x 120 ft. armory to serve as convention hall.

Kan., Pratt—School—Bd. Educ. soon lets contract building 3 story, 86 x 200 ft. brick and rein.-con. school and 1 story, 40 x 44 ft. boiler house. About $175,000. W. E. Hulse & Co., Hutchinson, archts.

Mo., Concordia—College—St. Paul's College had plans prepared by C. F. May, archt., Merchants Laclede Bldg., St. Louis, for 3 story, 43 x 125 ft. and 52 x 80 ft., brick and stone living room and gymnasium, rein.-con. flooring. About $60,000.

Mo., Joplin—Y. M. C. A., 117 East 4th St., receives bids about Mar. 1, building 4 story, 103 x 129 ft. brick and rein.-con. About $150,000. J. S. Gravelle, secy. Smith, Rea & Lovitt, 602 Finance Bldg., Kansas City, archts.

Mo., St. Louis—Bank and Office—St. Louis Union Trust Co., 4th and Locust Sts., plans to build on 7th and Locust Sts. Address J. H. Grover, vice pres.

Mo., St. Louis—Hotel—A. A. Busch, 9th and Pestalozzi Sts., plans to build on west side 12th St. from Market to Chestnut Sts. About $2,000,000.

Tex., Fort Worth—Office—W. T. Waggoner, 1st Natl. Bank Bldg., having plans prepared by Sanguinet & Staats, archts., 1st Natl. Bank Bldg., for 16-story, 75 x 95 ft., on 8th and Houston Sts.

Buildings (Continued)

Cal., **Pomona**—Y. M. C. A. having plans prepared by R. H. Orr, archt., 1301 Van Nuys Bldg., Los Angeles, building 4 story, 125 x 150 ft., brick, rein.-con. flooring, concrete foundation. About $75,000 available; campaign to raise $75,000 more will be inaugurated.

N. B., **Moncton**—Hospital—City plans to build addition. About $60,000. J. S. Magee, clk.

Ont., **Kingston**—Hospital—General Hospital Bd. plans to build additional wings. About $200,000. B. Taylor, pres.

Ont., **London**—School—City plans election to vote on $250,000 by-law to build brick and stone medical school.

Ont., **London** — Medical School — City voted $100,000 bonds to build in connection with Western University. Noted Dec. 12.

Ont., **Niagara Falls**—Administration—City plans to build at Queen Victoria Park. About $100,000.

Ont., **Port Arthur**—Court House—City plans to build. About $150,000.

Ont., **Saulte Ste. Marie**—Court House—Algoma Co. plans to build. About $200,000.

Ont., **Toronto**—Hospital—Bd. Control plans to build reception hospital. About $50,000.

Ont., **Toronto**—Hospital—Provincial and Federal Governments plan to build hospital about 15 mi. from here, for Soldier's Civil Re-establishment Dept. About $500,000.

Ont., **Toronto**—Schools—City plans to purchase sites and build 4 new schools. About $750,000. C. A. Brown, chn. finance com.

Ont., **Weston**—School—Town plans election to vote on $60,000 bonds to build school. J. Taylor, clk.

Man., **Winnipeg**—Home—Dominion Government plans to build 550 x 1000 ft. Home for Deaf. About $500,000.

Sask., **Regina**—School—City plans election to vote on $125,000 bonds to build school. J. H. Cunningham, secy. bd. educ.

BIDS DESIRED

Conn., **Hartford**—Theatre—Until Jan. 20, by T. W. Lamb, archt., 644 8th Ave., New York City, building 3 story, 120 x 158 ft. brick and steel, concrete foundation on Main St., here, for S. Z. Poli, 24 Church St., New Haven. About $125,000.

N. J., **Asbury Park**—Church—Until Jan. 25, by L. E. Smith, archt., 2 West 47th St., New York City, building 2-story, 70 x 190 ft., steel and brick, concrete foundation, for 1st Methodist Episcopal congregation. About $150,000. Noted Oct. 10.

Fla., **Melbourne**—School—Until Feb. 3, by Bd. Educ., Brevard Co., building 2 story, 80 x 183 ft. school and 54 x 72 ft. auditorium extension, rein.-con. frame and hollow tile. About $60,000. S. J. Overstreet, supt. A. E. Lewis, Real Estate Bldg., Miami, archt. Noted Aug. 15.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ill., **Chicago**—Office—C. Rubens, c/o A. S. Alschuler, archt., 28 East Jackson St., let contract building 8 story, 122 x 286 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on Harrison and Paulina St., to J. W. Snyder Co., 122 South Michigan Ave. About $50,000. Noted Dec. 26.

★Ia., **Stanton** — Orphanage — Swedish Lutheran congregation let contract building 2 story, 32 x 45 ft. to C. W. Johnson, Chariton. About $65,000.

★Minn., **Minneapolis**—Settlement House—North East Neighborhood House, 15th Ave. N. E., and 2nd St., let contract building 3 story, 50 x 80 ft. with 2 story, 42 x 75 ft. wing, concrete and brick, concrete foundation, to Pike & Cook, 416 South 5th St. About $60,000.

★Mo., **St. Louis**—Mercantile—N. Frank Real Estate Co., Century Bldg., will alter 75 x 174 ft. brick, concrete and steel, on Bway. and Washington Ave. Work will be done by day labor. About $50,000.

★Cal., **Los Angeles**—Mausoleum—Rosedale Mausoleum Co., 308 Haas Bldg., let contract building 2 story, 91 x 308 ft. rein.-con. at Rosedale Cemetery containing 1750 crypts, chapel, 2 columbariums, etc., to J. S. Fluor, Santa Ana. About $200,000.

★Ont., **Burlington**—Hospital—Dept. Pub. Wks., Ottawa, let contract building active treatment ward for military hospital, here, to Pigott, Healy Constr. Co., 36 James St., S. Hamilton. Noted Dec. 5.

Federal Government Work

PROPOSED WORK

N. Y., **Brooklyn**—Heating and Ventilating Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in Building "D" at Naval Building Reservation; Spec. 3744. About $40,000.

N. Y., **Ward's Island**—Refrigerating Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install; Spec. 3749. About $30,000.

N. Y., **West Point**—Quarters and Barracks—Constr. Div., War Dept., Wash., D. C., soon receives bids building 1-story, 49 x 390 ft. barracks and quarters at West Point Military Academy. About $500,000.

Md., **Baltimore**—Hospital—U. S. Government having plans prepared for doubling capacity of Evergreen Junior, U. S. Genl. Hospital No. 7. Work consists of 5 new buildings, etc. About $500,000.

Md., **Indianhead** — Houses — Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed building Type "D" apartment houses; Spec. 3696. (Specifications and plans not prepared in time.) About $70,000. Noted Jan. 2.

D. C., **Wash.**—Sewer—Dist. Comrs., Dist. Bldg., soon let contract building James Creek Valley Trunk sewer involving 6000 cu.yd. excav., 1600 yd. concrete masonry and 10 yd. sewer brick masonry.

Va., **Newport News**—Emergency Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3750. About $500,000.

Fla., **Santa Rosa**—Sewer and Water System—Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed project; new bids to be opened at local yard; Spec. 3634. Noted Nov. 14.

Mich., **Frankfort**—Dredging Harbor—U. S. Eng. Office, Grand Rapids, plans to deepen and improve harbor. About $700,000. L. W. Goddard, engr.

Ore., **Marshfield**—Channel Improvement—Com. on Rivers and Harbors, Wash., D. C., appropriated $204,000 for inner channel project. Plans include bar dredging and entrance work at Marshfield.

Cal., **South San Francisco**—Cottages and Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 2 double cottages, 4 room cottage and install sewer system; Spec. 3742. About $9000.

BIDS DESIRED

N. Y., **Rockaway**—Heating System—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing in Hangars C, D and E; Spec. 3722. About $25,000; $10 deposit required for plans and spec. Noted Dec. 19.

D. C., **Wash.**—Sewers—Until Jan. 14, by Dist. Comrs., Dist Bldg., building sewers involving 140 lin.ft. 7 x 7 ft. concrete sewer and 1065 lin.ft. 6 x 6 ft. concrete sewer.

Va., **Hampton Roads**—Oil Storage Buildings, etc.—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building oil storage and reclaim building and photograph laboratory; Spec. 3714. About $20,000; $10 deposit required for plans and spec. Former bids rejected. Noted Dec. 19.

Tex., **North Ft. Worth** — Gas Holders, Removing System, etc.—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 5 gas holders and C02 removal system at Argon Production plant; Spec. 3594. About $120,000. Noted Dec. 5.

Idaho, **Boise**—Irrigation—Until Jan. 18, by U. S. Recl. Serv., Boise, building 9 mi. earth canal on Black Canyon extension of Boise projert. Work involves 190,000 cu.yd. excav. to be let in sections of 2000 yd.; 178,000 cu.yd. dry earth excav., 5000 cu.yd. loose dry rock excav. and 7000 solid dry rock excav. About $50,000. D. W. Cole, engr.

Cal., **Inglewood**—Cottages and Sewer System—Until Jan. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 2 double quarters and one 4 room quarters, also installing sewer system to connect with Los Angeles City sewer; Spec. 3740. About $9000; $10 deposit required for plans and spec.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Me., **Caribou**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash. D. C., received bids Jan. 6, building here from I. F. Woodbury & Son Co., 185 Summer St., Boston, Mass., $68,998; O. Nelson Co., 194 Exchange St., Bangor, $69,700; T. F. Moreau & Co., Lewiston, $72,857. Noted Dec. 5.

★Mass., **Chatham**—Boiler House, Heating and Draining Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building boiler house, and installing heating and draining systems, etc., to Coleman Bros., 1 Marginal St. Chelsea. $45,025 (30 days). Noted Jan. 2.

Mass., **Hingham**—Ralroad Track—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6 building at Naval Ammunition Depot,

(1) clearing. (Monthly payments will be based on actual number of sq.ft. of clearing completed and accepted and unit contract price for 10,000 sq.ft.)

(2) grading. Monthly payments will be based on actual number of cu.yds. completed and unit contract price per cu.yd measured in excav. and placed in final position.

Contract price per cu.yd. shall include excav. of material by any method whatever, loading, transportation and deposit of same in manner described by these specifications.

(3) culverts. Unit contract price for this item may for purposes of monthly payments be separated in schedule of prices to cover proper proportional payments for number of lin.ft. of culvert pipe delivered and accepted and for actual number of lin. ft. of culvert installed measured in place.

(4) ballast. Unit contract price per cu. yd. shall be for ballast in place, measured in place. Monthly payments will be based on actual number of cu.yds. in place, measured in place and unit contract price.

(5) track timbers. Unit contract prices for this item may, for purposes of monthly payments, be separated in schedule of prices to cover proper proportional parts for number of ties and sets of switch timbers delivered and accepted and for actual number of ties and sets of switch timbers installed.

(6) installation of tracks (a) and (b) unit contract for this item may, for purposes of monthly payments, be separated in schedule of prices to cover proper proportional payments for material delivered and accepted and for number of lin.ft. of track installed and number of turnouts installed. (c) and (d) Monthly payments will be based on actual number of lin.ft. of track installed and for actual number of turnouts installed. No separate payments will be made for preparatory work on same prior to installation.

(7) miscellaneous work. As specified in paragraph 89, from

Kennedy & Peterson Constr. Co., 7 Water St., Boston, Mass., (1) $20; (2) $3; (3) $.75; (4) $1.50; (5a) $1.30; (5b) $80; (6a) $2.95; (6b) $3; (6c) $1.45; (6d) $95 (60 days).

C. M. Leach, P. O. Box No. 2285, Boston, Mass., (1) $.03 per sq.ft.; (2) $1.55; (3) $1.55; (4) $2; (5a) $2; (5b) $28; (6b) $2; (6b) $1.65; (6c) $0.75; (6d) $45 (90 days).

Coleman Bros., 1 Marginal St., Chelsea, Mass., (1) $100; (2) $1.35; (2a) $5; (3) $1.80; (4) $.70; (6c) $1.25; (6d) $150 (70 days).

A. A. Johnson, Van Buren St., Long Island City, N. Y., (1) $100; (2) $3; (4) $4; (5) $1.50; (5a) $2.70; (5b) $140; (6a) $2.00; (6b) $2.50; (6c) $.75; (6d) $100 (75 days).

Hasson Pavement Co., 902 Chapel St., New Haven, Conn., (1) $50; (2) $1.30; (3) $1.50; (4) $2; (6c) $1.50; (6d) $100. Noted Dec. 19.

Mass., **Newburyport**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 3, from Franco Amer. Constr. Co., 150 Nassau St., New York City, $81,761; M. E. O'Conner, Northampton, $94,500; C. S. Cunningham & Son, 7 Water St., Boston, $97,300. Noted Dec. 5.

Conn., **New London**—Completing Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6 installing walls and doors for building for nets, at Submarine Base, (1) (work complete). (2) price and time for installing concrete floor as specified under alternative No. 1 from C. M. Leach, P. O. Box, 2285, Boston, Mass., (1) $13,393 (80 days); Hamilton & Chambers Co., 29 Bway., New York

Federal Government Work (Continued)

City, (1) $18,200 (60 days), (2) $10,170 (30 days), (3) $17,900 (60 days); H. E. Fox Constr. Co., 81 East 125th St., New York City, (1) $19,940 (60 days), (2) $9910 (45 days), (3) $8960 (60 days). Noted Jan. 2.

N. Y., Brooklyn—Extension "A" to Power Plant — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30:

(1) net price and time for work, complete, in accordance with drawings and specifications using cast in place slabs with pitch and gravel or slag roof,

(2) net price and time added or deducted from (1) for each pile in excess of or less than number shown on drawings based on length of 45 ft. from point to cut-off,

(3) net price and time added or deducted from (1) for each linear foot of pile in excess of or less than length specified above,

(4) net price and time added to or deducted from (1) if asphalt and gravel or slag roofing is used,

(5) net amount added to or deducted from (1) if asphalt impregnated asbestos felt roofing is used,

(6) net price and time added to or deducted from (1) if gypsum precast tile slab roof is furnished, from

E. Dietsch, 383 Madison Ave., (1) $101,000 (140 days), (2) add $20, deduct $12.

Post & McCord, 101 Park Ave., (1) $101,800 (150 days), (2) add $25, deduct $22, (3) add $0.60, deduct $0.50, (4) deduct $50, (5) add $75, (6) deduct $100.

Rangely Constr. Co., 401 Lexington Ave., (1) $102,448 (150 days), (2) add $29, deduct $25, (3) $0.65, deduct $0.55, (6) deduct $100. All contractors of New York City. Noted Dec. 10 under "New York."

★**N. Y., Rockaway**—Gasoline Piping, Tanks, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to C. Meads & Co., 38 Park Row, New York City, $21,120 (90 days). Noted Jan. 2.

N. Y., Stapleton—Nurses' Quarters—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Dec. 30, building at Marine Hospital (work complete), from B. Diamond, 12 Bergen St., Brooklyn, $19,500; Rangley Constr. Co., 405 Lexington Ave., New York City, $19,600; Northeastern Constr. Co., 225 5th Ave., New York City, $20,692. Noted Dec. 19.

N. J., Cape May—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, building at Naval Air Sta., (1) price and time for work complete, (2) price added to or deducted from (1) for each pile in excess of or less than number shown on drawing, based on length of 25 feet from point to cut off, (3) price added to or deducted from (1) and (2) for each linear foot of pile in excess of or less than length specified above, (4) price to be added to or deducted from (1) if material, as specified under alternative No. 1 is used, from

Post & McCord, 101 Park Ave., New York City, (1) $128,000 (180 days), (2) add $21, deduct $18, (3) add $1, deduct $0.80, (4) deduct $200.

M. H. McCloskey, Jr., 1620 Thompson St., Phila., (1) $138,138, (2) add $28, deduct $6, (3) add $1.10, deduct $0.05.

H. S. Roberts & Co., 1123 Bway, New York City, (1) $139,500 (185 days), (2) $13, (3) add $0.80, deduct $0.50, (4) deduct $350. Noted Dec. 12.

Pa., Ft. Mifflin—Altering Marine Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 23, for work at Ammunition Depot (work complete), from J. M. Yardley Co., 1716 Samson St., Phila., $9193 (59 days); J. S. Rogers Co., Drexel Bldg., Phila., $9927 (60 days). Noted Dec. 12.

★**Pa., Phila.**—Heating System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in extension at U. S. Marine Corps. Reservation, to Raisler Heating Co., 129 Amsterdam Ave., New York City, $25,506 (90 days). Noted Nov. 28.

Pa., Phila.—Mechanical Stokers—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids furnishing stokers, driving engines and auxiliaries at (a) power plant, (b) aircraft factory, here, from Westinghouse Electric & Mfg. Co., 803 Hibbs Bldg., Wash., D. C., (a) $32,500, alternate $28,000; (b) $12,400, alternate, $11,000; Sandford-Riley Stoker Co., 25 Foster St., Worcester, Mass., (a) $36,660, alternate, $28,510; (b) $12,700; Amer. Eng. Co., Aramingo and Cumberland Sts., (a) $33,185, alternate, $28,386; (b) $12,565, alternate, $11,170.

★**Pa., Phila.**—Water Supply, Sewer and Drainage Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Grays Ferry Rd., to H. Lodge, Inc., 1633 Ranstead St., $29,875 (75 days). Noted Jan. 2.

D. C., Bellevue—Railroad—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6, building at Naval Magazine, work complete, from Hyde & Baxter, 711 13th St., Wash., $23,875 (40 days); G. F. Pawling & Co., 1432 South Penn. Sq., Phila., $27,385 (40 days); L. J. Sieling, 1270 Bway., New York City, $42,892 (40 days). Noted Dec. 19.

D. C., Wash.—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, installing two 20-ton electric traveling cranes in tool shop and miscellaneous shop, at Navy Yard, here, (1) price and time, for cranes complete on runways, in accordance with drawing and specification, (2) price and time for cranes complete on runways in accordance with bidders specifications, (3) price of spare parts for each crane as called for in paragraph 20 of the standard specification for "Electric Traveling Cranes" from Chesapeake Iron Wks., Westport, Md., (2) $18,700 (150 days); Toledo Bridge & Crane Co., Dorr St. and Lake Shore R. R., Toledo, O., (2) $23,000 (120 days); Niles-Bement-Pond Co., 111 Bway., New York City, (2) $29,910 (150 days); Manning, Maxwell & Moore, 119 West 40th St., New York City, (1) $30,110 (70 days). Noted Dec. 12.

D. C., Wash.—Radial Block Chimneys—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, building at Navy Yard here, (1) price and time, work complete; (2) price and time, work complete, in accordance with bidders' detail drawings and specifications. In case a bid is based on this item, a separate letter so stating full and complete specification detailing just what bidder proposes to furnish shall accompany proposal, from W. H. Kellogg Co., 90 West St., New York City, (1) $48,200 (120 days), (2) $35,990 (120 days); A. Custodis Chimney Co., 95 Nassau St., New York City, (1) $52,000 (120 days), (2) $38,500 (120 days); H. R. Heinicke, Inc., 147 4th Ave., New York City, (1) $52,765 (135 days), (2) $42,855 (135 days), (3) $39,680 (130 days). Noted Dec. 19.

★**Va., Alexandria**—Pier and Bulkhead—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to McLean Constr. Co., 1415 Fidelity Bldg., Baltimore, Md., $36,711 (90 days). Noted Jan. 2.

★**Va., Hampton Roads**—Heating Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Wise Granite Constr. Co., Amer. Natl. Bank Bldg., Richmond, $83,300 (45 days).

Va., Norfolk—Kitchen and Diet Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6:

(1) net price and time for work, complete in accordance with drawings and specification.

(2) amount and time to be added to (1) if all waste vent, water supply, steam supply and electric connections to outlets at locations of equipment and all other connections with valves and fittings required for satisfactory installation of all equipment ready for operation, be made by contractor from Bramhall Deane Co., 261 West 36th St., New York City, (1) $19,200 (60 days); Rod Iron Range Co., 6 Portland St., Boston, Mass., (1) $19,432 (60 days); (2) add $5500;

Stearnes Co., 1523 South Michigan Ave., Chicago, (1) $20,000 (60 days). Noted Jan. 2.

Va., Norfolk—Mechanical Stokers—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids furnishing stokers, driving engines and auxiliaries at navy yard, here, from Westinghouse Electric & Mfg. Co., 803 Hibbs Bldg., Wash., D. C., $21,900, alternate $18,100 (120 days); Sandford-Riley Stoker Co. 25 Foster St., Worcester, Mass., $22,100, alternate, $19,290 (120 days); Amer. Eng. Co., Aramingo and Cumberland Sts., $22,405. Alternate, $19,164 (120 days).

★**Va., Petersburg**—Paving—U. S. Government sublet contract paving roadway of East Bank St. from Madison St. to city limits, to M. A. Finn, Finn Bldg.; on percentage basis. Government will pay all cost over $15,000 appropriated by city. Total cost, $30,000. Noted Dec. 26 under "Streets & Roads."

★**Va., Quantico**—Painting Old Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to Barker Painting Co., 138 West 38th St., New York City, $36,000, time Feb. 1.

Va., Yorktown—Extension to Naval Mine Depot—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids (1) price and time, work complete, in accordance with drawings and specfications (2) amount to be deducted from (1) if window guards in front of 1st story dormitory windows of barracks for 500 men are omitted, from Hughes Foulkrod Co., 1406 Commonwealth Bldg., Phila., (1) $309,977 (178 days); Boyle Robertson Constr. Co., 501 Evans Bldg., Wash., D. C., (1) $314,813 (150 days), (2) $900; Consolidated Eng. Co., 243 Calvert Bldg., Baltimore, Md., (1) $324,000 (150 days), (2) $500.

W. Va., South Charleston — Electric Traveling Crane—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, installing in foundry and forge shop at Naval Ordnance Plant, (1) price and time of delivery for one 60-ton crane complete, delivered on board cars here, ready for installation, in accordance with this specification and accompanying drawing and services of superintendent to supervise and assist in installation of crane and making of tests (2) price of spar parts as specified in paragraph 41, from Whiting Fdry. Equipment Co., Harvey, Ill., (1) $29,350; Chesapeake Iron Wks., Westport, Md., $31,000 (150 days); Cleveland Crane & Eng. Co., Wickliff, O., (1) $31,400 (150 days).

N. C., Monroe—Radio Buildings, Garage, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, building radio buildings, garage, barracks and 3 officers' quarters at Southern Radio Sta.

(1) net price and time for work complete in accordance with the drawings and specifications,

(2) net price and time for 1 cottage for commanding officers' quarters complete in accordance with the drawings and specifications,

(3) net price and time for each of petty officer's quarters complete in accordance with the drawings and specifications,

(4) net price and time for operators' quarters for 50 men complete in accordance with drawings and specifications,

(5) net price and time for marine barracks for 76 men complete in accordance with the drawings and specifications,

(6) net price and time for operating building complete in accordance with the drawings and specifications, including cranes,

(7) net price and time for garage complete in accordance with the drawings and specification, including tank and pump.

(8) price per cubic yard to be added to (1) and (6) for each cubic yard of concrete placed for machinery and boiler foundations in operating building; quantity required will be ascertained after award of contract. Price bid shall include all excavation, grading, filling, and removal of earth,

(9) price per cubic yard for rein-con. floor in operating building, including beams, slabs, reinforcement and all necessary labor and forms. It is assumed that floor shall be required to sustain a live load of 250 pounds per square foot,

(10) price per cubic yard for plain concrete floor in basement of operating building,

(11) amount to be deducted from (1) and (6) if 2 cranes specified are omitted,

(12) amount to be deducted from (1) and (6) if 1 of 2 cranes specified is omitted, from

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $237,000 (150 days), (8) $20, (9) $25, (11) $10,000, (12) $5000.

A. C. Moses Constr. Co., 916 New York Ave., Wash., D. C., (1) $237,104 (200 days), (2) $13,068 (120 days), (3) $7640 (120 days), (4) $35,429 (150 days), (5) $42,885 (200 days), (6) $122,628 (200 days) (7) $8234 (120 days), (8) $17, (9) $28.50, (10) $14, (11) $4170, (12) $2085.

Post & McCord, 101 Park Ave., New York City, (1) $237,450 (240 days), (8) $24, (9) $40, (10) $18, (11) deduct $4800, (12) deduct $2400. Noted Dec. 12.

N. C., Monroe—Water Supply and Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at Naval Radio Sta., here,

(1) Net price and time for entire work, exclusive of well, casing and pump, complete, in accordance with drawings and specifications.

(2) Net price and time for well, casing and pump, complete based on depth of 250 ft. in accordance with drawings and specification. Pump and motor under this item shall be suitable for maximum depth of 350 ft.

(3) Net price per ft. of well, casing and pump rod for each ft. in excess of 350 ft.

Federal Government Work (Continued)

(4) Net price per ft. of well, casing and pump rod for each ft. in excess of 350 ft. to maximum depth of 500 ft.

(5) Net amount to be added to (2) for larger pump and motor required if well is carried deeper than 350 ft. to maximum depth of 500 ft.

(2a), (3a), (4a) and (5a) Under these items bids will be received on work outlined in (2), (3), (4) and (5), but substituting for deep well pump and motors, air lift pump, motor-driven air compressors, air booster, and other necessary accessors, increasing size of pump-house to accommodate air compressors. These items shall include all material and work necessary for complete air-lift system and are alternatives for deep-well pump system, from

J. L. Sweigard & Co., 1120 Lincoln Bldg., Phila., Pa., (1) $32,240, (150 days); (2) $8140; (3) $21; (4) $21; (5) $1500.

N. Clifford Co., 322 28th St., Newport News, Va., (1) $34,500—(6 months); (2) $12,075; (3) $30; (4) $35; (5) $415.

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $45,675 (150 days); (2) $12,200; (3) $20; (4) $35; (5) $1500. Noted Dec. 19.

S. C., Lancaster—Post Office—J. A. Wetmore, superv.-archt., treas. dept., Wash., D. C., received bids Jan. 6, building here (1) limestone; (2) sandstone, from A. Blair, 11 South Lawrence St., Montgomery, Ala., (1) $52,950; Westchester Eng. Co., 116 Main St., White Plains, N. Y., (1) $55,900; (2) $56,400; R. P. Farnsworth & Co., Owensboro, Ky., (1) $57,960. Noted Dec. 5.

★S. C., Paris Island—Extension to Heating System and Power House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Tyler-Underground Heating System, 855 Progress St., Pittsburgh, Pa., $89,797 (100 days). Noted Dec. 12.

★Fla., Pensacola—Removing Old Piles—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract removing old piles from Warrington Barracks, to C. N. Turner & Co., Lobby Brent Bldg., $2142 (45 days). Noted Dec. 12.

Ala., Montgomery—Altering Court House and Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Dec. 30 (work complete), from Jeffry Bros., Montgomery, $9723; G. A. Clayton, Atlanta, Ga., $9739. Noted Dec. 19.

Ill., Mt. Carmel—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 3, limestone, from H. G. Mitchell, Scottsburg, Ind., $57,000; C. D. Mitchell, Charleston, S. C., $59,999; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $61,880. Noted Dec. 5.

Tex., Galveston—Hangars, Pavement and Beach—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6, building at Naval Air Sta.:

(1) Net price and time for work, complete, in accordance with drawings and specifications.

(2) Net price and time added to or deducted from net price and time for work complete as required in (1) by using asbestos-covered metal in lieu of asbestos shingles over sheathing for walls and built-up roofing over sheathing for roof as specified in alternative No. 1.

(3) Net price and time added to or deducted from net price for work, complete, as required in (1), by using asbestos-covered metal for walls in lieu of asbestos shingles over sheathing. The asbestos covered metal will be as specified in paragraph 105, and will be secured direct to studs and girts.

(4) Net price to be added to or deducted from net price for work complete as required in (1) for each pile in excess of or less than number shown on drawing, based on a length of 30 feet from point to cut-off.

(5) Net price added to or deducted from net price for work complete as required in (1) and (4) for each linear ft. of pile in excess of or less than length specified above, from

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $530,000 (130 days); (2) add $38,000; (3) deduct $2000; (4) add $13, deduct $8; (5) add $0.50, deduct $0.20.

Paschen Bros., 11 West Washington St., Chicago, (1) $534,100—(120 days); (2) $41,000; (3) $15; (5) $0.50.

Newport Contg. & Eng. Co., Law Bldg., Newport News, Va., (1) $600,000 (240 days); (2) add $35,000; (4) add $22.50, deduct $12; (5) add $0.75, deduct $0.40. Noted Dec. 19.

Tex., Galveston—Shops and Industrial Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Dec. 30, building at Naval Air Sta., (1) price and time, work complete, (2) amount added to or deducted from (1) for each pile in excess of or less than number shown on drawings, based on length of 300 feet from point to cut off, (3) amount added to or deducted from (1) and (2) for each linear foot of pile in excess of, or less than length specified above, from H. F. Friedstedt Co., 327 South La Salle St., Chicago, (1) $157,336 (180 days), (2) $12, (3) $0.40; Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $178,000 (120 days), (2) add $15, deduct $5, (3) add $0.50, deduct $0.15; Krahl Constr. Co., 350 North Clark St., Chicago, (1) $194,991 (180 days), (2) $19, (3) $0.60. Noted Dec. 5.

Tex., North Ft. Worth—Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C., received only bid Jan. 6, building 2 wells and installing pumps at Argon production plant, (1) price and time, for wells and pumps, work complete, in accordance with this specification (2) under this item bidders may submit proposals for complete work in accordance with spirit of specification, but with such modifications of methods and details as they desire, from W. Carter, 2643 West Monroe St., Chicago, (1) $79,949 (120 days), (2) $65,400 (120 days), (3) $2. Noted Jan. 2.

Utah, Park City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 3, from C. Weitz & Sons, 713 Mulberry St., Des Moines, Ia., $38,302; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $43,380. Noted Dec. 5.

Cal., San Francisco—Electrical Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids work complete, from K. E. Parker, 251 Kearny St., $110,363 (135 days); Clinton Constr. Co., 140 Townsend St., $113,346 (150 days); Lange & Bergstrom, Sharon Bldg., $117,331 (150 days).

Miscellaneous

PROPOSED WORK

Garbage Incinerator—Bridgeport, Conn.—C. C. Fischer & Co., Asylum St., plans to rebuild garbage incinerator recently destroyed by fire. About $35,000.

Monument—Stamford, Conn.—City had plans prepared by G. A. Freeman, archt., New York City, building marble memorial monument with bronze tablets to soldiers and sailors. About $15,000.

Removing and Replacing Dock—Buffalo, N. Y.—Buffalo Union Furnace Co., foot of Hamburg St., plans to remove and replace 400 ft. of collapsed dock. About $200,000. Empire Eng. Co., Morgan Bldg., engrs.

Subway—Rochester, N. Y.—New York Central R.R., Grand Central Terminal, New York City, having plans prepared for subway; also altering several streets. H. W. Kittredge, New York City, ch. engr.

Elimination of Grade Crossings—East St. Louis, Ill.—See "Streets and Roads."

Grand Stand—St. Paul, Minn.—Minnesota State Agricultural Society, State Fair Grounds, plans to build addition and repair grand stand. About $84,500. T. H. Canfield, secy. and mgr.

Flood Protection—Courtney, Mo.—Courtney D. D. having plans prepared by C. E. Jacoby Eng. Co., engrs., 514 Shukert Bldg., Kansas City, for 1000 acres flood protection system along Missouri River and Mill Creek. H. Gentry, Jr., Court House, Kansas City, chn.

Pier—Portland, Ore.—City plans to complete Pier No. 1 at St. Johns Terminal extending covered section to 1200 ft., (to be fitted with automatic sprinkler); widen slip No. 1 distance of 20 ft.; also build Pier No. 2 (open). A. Hegardt, ch. engr.

BIDS DESIRED

Cement, Sand, etc.—New York, N. Y.—Until Jan. 16 by H. Bruckner, pres. Bronx Boro., furnishing and delivering, 750 tons asphaltic cement, 5000 cu.yd. asphalt wearing surface sand, 25 tons paving pitch, 800 tons limestone dust or other suitable inorganic dust, 9500 cu.yd. sand grits, 2000 cu.yd. binder stone, 2000 bags Portland cement, 4500 cu.yd. 1½ in. broken trap rock stone and 2000 cu.yd. broken trap rock stone screenings, forage, 10,000 gal. bituminous road surfacing materials, (for hot use) 150,000 gal. tar road oil and 250,000 gal. asphalt road oil.

Portland Cement, Sand, etc.—New York, N. Y.—Until Jan. 16, F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 10,000 bags Portland cement, 10,000 cu.yd. asphaltic wearing surface sand, grade B, 200,000 gal. refined asphalt; 1500 tons limestone dust; 2500 cu.yd. binder stone; 40,000 gal. gasoline; 300,000 wood paving blocks.

Heating, Plumbing, etc.—Sonyea, N. Y.—Until Jan. 14, by P. L. Lang, pres. Bd. Mgrs., Craig Colony for Epileptics, installing heating, plumbing, draining and electric systems in dining room and kitchen buildings; advertised in this issue.

Dam—Los Angeles, Cal.—Until Feb. 3, by Bd. Supervs. Los Angeles Co., building concrete masonry arch dam 23 ft. high, northwest Pasadena, involving 6000 yd. rock excav., 5000 yd. earth excav., 33,000 yd. concrete with stones embedded, 300 ft. concrete outlet tunnel; 120 ft. concrete spillway, concrete arches supporting roadway on top, etc., for county flood control districts. About $300,000. J. W. Reagan, Court House, ch. engr.

Dump Cars—Winnipeg, Man.—Until Jan. 13, by Comrs. Greater Winnipeg Dist., Tribune Bldg., for 18 6 cu.yd. dump cars, 12 cars made by Canadian Car & Foundry Co., 1916, 6 cars made by Continental Car & Equipment Co., 1917. R. D. Waugh, chn.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Coal Trestle—Binghamton, N. Y.—State Hospital Comn., Capitol, Albany, received bids Dec. 18 building steel coal trestle at State Hospital here, from Lehigh Structural Steel Co., Binghamton, $24,284; A. E. Stephens Co., Albany, $32,400; Bame & Cardell, 176 Warren St., Albany, $26,148. Noted Dec. 12.

★Heating and Ventilating Systems—New York, N. Y.—Bd. Educ. let contract installing systems in P. S. No. 32, to D. J. Rice, 103 Park Ave., $62,797.

★Shaft—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., let contract completing shaft No. 2 of Route No. 26, Queensboro Subway Rapid Transit R.R., on East 42nd St., to Rice & Carey, 2786 Bainbridge Ave., $99,085. Noted Dec. 26.

★Repairing Docks—Jersey City, N. J.—Pennsylvania R. R., Broad St. Sta., Phila., let contract repairing docks in Greenville Terminal Yards, here, to A. N. Spooner & Son, Pier 11, North River, New York City. About $15,000.

Stone—Mt. Holly, N. J.—Bd. Freeholders Burlington Co. received bids for broken stone f.o.b. quarry for year of 1919 as follows: (a) 2½ in. stone, (b) 1½ in. stone, (c) ¾ in. stone, (d) ½ in. stone, (e) screenings, from Lambertville Stone Quarry Co., Lambertville, (a) $1.10, (b) $1.25, (c) $1.40, (d) $1.60, (e) $1.10; Delaware River Quarry & Constr. Co., 190 George St., New Brunswick, (a) $1.20, (b) $1.25, (c) $1.40, (d) $1.75, (e) $0.90; Birdsboro Stone Co., Land Title Bldg., Phila., Pa., (a) $1.20, (b) $1.30, (c) $1.50, (d) $1.80, (e) $1.15.

★Wharf—Old Town, Fla.—Seminole Fertilizer & Oil Co., 1958 Herschell St., Jacksonville, let contract building 80 x 300 ft. wharf here, to H. H. Dickey, Brunswick, Ga.

★Tunnel—Dearborn, Mich.—Ford Motor Co., Highland Park, let contract building 2000 ft. tunnel and water intake, (tunnel to be 1½ mi. long ultimately) 13 ft. inside diameter, concrete segmental blocks 18 in. thick and 10 blocks to ring, to Hoag & Dall, 510 Commercial Bank Bldg., Cleveland, O. About $500,000.

★Foundation—Chicago, Ill.—See "Industrial Works" under Proposed Work.

★Coal Chute, etc.—St. Louis, Mo.—Chicago, Burlington & Quincy R.R., 547 West Jackson Bldg., let contract building 1 story coal chute, 1 story engine room and 1 story, 38 x 54 ft. ice house, brick and concrete, rein.-con. flooring and concrete foundation, at 220-228 Humboldt St., to E. D. Otto, Downers Grove, Ill. About $18,000.

★Levee Work—El Centro, Cal.—Imperial Irrigation Dist. let contract extending and raising Saiz Levee for distance of 6½ mi., to L. Little, Calexico, $124,800; $0.39 per cu.yd. Work involves 320,000 cu.yd. dry earth excav. Noted Nov. 14.

★River Improvement—Atwood, Ont.—Town let contract improving Maitland River, to G. G. Reid, 23 Earlscourt Ave., Toronto. About $31,500. Noted Oct. 31 under "Mitchell."

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 14.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 14th, 1919, at which place and hour they will be publicly opened and read, for improving the Cayuga and Seneca canal pursuant to the provisions of Chapter 391 of the Laws of 1909, and Chapter 147 of the Laws of 1903, and amendatory laws, and for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT "T"

Cayuga and Seneca Canal—Section 1.

For extending the core wall and other work at the north end of Dam No. 2, Seneca Falls.

Sheets 1 and 2.

—2—

CONTRACT NO. 197.

Erie Canal—Section No. 2.

For drilling holes in the sill of the dam and the toe of the river wall of the lock, near Rotterdam, and making necessary repairs.

Sheets 1 and 2.

And for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—3—

TERMINAL CONTRACT NO. 102.

For furnishing and installing two three-ton electric semiportal revolving jib cranes on Pier 6, East river, New York City.

Contract plans, sheets 1 to 17 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract, in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

PROPOSALS

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

Dec. 13, 1918.

Bids: Jan. 14.

Heating, Plumbing, etc.

Sonyea, N. Y.

Sealed proposals for construction, heating, plumbing and drainage and electric work for dining room and kitchen buildings, West Group, Craig Colony for Epileptics, Sonyea, N. Y., will be received by Hon. Percy L. Lang, president of the Board of Managers, Craig Colony for Epileptics, Sonyea, N. Y., until 2 o'clock P.M., on Tuesday, January 14, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3102, 3104, 3105 and 3106. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the Craig Colony for Epileptics, Sonyea, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 24, 1918.

Bids: Jan. 13.

Sale of Dump Cars

GREATER WINNIPEG WATER DISTRICT

Winnipeg, Man., Can.

Sealed tenders marked "Tenders for sale of Dump Cars."

Addressed to Commissioners, Greater Winnipeg District, Tribune Building, Winnipeg, will be received up to noon on Monday, January 13th, 1919.

18 Six Cubic Yd. Dump Cars.

12 Cars made by Canadian Car & Foundry company, 1916.

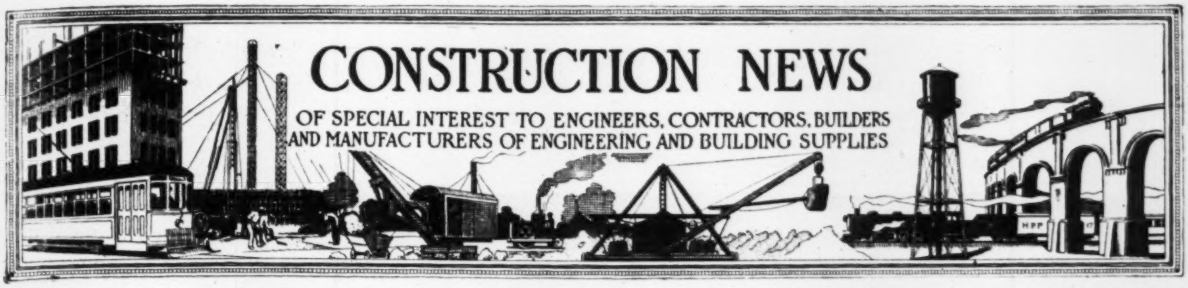
6 cars made by Continental Car & Equipment Company, 1917.

Further information may be obtained at the office of the Commissioners.

Highest or any tender not necessarily accepted.

R. D. WAUGH,
Chairman of Commissioners

Dated at Winnipeg December 27th, 1918


CONSTRUCTION NEWS
OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES
HPP

Are Prices Too High?

What may be expected in the price situation next Spring certainly cannot be determined by guesswork. There are manufacturers and others who believe that prices of construction materials should stay at the present levels. There are others who believe prices should come down, but that they will not come down until the cost of labor drops. The reply to the latter is that it is unlikely that labor can be made cheaper until the cost of living lowers. All this is simply a wheel of talk, no beginning and no end.

To reach some reliable conclusions, it would seem that the first thing to do is to study the past—on which all prophecy and estimating are based. In this way, it may be learned from a mechanical standpoint whether prices of construction materials ought or ought not be lowered.

The one thing above all others that would bring prosperity to the engineering and contracting profession is lots of work, and therefore plenty of employment for labor, in the Spring of this year. One way toward bringing about this desired condition is to adjust prices to a reasonable level. Now we come to the question: What is a reasonable price schedule for the Spring of 1919? One has answered in this way: Would not a reasonable schedule for the the Spring of 1919 be in most instances the average Spring prices from 1913 to 1918 inclusive?

TABLE I. SPRING PRICES IN NEW YORK FOR THE PAST SIX YEARS—THEIR RISE

	Portland Cement (per bbl., with sacks)	Common Brick (per M.)	Crushed Stone (per cu.yd.—¾ in.)	Sand (per cu.yd.)	Gravel (per cu.yd.—¾-in.)	C.-I. Pipe (6-inch—per ton)	Beams and Channels (3—15-inch per 100 lb.)	Plates per 100 lb.	Hollow Tile (6x12x12) per block	Linseed Oil (raw in barrels)	Freight, to Pittsburgh on Steel (per 100 lb.)
April, 1913......	$1.58	$7.00	$0.90	$0.50	$0.85	$24.00	$2.15	$1.61	$0.084*	$0.48	$0.16
May, 1913.......	1.58	7.00	.90	.50	.85	23.50	2.15	1.61	.084*	.50	.16
June, 1913.......	1.58	7.00	.90	.50	.85	23.00	2.15	1.61	.084*	.48	.16
Average.......	$1.58	$7.00	$0.90	$0.50	$0.85	$23.50	$2.15	$1.61	$0.084*	$0.49	$0.16
April, 1914......	$1.58	$5.50	$0.95	$0.50	$0.90	$22.00	$1.95	$1.31	$0.084*	$0.54	$0.16
May, 1914.......	1.58	5.50	.95	.50	.90	22.00	1.85	1.31	.084*	.54	.16
June, 1914.......	1.58	5.60	.95	.50	.90	20.50	1.85	1.31	.084*	.53	.16
Average.......	$1.58	$5.55	$0.95	$0.50	$0.90	$21.50	$1.85	$1.31	$0.084*	$0.54	$0.16
April, 1915......	$1.22	$5.50	$0.90	.....	$0.85	$20.00	$1.90	$1.36	....	.....	$0.169
May, 1915.......	1.22	5.75	1.05	.....	.85	20.50	1.90	1.32	....	.....	.169
June, 1915.......	1.22	6.00	1.05	.....	.85	22.00	1.90	1.37	....	.....	.169
Average.......	$1.22	$5.75	$1.00	.....	$0.85	$20.75	$1.90	$1.35	....	.....	$0.169
April, 1916......	$1.72	$8.50	$0.95	$0.40	$0.80	$30.50	$2.50	$2.50	$0.08½	$0.81	$0.169
May, 1916.......	1.72	7.25	.95	.40	.85	.....	2.50	2.65	.08½	.81	.169
June, 1916.......	1.72	8.00	.95	.50	1.00	.....	2.60	2.75	.08½	.....	.169
Average.......	$1.75	$7.90	$0.95	$0.45	$0.90	.....	$2.55	$2.65	$0.08½	$0.81	$0.169
April, 1917......	$2.12	$9.50	$1.20	$0.50	$1.25	$47.50	$3.75	$5.00	$0.13	$1.04	$0.169
May, 1917.......	2.40	11.50	1.25	.50	1.35	55.50	3.80	5.50	.13	1.21	.169
June, 1917.......	2.40	10.25	1.25	.50	1.25	55.50	5.00	7.00	.13	1.31	.169
Average.......	$2.40	$10.40	$1.25	$0.50	$1.30	$51.70	$4.15	$5.80	$0.13	$1.19	$0.169
April, 1918......	$2.59	$10.25	$1.75	$1.25	$2.00	$55.35	$4.20	$4.45	$0.14*	$1.55	$0.195
May, 1918.......	2.59	10.00	1.75	1.25	2.00	55.35	4.20	4.45	.14*	1.55	.195
June, 1918.......	2.59	10.25	1.75	1.25	2.00	61.35	4.20	4.45	.14*	1.58	.195
Average.......	$2.59	$10.15	$1.75	$1.25	$2.00	$57.35	$4.20	$4.45	$0.14*	$1.56	$0.195
General average..	1.85	7.80	1.30	.60	1.15	35.00	2.80	2.86	.112*	.92	.17
January, 1919....	3.40	14.00	1.85	1.25	2.00	67.70	4.27	4.52	.159*	1.59	.23

* These hollow-tile quotations f.o.b. works, Perth Amboy, N. J.

Table I herewith shows the range on eleven materials in New York City. Only figures for April, May and June, 1913 to 1918, with the Spring average prices for each year, are given. No particular comment should be necessary, for the table shows very clearly what has happened. Every price climbed more or less steadily, descending only by Government regulation, and now with general conditions settling in the direction of normality, remains at or near the peak.

These eleven materials are treated further in Table II. Here are listed the average prices for the Spring of 1914—just prior to the European War. These are compared with the average of the Spring prices of the past six years, the results being listed in the third column. Corresponding quotations on Jan. 1, 1919, are compared with the average prices of the preceding six years, showing considerable advance. Throughout the six years to July 1, 1918, the average advance of the eleven materials was 50% over the schedule on June 1, 1914. From June 1, 1918, to Jan. 1, 1919, the average advance was 70%, making a total average price increase on these eleven representative construction materials of 120%.

TABLE II. SHOWING AVERAGE PRICE ADVANCE AND EXTRAORDINARY INCREASE IN LAST HALF OF 1918

Material	Average Spring Prices, 1914	General Average Spring Prices, 1913 to 1918	Average Increase in Per Cent.	January, 1919, Prices	Per Cent. Increase over General Average of Spring Prices, 1913-18
Portland cement (per bbl. with bags).........	$1.58	$1.85	17	$3.40	83
Common brick (per M.)......	5.55	7.80	40	14.00	80
Crushed stone ¾-in. (per cu.yd.)	95	1.30	37	1.85	42
Sand, per cu.yd	50	.60	20	1.25	100
Gravel, ¾-in. (per cu.yd.)........	90	1.15	28	2.00	120
Hollow tile building, 6x12x12, per block, Perth Amboy........	084	112	33	.159	42
C.-I. Pipe, 6-in., per ton........	21.50	35.00	63	67.70	91
Beams and channels, 3 to 15 in., per 100 lb.....	1.85	2.80	54	4.27	52
Plates (per 100 lb.)...........	1.31	2.86	119	4.52	58
Linseed oil, raw (per gal.)......	.54	.92	70	1.59	62
Freight, New York to Pittsburgh, on steel.	.16	.17	6	.23	35
General advance in per cent.........			50		70

This heavy price appreciation is due in a large part to the increased cost of labor and freight—though in the past six years freight rates increased only 41%. Fair prices must and will be maintained, but prices which are not fair will not stimulate construction work. It should be obvious to everyone that the mere fact of high prices does not necessarily mean prosperity. It may even mean stagnation.

PROPOSALS

For Proposals Advertised See Page 67

WATER-WORKS

Bids Close		See Eng. News-Record
Jan. 31	Poteau, Okla. Adv. Dec. 19 and 26.	Dec. 26
Jan. 31	Bradentown, Fla.	Jan. 16
Feb. 3	Maple Heights, O.	Jan. 16

SEWERS

Bids Close		See Eng. News-Record
Feb. 5	Portvue, Pa.	Jan. 16

BRIDGES

Bids Close		See Eng. News-Record
Jan. 22	Ft. Smith. Ark. Adv. Jan. 2 and 9.	Jan. 2
Jan. 27	Fallon. Nev.	Jan. 9
Jan. 27	Winneucca, Nev.	Jan. 9
Feb. 3	Charlotte Harbor, Fla. Adv. Dec. 19, 26, Jan. 2 and 9.	Jan. 2

STREETS AND ROADS

Bids Close		See Eng. News-Record
Jan. 20	Miami, Okla.	Jan. 16
Jan. 20	Oswego, Kan.	Jan. 2
Jan. 21	Charleston, S. C. Adv. Jan. 2 and 9.	Jan. 9
Jan. 24	Topeka, Kan.	Jan. 2
Jan. 25	Belton, Mo.	Jan. 16
Jan. 27	Louisiana	Jan. 16
Jan. 27	Nevada	Jan. 9
Jan. 31	Ohio	Jan. 16
Feb. 3	Wichita, Kan.	Jan. 9
Feb. 5	Indiana	Jan. 9
Feb. 10	Fayetteville, W. Va.	Jan. 16
Feb. 11	Moulton, Ala.	Jan. 16

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Jan. 21	El Centro, Cal.	Jan. 9
Jan. 27	Madison, S. D.	Jan. 9
Feb. 3	Madisonville, Ky. Adv. Dec. 5, 12 and 19.	Dec. 12

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Jan. 28	New York, N. Y.	Jan. 9
Mar. 4	Thiells, N. Y.	Jan. 16
Apr. 1	Sioux City, Ia.	Jan. 16

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 20	Hartford, Conn.	Jan. 9
Jan. 23	Detroit, Mich.	Jan. 16
Jan. 25	Asbury Park, N. J.	Jan. 9
Jan. 30	Phoenix, Ariz.	Jan. 2
Jan. 30	Eagle, Neb.	Jan. 16
Feb. 3	Melbourne, Fla.	Jan. 9
Feb. 3	St. Paul, Minn.	Oct. 31
Mar. 15	Culver, Ind.	Dec. 26

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Jan. 17	Post Office—Franklin, Pa.	Dec. 5
Jan. 17	Post Office—Cohoes, N. Y.	Dec. 5
Jan. 20	Heating System—Spec. 3722 —Rockaway, N. Y.	Jan. 9
Jan. 20	Oil Storage Buildings, etc.—Spec. 3714 — Hampton Roads, Va.	Jan. 9
Jan. 20	Post Office — Harrisonville, Mo.	Dec. 5
Jan. 20	Post Office—Owego, N. Y.	Dec. 5
Jan. 20	Post Office—Sunbury, Pa.	Dec. 5
Jan. 20	Post Office—Decatur, Ala.	Dec. 5
Jan. 20	Post Office — Shelbyville, Ind.	Dec. 26
Jan. 20	Double Quarters for Officers — Spec. 3603 — Newport, R. I.	Jan. 16
Jan. 20	Additional Buildings, etc. - Spec. 3745 — Indianhead, Md.	Jan. 16
Jan. 20	Coal Storage and Reclaiming Building—Spec. 3714—Norfolk, Va.	Jan. 16
Jan. 23	Post Office—Salem, Va.	Jan. 2
Jan. 23	Post Office — Russellville, Ark. Adv. Jan. 2.	Jan. 2
Jan. 27	Extending Pneumatic Tube System, etc.—Spec. 3658—Hampton Roads, Va.	Jan. 16
Jan. 27	Heating Hangar—Spec. 3748 —Anacostia, D. C.	Jan. 16
Jan. 27	Gas Holder, Removing System, etc.—Spec. 3594—North Ft. Worth, Tex.	Jan. 16
Jan. 28	Dredging—Key West, Fla. Adv. Jan. 2 and 9.	
Feb. 3	Dredging — Spec. 3579 — Ft. Lafayette, N. Y.	Jan. 16
Feb. 3	Kitchen Equipment—Spec. 3730—Chelsea, Mass.	Jan. 16
Feb. 3	Water Tower, Pump and Tank House Equipment—Spec. 3682 — Philadelphia, Pa.	Jan. 16
Feb. 4	Boilers—Memphis, Tenn. Adv. Jan. 9.	Jan. 9
Feb. 4	Turbine, Pumpset, etc. — Memphis, Tenn. Adv. Jan. 9.	Jan. 9
Feb. 10	—Metal and Glass—Baltimore, Md. — Adv. Jan. 16.	Jan. 16
Feb. 11	Bridge—Washington, D. C. Adv. Jan. 16.	Jan. 16
Mar. 1	Foundation and Rip Rap—Baltimore, Md. Adv. Jan. 16.	Jan. 16
Mar. 1	Dredging—Superior, Wis.	Jan. 16

MISCELLANEOUS

Bids Close		See Eng. News-Record
Jan. 21	Oils and Greases—New York, N. Y.	Jan. 16
Jan. 24	Wharf—Esquimalt, B. C.	Jan. 16
Jan. 24	Sheet Steel Rivets—Los Angeles, Cal.	Jan. 2
Feb. 3	Dam—Los Angeles, Cal.	Jan. 9
Feb. 19	Gantry Crane — Seattle, Wash. Adv. Jan. 2 and 9.	Jan. 2

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Md., Baltimore—Bd. Awards soon lets contract building 32 rein.-con. and terra cotta filter operating tables for Lake Montebello filters, Contr. No. 46. About $26,000. F. W. Lee, city engr. Noted Dec. 19.

Md., Brunswick—F. L. Spitzer, city clk., receives bids about Feb. 10, for trenching and laying 5 mi. 4-10 in. wood stave pipe from springs in London Co., Va., gravity flow, also enlargement and improvement of reservoir. About $126,000. Norton, Bird & Whitman, 1320 Munsey Bldg., Baltimore, engrs. Noted Nov. 28.

Miss., Inverness—City receives bids in March, improving water-works and electric light system. Work includes c.i. and galvanized iron pipe, valves, hydrants, oil engines, pumps, reservoirs, alternators, etc. Former bids rejected. X. A. Kramer, Magnolia, engr. Noted Dec. 19.

O., Cleveland—Bd. Pub. Serv. plans to build brick, rein.-con. and steel filtration plant, rein.-con. flooring and concrete foundation, foot East 49th St., to have daily capacity of 160,000,000 gal. About $500,000. F. H. Betz, city engr.

Ill., East Alton—Bd. Local Impvts. had plans prepared by Sheppard & Morgan, archts., Edwardsville Bank Bldg., Edwardsville, for water-work distribution system. About $65,500.

Wis., Milwaukee—City plans to drill artesian wells in various sections of city. About $50,000 appropriated for project. G. Staal, city engr.

Ia., Shenandoah—City plans election to vote on bonds to improve water-works.

Okla., Bristow—City defeated $15,000 bonds for extending water-works. Noted Dec. 26.

Okla., Oilton—City plans election in spring to vote on bonds for water-works system. J. Harris, mayor.

BIDS DESIRED

Fla., Bradentown—Until Jan. 31, by city, furnishing steam-driven air compressor and approved air-lift pump for 7 in. well. L. L. Hine, clk.

O., Maple Heights—Until Feb. 3, by Village, building water pipe line in Dunham Rd. and Orchard Ave. About $7500. Work involves 2600 ft. 6 in. steel pipe. R. Hecker, 509 Leader-News Bldg., Cleveland, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

O., Toledo—City received bid building galleries, floors, railings, lavatories and installing piping at Bway Pumping Sta., from Spear Moylan & Lasley, Toledo, $24,600.

Mich., Saginaw—City received only bid installing 2 electrically driven pumping units, 3 transformers and accessories for west side water works station, from Allis Chalmers Mfg. Co., West Allis, Wis., $5800. Noted Jan. 2.

★Mich., Wyandotte—City let contract building filter plant with 6,000,000 gal. capacity, composed of six filter units, 21½ x 24 ft. of 1,000,000 gal. capacity each, 40 x 65 ft. and 37 x 73 ft. brick and steel filter and head houses, 2 coagulation basins, 64 x 94 ft. each, filtered water reservoir having capacity of 850,000 gal., usual equipment of hydraulic valves and controllers and 32 x 50 ft. brick addition to pumping station, using wood piles with alternate on reservoir, to Pitt Constr. Co., Fulton Bldg., Pittsburg, Pa., $195,485. Noted Jan. 9.

★N. D., Elgin—City let contract for pumping machinery and wells and building 50,000 gal. steel tank on 100 ft. steel tower to J. Kennedy, Fargo. About $30,000.

Sewers

PROPOSED WORK

Conn., New Canaan—Town Selectmen plan to replace present sewer system with a modern system.

Conn., New Haven—City plans to sell $100,000 bonds to build sewerage system in Westville Dist. F. L. Lord, city engr.

Ala., Sheffield—City plans to build storm sewers in various streets, 1½-2 mi. long. R. A. Chapman, city engr.

Miss., Passagoula—See "Streets and Roads."

O., East Cleveland (Cleveland P. O.)—City plans to build 1 mi. concrete sewer in Marloes Ave. About $13,000. M. Garnet, city engr.

Ind., Terre Haute—City plans to build sewers in various streets, involving 1 mi. 12-36 in. concrete, vitr. or segmental block, pipe, etc About $30,000 R. A. Koerner, city engr.

Mich., Pontiac—City having revised plans prepared by H. H. Barnett, engr., City Hall, installing Imhoff tanks, also extensions to treat sewage and prevent dumping it into Clinton River. About $250,000.

Ill., Staunton—Bd. Local Impvts. plans to build sanitary sewer in various streets. About $110,000.

Okla., Bristow—City defeated $20,000 bonds for extending sewerage system. Noted Dec. 26.

Cal., Santa Barbara—See "Streets and Roads."

Que., Verdun—Town receives bids in February, building sewers. About $57,000. J. Wishart, clk.

Ont., Barrie—Town plans to build sewerage system. A. W. Smith, clk.

BIDS DESIRED

Pa., Portvue—(McKeesport P. O.)—Until Feb. 5, by Borough Council, building sewerage system. C. Kelly, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★N. Y., Corona—M. E. Connolly, pres. Queens Boro., let contract building sewer in 43rd St., from line of Flushing Bay, to A. M. Hazell, 26 Cortlandt St., New York City. About $19,000.

★N. Y., Syracuse—City let contract building Sect. A of 17th Ward sewer on Lombard St. from Maple St. to point east, to J. Young, 509 Bastable Blk. About $36,985. Noted Sept. 26.

★O., Sandusky—City let contract building sewer and 12 in. water line in Sycamore Ave., also Lane and Wayne Sts., to M. J. Callaghan, Sandusky. About $20,022.

★Ariz., Globe—City let contract building sanitary sewers and sewage-disposal plant, cement pipe, to Clarke-Henry Constr. Co.,

Sewers (Continued)

38 South Sutter St., Stockton, Cal., about $226,400. Project consists of 2 Imhoff tanks, 2 sludge beds, 1 chlorinator house, involving 15,000 cu.yd. earth excav., 1000 cu.yd. rock excav., 500 ft. high fence, 93,787 ft. 6-18 in. pipe, 92,224 ft. trenching and back filling, 4-12 ft. cuts, 60 ft. 18 in. and 120 ft. 8 in. pipe, 120 cu.yd., concrete work, 70 cu.yd. masonry and 800 ft. ¾ in. pipe, etc. Noted Dec. 26.

Bridges

PROPOSED WORK

Mass., Boston—J. H. Brennan, representative of Boston, has filed bill in House of Representatives for appropriation of $1,000,000 to build bridge over Boston Harbor, between Boston and East Boston, as memorial to Massachusetts soldiers and sailors.

Connecticut—See "Streets and Roads."

N. C., Badin—Comrs. Stanly Co., (Albemarle), and Montgomery Co., (Troy), having plans prepared for bridge over Yadkin River near here.

Ga., Hamilton—See "Streets and Roads."

Tenn., Centerville—Comrs. Hickman Co. plan to build bridge over Beaverdam Creek. About $10,000.

O., Elyria—Lorain Co. having plans prepared for bridge in Rochester Twp. About $10,000. F. P. Crosse, co. engr.

Ill., Chicago—See "Buildings."

Ill., Sterling—City plans to build bridge on 1st Ave. About $150,000. V. N. Taggett, Morrison, engr.

Wis., Beloit—City receives bids in spring building rein.-con. bridge over Rock River, 500 ft. long, 64 ft. wide. B. Wood, clk.

Wis., Oshkosh—City having plans prepared by Scherzer Rolling Lift Bridge Co., 5454 Everett Ave., Chicago, building bridge over Fix River on Light St., 200 to 300 ft. long.

Kan., Lyndon—Osage Co. soon lets contract building 90 ft. rainbow arch bridge, 18 ft. wide.

Kan., Topeka—Comrs. Shawnee Co. receive bids about Feb. 1, building 4 bridges over Deer Stinson, Tecumseh and Whitson Creeks, on new Fort to Fort Highway between Ft. Riley and Ft. Leavenworth.

Neb., Lincoln—Comrs. Lancaster Co. receive bids in March building 90 ft. rein.-con. arch, 27 ft. wide, pile foundation, on North 14th St. About $18,000. Work involves 550 cu.yd. rein.-con., 11 tons steel and 1200 lin.ft. wooden piling. A. H. Edgren, co. engr.

Utah, Logan—Comrs. Cache Co. plan to build 125 ft. steel bridge with approaches over Blacksmith's Fork River at mouth of Blacksmith's Fork Canyon. About $10,000. T. H. Humpherys, co. engr.

Utah, Smithfield—Comrs. Cache Co. (Logan) plan to build 110 ft. steel bridge on concrete piers and 125 ft. steel bridge with approaches over Bear River here. About $10,000 each. T. H. Humpherys, co. engr.

Utah, Trenton—Comrs. Cache Co. (Logan) plan to build 100 ft. steel bridge on concrete piles with approaches and 130 ft. steel bridge over Bear River here. About $10,000 each. T. H. Humpherys, co. engr.

BIDS DESIRED

O., Lisbon—Until Jan. 31, by Comrs. Columbiana Co. building concrete bridge in Madison Twp. About $23,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Trenton—Pennsylvania R.R., Broad St. Sta., Phila., Pa., and City, let contract extending Passaic St. over Delaware and Raritan Canal by building 3 arch concrete bridge, 40 ft. long, 40 ft. wide, also 700 ft. concrete wall on both sides of bridge, to A. McMullen Co., Finance Bldg., Phila. About $50,000. Noted Dec. 12.

★Kan., Hiawatha—Brown Co. will build 22 bridges and culverts by day labor.

Structural Steel

PROPOSED WORK

N. J., Bayonne—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Pa., Phila.—See "Miscellaneous."

Reinforced Concrete

PROPOSED WORK

Md., Baltimore—See "Industrial Works."

Wis., Beloit—See "Bridges."

Neb., Lincoln—See "Bridges."

Cal., Oceanside—See "Excavation and Dredging."

P. R., San Juan—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★N. J., Trenton—See "Bridges."

★Minn., St. Paul—See "Industrial Works."

Streets and Roads

PROPOSED WORK

Maine—State Highway Comn., Augusta, plans to expend $2,669,000 to build state and state-aid highways and bridges, also $700,000 for maintenance of other highways. P. D. Sargent, ch. engr.

New Hampshire—State Highway Comn., Concord, has asked legislature for appropriation for road work, which together with Federal aid and increase in motor vehicle fees will amount to $1,500,000. About $900,000 will be expended for construction and $600,000 for maintenance. F. E. Everett, comr.

Mass., Boston—Comn. Waterway & Pub. Lands applied to State Legislature for appropriation to build new street near drydock at South Boston to be known as Dry Dock Ave., cost, $70,000; also to extend Maverick St., East Boston in connection with large improvement project, $65,000.

Mass., Dracut—(Lowell P. O.)—A. Colburn, senator, asked State Legislature to direct State Highway Comn., Boston, to improve State Highway known as Black North Route from Lowell to Lawrence, in Dracut and Methuen Twps. About $20,000.

Mass., Quincy—A. Whiton, mayor, asked State Legislature to appropriate $150,000 to complete Furnace Brook Parkway.

Connecticut—State Highway Comn., Hartford, plans to expend $2,500,000 to build highways and bridges and $1,500,000 for maintenance and replacements. Federal Government will appropriate toward cost. C. J. Bennett, comr.

N. J., Jersey City—City plans to open, widen and improve Merseles St. About $12,000. C. A. Van Keuren, city engr.

Pa., Coatesville—City receives bids in spring for paving 30,000 sq.yd. About $100,000. C. A. Niles, city engr. Noted Jan. 2.

Md., Baltimore—Park Bd. plans to build new public square in East Baltimore in addition to City Spring Sq. J. V. Kelly, Stockbridge, secy.

Md., Westminster—Comrs. Carroll Co. receive bids in February regrading and resurfacing 7 mi. Littlestown Rd., 16 ft. wide, concrete with 3 ft. dirt shoulders, total cost, $300,000; also rebuilding 4 mi. New Windsor Rd., 16 ft. wide, macadam, cost, $50,000. State Highway Comrs., Annapolis, will also regrade and resurface 4 mi. Littlestown Rd. H. S. Shirley, Towson, and E. Friese, 4203 Connecticut Ave., Baltimore, engrs.

N. C., Taylorsville—Comrs. Alexander Co. will ask State Legislature, Raleigh, for permission to issue $50,000 bonds to improve roads.

Ga., Hamilton—State and Federal Government had surveys made for improving 20 mi. of Columbus-Atlanta Highway, including bridges. About $100,000.

Ala., Bessemer—City plans to improve streets. About $12,000. S. R. Batson, city engr.

Ala., Sheffield—City plans to pave 100,000 sq.yd. of streets. R. A. Chapman, city engr.

Miss., Pascagoula—City rejected bids received Dec. 18, paving and building sanitary storm sewers in various streets. About $115,000. Work will be re-advertised later. Work involves 26,750 sq.yd. pavement, 62,500 cu.yd. excav., curbs, gutters, etc. X. A. Kramer, Magnolia, engr. Noted Dec. 12.

Tennessee—State Highway Comn., Nashville, plans to build following Federal and county aid projects; Hamilton Co., State Highway No. 20, concrete, cost $54,738; State Highway No. 7, macadam, $36,910; Franklin Co., State Highway No. 7, macadam, $121,474; Bedford and Moore Counties, State Highway No. 7, gravel, $99,475; Greene Co., State Highway No. 2, macadam, $38,322; Washington Co., State Highway No. 2, macadam, $287,710; Henry Co., State Highway No. 11, chert, $130,000; Hawkins Co., State Highway No. 1, macadam, $350,000; Grainger Co., State Highway No. 1, macadam, $65,000; Sullivan Co., State Highway No. 1, macadam, $25,000; Carroll Co., State Highway No. 3, chert, $120,000; also following state aid projects. Coffee Co., State Highway No. 7, chert, $38,533; Maury Co., State Highways Nos. 1 and 10, chert, $31,620; Marion Co., State Highway No. 7, $25,000; Unicoi Co., Flag Pond Rd., macadam, $25,000. A. M. Nelson, state highway engr.

O., East Cleveland (Cleveland P. O.)—City plans to pave Lee Rd. and 5th Ave., brick, wood block or asphalt. About $22,000. Mr. Garnet, city engr.

O., Euclid—City receives bids in autumn repaving and widening 2¼ mi. Euclid Ave. from Chardon Rd. to county line, from 60 to 100 ft. About $300,000. W. A. Stinchcomb, city engr.

O., Martins Ferry—City receives bids in spring paving Seabright Lane from 7th to 8th St., 8th St. from Seabright Lane to Park St., 9th St. from Carlisle to Park Sts., Park St. from Carlisle to 9th Sts., Colerain Pike from 10th St. to city limits, alley from hospital to Blackford Alley, alley between 5th and 6th Sts. from Hanover to Walker Sts., total length, 1500 ft., 30 ft. wide. About $10,000. C. Lash, Martins Ferry, engr.

Ind., Terre Haute—Vigo Co. plans to pave 4 mi. Maple Ave. and North 25th St., brick block on 4 in. concrete base. R. E. Gibbons, co. engr.

Ind., Terre Haute—Comrs. Vigo Co. plan to grade 1¼ mi. Lafayette Ave. Rd. 20 ft. wide, brick wearing surface and grout filler on 4 in. concrete base. R. E. Gibbons, co. engr.

Ind., Terre Haute—Bd. Pub. Wks. plans to pave and curb 4 mi. sidewalks, concrete foundation. About $250,000. R. A. Koerner, city engr.

Mich., Detroit—Bd. Pub. Wks. having estimates made and plans prepared for paving and curbing 1 mi. Mt. Elliott St. from Conant Ave. to Lynch St., 30 ft. wide, asphaltic concrete. C. W. Hubbell, city engr.

Mich., Ferndale—(Royal Oak P. O.)—Village plans to lay 1 mi. concrete pavement 14 ft. wide. About $20,000. J. Graves, R. F. D., No. 3, Highland Park, village clk.

Mich., Highland Park—(Detroit P. O.)—City having estimates made paving and curbing Tyler St. from Lincoln to Hermann Sts., asphalt or concrete. About $24,000. L. C. Whitsit, city engr.

Ill., Edwardsville—City soon lets contract for paving in Brown St. Paving Dist. C. A. Sheppard, city engr. Noted Apr. 11.

Wisconsin—State Highway Comn. Madison, plans to drain and grade 8 mi. Hurley-Ashland Rd., Ashland Co., cost $39,000; 4 mi. Barron-Turtle Lake Rd., Barron Co., $24,000; grade, drain and gravel surface 8½ mi. Ashland-Superior Rd., Bayfield Co., $43,000; grade, drain and surface, with clay and gravel 9 mi. Frederic-Webster Rd., Burnett and Polk Counties, $45,000. S. P. Hall, Spooner, engr.

Wis., Waukesha—Waukesha Co. plans to grade, drain and surface roads with crushed gravel or stone. About $150,000 available.

Ia., Davenport—City plans to grade 15 streets and avenues, cost, $37,750; also pave 80 streets and avenues, 12 mi. long, 60 ft. wide. R. E. Sowistowsky, city engr. Noted Nov. 21.

Streets and Roads (Continued)

Ia., Davenport—City plans to extend Kirkwood Blvd. from present terminus at Bridge Ave. to Jersey Ridge Rd. R. E. Sowistowsky, city engr.

Minn., Tracy—City receives bids in March paving 25 blocks, 36 and 44 ft. wide. About $75,000. J. W. Shaffer, New York Life Bldg., Minneapolis, engr.

Kan., Junction City—Comrs. Geary Co. receive bids about Mar. 1, building 12 mi. concrete road, 18 ft. wide, and 0.9 mi. brick highway. About $152,702. B. Boyle, co. engr. Noted Dec. 19.

Neb., Lincoln—City plans to pave 25th St. between Washington and Garfield Sts. A. Dobson, city engr.

Neb., Omaha—City plans to pave about 15 mi. streets. J. A. Bruce, city engr.

Neb., Omaha—City soon lets contract paving in Street Impvt. Dists. No. 1772 and 1773 asphalt stone, vitr. brick, vitr. brick block, art stone, macadam, creosoted wood block, asphaltic concrete and 3 in. wire-cut brick block. J. A. Bruce, city engr.

Wyoming—State Highway Comn., Cheyenne, plans to build roads throughout state. If program submitted to Legislature is adopted funds available for state highway construction and maintenance in 1919 will be $450,000, Federal Government will appropriate $260,000 and counties $550,000. Z. E. Sevison, state highway engr.

Wyo., Thermopolis—Town plans to lay 20,000 sq.yds. of pavement. J. B. Chessington, town engr.

Mo., Kennett—Dunklin Co. will expend $150,000 bonds to build concrete roads in Cotton Hill Twp. C. M. Edwards, Malden, atty.

Texas—State Highway Comn., Austin, plans to build Exall Highway through Hunt Co. About $120,000.

Tex., Jasper—Comrs. Jasper Co. soon lets contract building 12.4 mi. hard surfaced road with drainage structures between Buna and Kirbyville Twps. C. C. Brown, co. judge.

Tex., Texarkana—City plans to pave 65 blocks with brick, concrete and asphalt.

Okla., Oklahoma—City receives bids about Feb. 1, paving Park Pl. from Blackwelder to Kentucky Sts. and McKinley Ave. from Linwood to 10th Sts. B. M. Hart, city engr.

Ore., Marshfield—City having surveys made for paving Bway. E. K. Burton, city engr.

California—State Highway Comn., Sacramento, received no bids grading and paving 15 mi. Tecate Divide Highway, San Diego Co. Noted Jan. 9.

Cal., San Diego—A. H. Wright, city clk., receives bids in February, grading and paving concrete highway on 5 in. concrete base between San Diego proper and La Jolla, 2½ mi. long, 20 ft. pavement, with 5 ft. beams on either side. G. Cromwell, city engr.

Cal., Santa Barbara—City soon lets contract grading and paving Quarantina St. between Victoria and Sola Sts., 5 in. concrete pavement, also concrete gutters, concrete and stone curbs and 6 in. vitr. pipe sewer connections. A. B. Cook, city engr.

BIDS DESIRED

W. Va., Fayetteville—Until Feb. 10, by Fayette Co., paving 32 mi. Midland Trail Rd. on James River and Kanawha Turnpike, involving 150,000 cu.yd. unclassified material, 118,000 sq.yd. paving and 4000 yd. concrete and stone masonry. J. K. McGrath, co. engr.

Ala., Moulton—Until Feb. 11, by Comrs. Lawrence Co., grading, draining and surfacing 7.38 mi. Decatur and Sheffield Rd., chert or gravel. Work involves 26,331 cu. yd. earth excav., 13,300 cu.yd. surfacing, 278 cu.yd. concrete and 525 lin.ft. vitr. pipe.

Louisiana—Until Jan. 27, by State Highway Comn., New Orleans, building 2.4 mi. Columbia-Rayville Rd., Caldwell Parish, cost, $10,624; 5 mi. road extension in East Baton Rouge Parish; 8.59 mi. road between New Iberia and Jeanerette Twps., Iberia Parish; 5.42 mi. Alexandria-Melville Rd., Avoyelles Parish, $50,458. Federal Government will appropriate toward cost. D. Buie, state highway engr. Noted Sept. 26.

Ohio—Until Jan. 31, by State Highway Comn., Columbus, building roads as follows:

Ashtabula Co., Sects. "N," "O" and "P," Cleveland-Buffalo Rd., 11.92 mi., monolithic brick, cost, $421,419.

Sect. "C," Youngstown-Conneaut Rd., 5 mi., monolithic brick or concrete, $121,062.

Ashland Co., Sect. "G," Sacannah-Vermillion Rd., 4.08 mi., monolithic brick or plain concrete, $105,712.

Columbiana Co., Sect. "E," Cleveland-East Liverpool Rd., $22,537.

Sect. "Q," Cleveland-East Liverpool Rd., .98 mi. brick, $36,990.

Guernsey Co., Sect. "S," Steubenville-Cambridge Rd., 1.49 mi., bituminous macadam, $24,101.

Sect. "T," Steubenville-Cambridge Rd., 2.04 mi., grading and bridges, $21,939.

Sect. "A," McConnelsville-Spencer Rd., 1.36 mi., water-bound macadam, $22,353.

Highland Co., Sect. "I," Milford-Hillsboro Rd., 2.79 mi., concrete, gravel side drive or water-bound macadam, $49,259.

Sect. "K," Milford-Hillsboro Rd., 4.63 mi., bituminous macadam, water-bound macadam or concrete with gravel side drives, $87,250.

Sect. "C-2," Hillsboro-Chillicothe Rd., .14 mi., water-bound macadam, bituminous macadam or concrete with gravel side drives, $16,032.

Knox Co., Sect. "L," Columbus-Wooster Rd., 1.99 mi., rein.-con. or semi-monolithic brick, $68,023.

Miami Co., Sect. "A," Milton-Carlisle Rd., .85 mi., rein.-con., $20,610.

Sect. "B-1," Milton-Carlisle Rd., .25 mi. rein.-con., $6.272.

Okla., Miami—Until Jan. 20, by City, for paving various streets with bitulithic. About $800,000. Hughes Eng. Co., 304 Bank of Commerce Bldg., Tulsa, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Secaucus—Town received only bid Dec. 24, grading and improving County Ave., from Clinton Contg. Co., 306 Charles St., West Hoboken. Bid was 275 per cent of engineer's estimate. Noted Dec. 19.

★Virginia—State Highway Comn., Richmond, let contract building 4.08 mi. gravel road between Cabin Point and Burrowsville, Surry and Prince George Counties, to J. J. Pattershill, Virgilina. About $34,000. Noted Dec. 26.

★W. Va., Williamson—Comrs. Mingo Co. let contract building 5½ mi. road between here and Burch Twp., to C. S. Waugh, Wytheville, Va. About $77,200. Work involves excav. without classification, including all clearing and grubbing, removal of structures, obstruction, etc., formation of embankments, subgrade and shoulders, refilling around concrete and masonry structures, disposal of surplus material and incidental work, at $0.74 per cu.yd., overhaul after 1500 ft. free haul, $0.02 per 100 ft., Class A concrete in place, per plan complete, $12.00 per cu.yd., Class B concrete, $10.00 per cu.yd., Class C concrete, $8.00 per cu.yd., cement rubble masonry, $6.00 per cu.yd., dry rubble masonry, $4.50 per cu.yd., 12 in. vitr. pipe in place, $1.75 per lin.ft., 15 in. vitr. pipe, $2.00 per lin.ft. and 18 in. vitr. pipe, $2.25 per lin.ft.

★S. C., Charleston—Sanitary & Drainage Comn., Charleston Co., let contract building 3.7 mi. road 20 ft. wide, 8 in. center and 6 in. sides, to Simons & Mayrant, Broad St., $3.13 per sq.yd. About $135,000. Work involves 35,000-58,000 sq.yd. concrete. Noted Jan. 9.

★Ga., Macon—City let contract for paving roads during 1919, to T. J. Lowe, Macon. About $0.15½ per sq.ft.

★Ala., Anniston—Calhoun Co. let contract repairing and improving 5 mi. road, to Nixon Transfer & Coal Co. About $20,000.

★O., South Euclid—City let contract laying bluestone sidewalks on Belvoir Blvd. from Mayfield Rd. to Cedar Rd., to Euclid Stone & Brick Co., 607 Electric Bldg., $18,590.

★Ind., Terre Haute—Comrs. Vigo Co. let contract grading 1.1 mi. Ft. Harrison Rd., 20 ft. wide, brick wearing surface and grout filler, on 4 in. concrete base, to Lane Bros., Rockville. About $37,500.

★Minn., Waseca—Comrs. Waseca Co. let contract grading 6 mi. road, to J. Brown, Madison Lake.

$15,000,000 per week

In the first week of April, 1914—which was in the Spring just prior to the European War—contracts let in the United States aggregated

$14,000,000

One would expect that the figure for 1918 would be comparatively small. Yet, in spite of World War, high prices and the embargo on all except Government work, contracts let in the first week of last April amounted to

$15,000,000

Of this sum, only 4½ millions, or 30 per cent., were for Federal Government work, leaving $10,500,000 for private, municipal and state projects.

When contracts are being let at the rate of 14 or 15 million dollars worth a week, right in the actual construction season, very few contractors should have cause to grumble.

We believe that the coming Spring will be an unusually prosperous season for contractors. And we expect to prove it by figures.

Will your contract be among them?

Be prepared.

Streets and Roads (Continued)

Arkansas—State Highway Comn., Little Rock, let contract building 18 mi. gravel road in Howard Co. and 340 lin.ft. steel bridges, concrete culverts, etc., to Healy Constr. Co., Grady, $146,560.

★**Tex., Palestine**—Comrs. Anderson Co. let contract building Montalba and Corsicana Highways, to D. La Roe, $20,000 and $40,000 respectively.

★**Cal., Riverside**—Bd. Supervs. let contract building Indio Coachella Rd., involving 1033 cu.yd. Class "A" concrete paving, 7.4 cu.yd. Class "A" concrete (ford), 543 cu.yd. excav. and 4145 lin.ft. shaping roadbed to, Johnson Shea Co., Riverside, $11,900. Noted Dec. 26.

★**Cal., San Pedro**—Bd. Pub. Wks., Los Angeles, let contract grading, bitulithic paving, cement curbs, gutters and walks, also building storm drains and sewers in 2nd St. Impvt. Dist., to Fairchild, Gilmore Wilton Co., Pacific Electric Bldg., about $394,000

Railways

PROPOSED WORK

Massachusetts—Comn. Waterways & Pub. Lands applied to State Legislature, Boston, for appropriation of $85,000 to build railroad and connections together with $130,000 for tracks and roadways, in East Boston.

Massachusetts—Comn. Waterways & Pub. Lands applied to State Legislature, Boston, for appropriation of $400,000 to purchase Union Freight R. R. operating on Atlantic Ave., Boston, between North and South Sta. and to extend terminal facilities.

New York—Transatlantic Shipbuilding Corp., 95 Liberty St., New York City, had plans prepared building wood and steel marine railway in Tottenville, S. I. About $100,000. J. M. Carver, 29 Bway., New York City, engr.

Excavation and Dredging

PROPOSED WORK

N. Y., New York—Drainage—G. C. Burlingame, 150 Nassau St., soon receives bids draining, grading and developing 100,000 acres former rice field, in South Carolina; advertised in this issue.

Miss., Pascagoula — Excavation — See "Streets and Roads."

Ill., Belleville—Channel—Comrs. North Richland Creek D. D. reconsidering plans to straighten and deepen North Richland Creek Channel. L. C. Miller, Belleville, comr.

Ore., Bandon—Excavation and Dredging —Congressional Rivers and Harbors Com. recommended that U. S. Congress appropriate $64,000 to deepen channel here between Breuer's dock and deep water, 200 ft. wide, 13 ft. at low tide. Total cost $128,000.

Ore., Turner — Irrigation — Willamette Valley Irrigated Lands Co. and farmers of valley plan to build system to irrigate 15,000 acres of land. A. Cupper, Salem, state highway engr.

Cal., El Centro—Canal—Dirs. Imperial Irrigation Dist. will hold election Jan. 21 to ratify contract with U. S. Recl. Serv. by which district secures right to take water from Colorado River at Languna Dam and construct an all American Canal to cost $26,732,602, not including cost power development. Will also vote on proposition of requesting Secy. of Interior and U. S. Congress to include district in unified Colorado River project to guarantee storage of water in upper Colorado River, control of flood on lower Colorado River, etc. Bd. Engrs. who reported feasibility of canal consisted of C. E. Grunsky appointed by district, E. Mead of University of California and W. W. Schlecht, of U. S. Recl. Serv.

Cal., Oceanside—Irrigation—W. F. McClure, state engr., Sacramento, completed surveys and submitted report to Water Com. for San Luis Rey irrigation project to embrace 43,000 acres between Oceanside and Esconidido by diversion of water from San Luis Rey River at Werner dam. Project involves construction 33 mi. of concrete conduits and pipe lines to cost $1,106,752; multiple arch concrete dam, 120 ft. high and 550 ft. long, $214,715; concrete distributing system containing some steel, $310,546

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Albany—Barge Canal Work—W. W. Wotherspoon, supt. pub. wks., received bids Jan. 7, excavating canal channel in Genesee River, near Elmwood Ave. bridge, Contr. 191, from Empire Eng. Co., 6 Church St., New York City, $176,170; C. W. Denison, Rochester, $188,300; Amer. Pipe & Constr. Co., 112 North Broad St., Phila., Pa., $192,900. Work involves 76,000 cu.yd. excav. and 7500 cu.yd. rock spoil protection; completing canal from east guard lock to Genesee River, and work in Genesee Valley Park, Contr. No. 192, from Brown & Lowe Co., Foster Ave., Schenectady, $428,860; MacArthur Bros. Co., 120 Bway., New York City, $439,370; Mohawk Dredge & Dock Co., Inc., Herkimer, $441,236. Work involves 86,000 cu.yd. excav., 65,000 ft. b. m. sheeting and bracing 78,300 cu.yd. forming embankment, 19,500 cu.yd. loam surfacing, driving 1100 sq.ft. steel sheet piling, furnishing and driving 4100 sq.ft. steel sheet piling, 6500 cu.yd. 2nd class concrete, 1680 cu.yd. 1st class rein.-con., 102 cu.yd. 2nd class rein.-con., 10,750 cu.yd. wash wall, 260 sq.yd. grouted cobblestone paving, 385 cu.yd. 2nd class rip rap, 140 lin.ft. wrought iron pipe railing, furnishing and placing 5200 lb. metal reinforcement, placing 48,000 lbs. metal reinforcements; placing 1 arch ribs in foot bridges, 6980 sq.ft. Portland cement sidewalks, 11,360 sq.yd. gravel walks, relaying 210 sq.yd. sidewalks, etc. Noted Dec. 12.

★**La., Lake Charles** — Dredging — Bd. Comrs. Sulphur D. D. No. 3 let contract for dredging, to Lake Arthur Dredging Co., Sect. 1, 121,000 cu.yd., at $0.19½ per cu.yd., Sect. 2, 179,000 cu.yd. at $0.16, Sect. 3, 299,000 cu.yd. at $0.18. Noted Dec. 26.

★**Ariz. Globe**—Excavation—See "Sewers."

★**N. S., Halifax**—Dredging—City let contract dredging and building retaining wall to Standard Constr. Co., Halifax. About $16,826.

★**Ont., Welland**—Canal—Dept. Rys. & Canals let contracts completing Welland Ship Canal as follows: Sect. 1 to Dominion Dredging Co., Ltd., 17½ Elgin St., Ottawa; Sect. 2, Baldry, Yerbaugh & Hutchinson, Ltd., 14 Queen St., St. Catharines; Sect. 3, Doheny, Quinlan & Robertson, Montreal, Que.; Sect. 5, Canadian Dredging Co., Ltd., King St., Midland. Cost plus basis.

Industrial Works

INDUSTRIAL WORK

Mass., Campello (Brockton P. O.)—A. E. Keith Co. receives bids about Mar. 10, building 64 x 71 ft. power plant, 40 ft. high. About $56,000. Jenks & Ballon, 735 Grosvenor Bldg., Providence, R. I., engrs.

Mass., Worcester—E. T. Chapin, archt., 340 Main St., preparing plans for 1 story, 160 x 212 ft. brick and rein.-con. garage, rein.-con. flooring and concrete foundation, on Mechanic St. About $60,000. Owner's name withheld.

Conn., Bridgeport—McCabe & Blagge, archts., 952 Main St., soon receives bids building brick and concrete grain elevator building on Water St. for Susman-Feuer-Brownstein Co., 23 Bank St.

Conn., Hartford—Swift & Co., 60 North Market St., Boston, Mass., receives bids about Apr. 1, building 2 story, 78 x 100 ft. brick and concrete storage building, rein.-con. flooring and concrete foundation, on Church St. here. About $90,000. A. E. Bump, 60 North Market St., Boston, Mass., engr. Noted July 25.

N. Y., Brooklyn—A. Gobel, 34 Rock St., rejected bids building 1 story, 69 x 100 ft., brick and steel garage, rein.-con. floors, concrete foundation. About $27,000. L. Allmenderger, 20 Palmetto St., archt. Work will be readvertised in about 3 months.

N. Y., Brooklyn—W. Goldstein, 1668 47th St., had preliminary plans prepared by M. A. Cantor, archt., 373 Fulton St., for 1 story, 100 x 100 ft., steel and brick garage, concrete foundation, 6th Ave. and 62nd St. About $25,000.

N. Y., Freeport—Test Tite Piston Co., 47 West 34th St., New York City, had plans prepared by C. Kern, archt., Freeport, for 1 story, 50 x 100 ft. steel and brick factory addition rein.-con. flooring, concrete foundation, on Merrick Rd. About $25,000.

N. J., Newark—Lion Furniture Co., 157 Ferry St., had plans prepared by F. Grad, archt., Springfield Ave., for 3 story, 30 x 100 ft., brick warehouse and store. About $25,000.

Pa., Athens—Ingersoll-Rand Mfg. Co., 11 Bway., New York City, soon receives bids building 1 story, 112 x 240 ft. brick and steel machine shop here. About $55,000. D. A. Keefe, 711 South Main St., engr.

Md., Baltimore—Hess Steel Corp., Biddle St., receives bids in February for several 1 story, steel and rein.-con. additions to plant. About $150,000.

Fla., Apalachicola—City having plans prepared by J. M. Carver, engr., 29 Bway., New York City, for shipyard to include bulkheads, loading docks, etc. About $300,000.

Tenn., Nashville—Naive—Spillers Co., 134 Second Ave., S., plans to rebuild plant recently destroyed by fire. Loss, $50,000.

Tenn., Newport—Unaka Tanning Co. plans to rebuild plant recently destroyed by fire. Loss between $300,000 and $500,000.

O., Catawba—Catawba Candy Co. plans to build addition to plant. About $150,000.

O., Cleveland—S. H. Weis, archt., 1030 Schofield Bldg., receives bids in spring building 2 story, 40 x 135 ft. rein.-con., brick and steel factory at 1729 East 21st St., for Bissinger Magneto Co., 1613 Schofield Bldg. About $40,000. Noted Oct. 10.

Ill., Chicago—Bankers Supply Co., 2251 South Park Ave., having plans prepared building 1 and 2 story, 100 x 360 ft. brick and rein.-con. printing plant, rein.-con. flooring and concrete foundation on State St. near 59th St. About $110,000. E. C. and R. M. Shankland, 209 South La Salle St., engrs.

Ill., Chicago—Goldsmith Bros. Smelting & Refining Co., 29 East Madison St., plans to build plant additions on 125 x 150 ft. site on 59th and Throop Sts. A. Woltersdorf, 138 North La Salle St., archt.

Ill., Chicago—W. F. Hall Printing Co., 466 West Superior St., had plans prepared by Graver & Dinkelberg, archts., 80 East Jackson St., building 7 story, 130 x 325 ft. brick, concrete and timber addition to printing plant, concrete foundation, on Superior and Kingsbury Sts. About $800,000. Noted Nov. 28.

Ill., Chicago — Illuminating Electrical Ventilating Co., 154 Whiting St., plans to build 4 story, 60 x 300 ft. brick and rein.-con. factory, rein.-con. flooring and concrete foundation, on Elston Ave. and Snow St. About $100,000. Lebenbaum, Marx & Vigeant, 175 West Jackson St., archts.

Ill., Chicago—International Leather & Belting Co., 3239 South Western Ave., plans to build 1 and 2 story brick and concrete factory buildings, concrete foundation, on Western Ave. at Drainage Canal. About $100,000. Purcell & Elmslie, 122 South Michigan Ave., archts.

Ill., Greenville—J. M. Cummings receives bids about Feb. 15, building garage. About $25,000. M. B. Kane, Bohme Bldg., Edwardsville, archt.

Ill., Joliet—Joliet Forge Co. receives bids about Feb. 15 building 1 story, 60 x 320 ft. brick and steel factory on Irving St. About $140,000. J. D. Sharpe, pres. C. W. Webster, Cutting Bldg., archt.

Ill., Joliet—F. J. Walsh, Bank Bldg., soon lets contract building 12 story garage. R. G. Hoen, 1st Natl. Bank Bldg., archt.

Wis., Milwaukee—R. E. Oberst, archt., 353 Natl. Ave., soon receives bids building 1 story, 60 x 127 ft. brick, rein.-con. and steel service station, concrete foundation, at 596 Jefferson St., for Storage Battery Serv. Co., 137 Oneida St. About $25,000.

Wis., Sheboygan—Phoenix Chair Co., South Water St., receives bids in spring building 4 story, 65 x 165 ft. brick and timber factory and warehouse on Virginia Ave. and South 12th St. Juul & Smith, 801 North 8th St., archts. Noted Nov. 7.

Wis., West Allis—Milwaukee Pottery Co., 70th Ave. and Hicks St., Milwaukee, plans to build 1 story, 90 x 120 ft. brick and timber addition to factory here, concrete foundation. H. Schulte, secy.

Mo., Columbia—See "Buildings."

Mo., Fulton—Bd. Mgrs. State Hospital will ask State Legislature, Jefferson City, for appropriation to build power house to cost $40,000 and equipment, $27,000.

Industrial Works (Continued)

Mo., St. Louis—City plans election to vote on $22,000,000 bonds to build series of grain elevators with total capacity of 1,500,000 bushels. J. A. Hooke, dir. pub. utilities.

Mo., Sikeston—City plans election in April to vote on bond issue to build light plant.

Okla., Inola—Liberty Oil & Carbon Co. plans to build refinery. About $250,000.

Ariz., Humboldt—See "Water-Works."

Wash., Yardley—Ohio Match Co., Wadsworth, O., having plans prepared by Eng. Dept. of Company, building 60 x 120 ft. brick factory here. About $75,000. F. A. Shore, Lindelle Blk., Spokane, will supervise construction.

Ore., Eugene—A. W. Miller, Napavine, Wash., and E. B. Kingman, Columbus, Mont., formed company with $800,000 capital stock to build and operate sawmill to have daily capacity 100,000 ft. lumber.

Cal., Fresno—Lisenby Mfg. Co., Kern and Angus Sts., plans to build large plant. C. Lisenby, pres.

Cal., San Diego—Musher & Co., 140 Liberty St., New York City, purchased uncompleted plant of Nat'l. Sea Food Product Co., foot of Juniper St., and plans to build 175-ft. wing and use same as fish cannery and olive oil packing plant. Cost including equipment $150,000. J. G. Buerkle, 2920 San Diego St., local representative. Noted Dec. 19.

Cal., Tulare—Carpenter Cheese Co., Salida, soon lets contract building 60 x 200 ft. brick or hollow tile factory here. About $100,000. Noted Oct. 10.

N. F., St. John's—Herald Printing Co. plans to rebuild plant recently damaged by fire. Loss, $50,000.

Que., Montreal—Bramson Auto Serv., 455 Phillips Pl., soon lets contract for building and equipping. About $50,000. C. Dufort, 195 St. Catherine St., E., archt.

Que., Montreal—Pyrene Mfg. Co. of Canada, Ltd., 3 St. Nicholas St., soon receives bids building factory. About $25,000. Noted Jan. 2.

Ont., Ft. William—Parrish & Heimbecker plan to build grain elevator. About $200,000.

Man., Portage la Prairie—Woodward & Co. plan to rebuild plant destroyed by fire. Loss, $400,000.

Alta., North Edmonton—Swift Canadian Co. plans to build addition to plant. About $500,000.

B. C., New Westminster—New Westminster Co-operative Assn. plans to build cold-storage plant. About $70,000.

B. C., Vancouver—Fraser Valley Milk Producers' Assn., Ltd., 510 Hastings St., W., plans to build milk-producing station. About $200,000. E. G. Sherwood, secy.

B. C., Victoria—Hutchinson Bros. & Co., 409 Bay St., plans to build foundry. About $50,000. D. C. Hutchinson, mgr.

P. R., San Juan—Aboy Vidal Co. had plans prepared by J. M. Carver, engr., 29 Bway., New York City, for three 3 story, 100 x 150 ft., rein.-con. warehouses, rein.-con. flooring, concrete foundation, also for wood and concrete docks. About $3,000,000.

BIDS DESIRED

N. Y., Brooklyn—Until Jan. 28, by Spencer Realty Co., Bway. and Havermeyer St., building 1 story, 50 x 200 ft., steel garage on Bedford and Myrtle Aves. About $65,000. Shampan & Shampan, 772 Bway., archts.

N. Y., Thiell—Until Mar. 4, by F. A. Vanderlip, 7 Wall St., pres. bd. mgrs., Letchworth Village, building additional power house, installing equipment and underground piping system. About $300,000. Plans include new boilers, piping, feed water heaters, filters, meters, feed pump steam turbines, valves, etc. L. F. Pilcher, Albany, state archt.

Ia., Sioux City—Until Apr. 1, by M. King, pres., 634 Davison Bldg., building concrete terminal elevator for Western Terminal Elevator Co. About $450,000. Noted Jan. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★R. I., Providence—Marine Eng. & Drydock Co., 170 Westminster St., will build 1-story, 60 x 305 ft. brick and timber workshop and office, rein.-con. flooring and concrete foundation on Allens Ave. work will be done by day labor. About $85,000.

★R. I., Providence—Swiss Cleaning Co., Elmwood Ave., let contract building 1 story, 40 x 60 ft. brick and timber addition, rein.-con. flooring and concrete foundation and extensive alteration work in old building, to Williams & Merchant, Inc., 86 Weybosset St. About $25,000.

★N. Y., Long Island City—L. Gold, 44 Court St., will build 2-story, 100 x 150 ft., steel and brick factory, concrete foundation, on Nott Ave. About $65,000. Work will be done by day labor.

★N. Y., Rochester—Lockner Cigar Co., 28 Ave. D, let contract building 2-story, 40 x 100 ft., brick and mill construction factory on St. Paul St., to G. Kirchner & Co., Clifford Ave. About $30,000, percentage basis.

★N. Y., Thiells—See "Buildings."

★N. J., Linden—MacGovern & Co., 114 Liberty St., New York City, let contract building 1-story, 50 x 150 ft., steel and brick factory, rein.-con. flooring, concrete foundation, to H. Wilhelm & Sons, 803 East Jersey St., Elizabeth. About $25,000. Noted Nov. 7.

★N. J., Newark—Essex Fdry. Co., Murray St., let contract building garage and office building, to Eustice Bros., 40 Clinton St. About $40,000.

★O., Cleveland—Torbenson Axle Co., 1115 East 152nd St., let contract building 2-story, 100 x 140 ft. brick, rein.-con. and steel addition to factory, rein.-con. flooring and concrete foundation, to S. W. Emerson Co., 1900 Euclid Ave. About $75,000.

★Ill., Chicago—Conlon Electric Washer Co., 312 North May St., let contract building brick and rein.-con. washing machine factory, rein.-con. flooring and concrete foundation, covering 75,000 sq.ft. floor space on 52nd Ave. and West 19th St., to F. D. Chase, Inc., 122 South Michigan Ave. About $250,000.

★Ill., Chicago—Independent Snuff Co., 1800 North Winchester Ave., let masonry contract for 3-story, 50 x 100 ft. brick and timber factory, brick foundation, on North Winchester Ave. and Bloomingdale Rd., to W. Polzin, 2700 West 22nd Pl. Carpentry will be done by day labor. About $35,000.

★Wis., Ft. Atkinson—Better Sox Knitting Co. let contract building brick addition to plant, to C. J. Griffin, Wigdale Blk. About $40,000.

★Minn., St. Paul—Griggs, Cooper & Co., 3rd St. and Bway., let contract building 4-story, 120 x 240 ft., rein.-con. factory, on Fairview and University Aves., to Toltz Eng. Co., 1419 Pioneer Bldg. About $300,000. Noted Oct. 17.

Buildings

PROPOSED WORK

Mass., Boston — Dormitory — Massachusetts Agricultural College has asked State Legislature to appropriate $150,000 to build dormitory at college.

Mass., Cambridge—Hospital—A. Quinn, mayor, asked State Legislature for authority to borrow $150,000 to build addition to city hospital.

Mass., Foxboro—Hospital—State Comn. Mental Diseases, State House, Boston, soon receives bids building 2 story, 60 x 130 ft. brick and timber ward building, concrete foundation. About $105,000. Former bids rejected. Address M. Kline, 36 State House, Boston. Noted Dec. 19.

Mass., Haverhill—W. D. Stearns, pres. Y. M. C. A., 75 Main St., receives bids in spring for constructing building. About $150,000.

Mass., Lowell—Auditorium—City applied to State Legislature for authority to build public auditorium as memorial to soldiers and sailors. About $1,000,000. P. D. Thompson, mayor.

Mass., Medford—School—A. York, city solicitor, asked State Legislature to appropriate $250,000 to build school.

Conn., Ansonia—Dormitory—F. A. Cooper, archt., 1024 Main St., Bridgeport, soon receives bids building 2 story, 50 x 80 ft. brick, steel and rein.-con., rein.-con. flooring and concrete foundation, on Central St., for Day Nursery Assn., Central St. About $50,000.

Conn., Fairfield — School — St. Thomas congregation, Boston Post Rd., plans to build 2 story, 62 x 96 ft. brick, concrete and steel, rein.-con. flooring and concrete foundation. About $65,000. W. J. Blake, pastor. W. Schmidt, 1188 Main St., Bridgeport, archt.

Conn., Hartford — Office — Connecticut Genl. Life Insurance Co., 64 Pearl St. had plans prepared by J. G. Rogers, archt., 40 East 22nd St., New York City, for ten 5 and 6 story, steel and brick offices, rein.-con. flooring, concrete foundation. Noted Jan. 9.

Conn., Manchester—Hotel—T. C. Hardie, 1088 Broad St., Hartford, plans to build a 50 room brick and rein.-con., rein.-con. flooring and concrete foundation on Main and North School Sts., here. About $75,000.

Conn., Milford—Fire House—Town Fire Bd. plans to build 2 story, brick and rein.-con., concrete foundation, on Bway.

Conn., New Haven—High School—Bd. Educ. purchase site on Whaley Ave. and Fountain St., Westville Dist. and plans to build high school. About $150,000.

Conn., New London—Theatre—H. R. Brewster, archt., 116 Nassau St., New York City, receives bids about Feb. 15, building brick and concrete, rein.-con. flooring and concrete foundation on Bank St., for C. H. Dugy and W. F. Murphy, 143 Bank St. About $125,000.

N. Y., Brooklyn—Nurses' Home—Dept. Pub. Charities having plans prepared by F. J. Helmle, archt., 190 Montague St., for 4-story, 50 x 100 ft., steel and brick, concrete foundation at Kings Co. Hospital, Clarkson St. and Alabama Ave. About $75,000.

N. Y., Brooklyn—School—Coney Island Talmud Torah, Inc., 2861 West 32nd St., Coney Island, having plans prepared by B. W. Dorfman, archt., 26 Court St., for 3-story, 56 x 100 ft., steel and brick, concrete foundation, on 31st St. between Mermaid and Neptune Aves. About $50,000. M. Friedman, pres.

N. Y., Long Island City—Schools—Bd. Educ., 500 Park Ave., New York City, having plans prepared by C. B. J. Snyder, archt., Municipal Bldg., New York City, for 3-story, 105 x 108 ft., steel and brick, on Colonial Ave. between Livingston and Meteor Sts. About $200,000.

N. Y., New York—Hospital—Beth Israel Hospital, 70 Jefferson St., having plans prepared by L. Abramson, archt., 220 5th Ave., for 16-story, 175 x 200 ft., steel and brick, concrete foundation, 16th and 17th Sts. and Livingston Pl. About $1,000,000.

N. Y., New York—Hospital—Bronx Hospital, Fulton Ave. and 169th St., had plans prepared building additions and altering four 4 story brick and steel buildings. About $50,000. L. Abramson, 220 5th Ave., archt.

N. Y., New York—Office—Estate of R. S. Clark, 19 Liberty St., J. M. Knox, owner, having plans prepared by A. C. Jackson, archt., 25 Madison Ave., for 4-story, 25 x 100 ft, brick and steel, concrete foundation, at 89 Maiden Lane. About $50,000. Natl. Surety Co., 115 Bway., lessee.

N. Y., New York—Office and Loft—Berth Levi & Co., 42 Bway., purchased site at 35-37 Frankfort St., and plans to build 50 x 100 ft., steel and brick, concrete foundation.

N. Y., Poughkeepsie—Hospital—State Hospital plans to build 1-story, 35 x 350 ft., frame hospital, concrete foundation, for tubercular patients. About $95,000.

N. Y., Syracuse—Hospital—Onondaga Hospital Assn., c/o H. D. Phoenix, archt., Union Bldg., had plans prepared for 4-story brick, concrete flooring, at 415 West Onondaga St. About $100,000.

N. Y., Utica—Laboratory—State Hospital Comn., Albany, plans to build 2-story, 44 x 60 ft., brick, at State Hospital here. About $50,000.

N. J., Newark—Store—See "Industrial Works."

N. J., Trenton—Assembly Hall—State plans to build on site adjoining state house. About $250,000. F. H. Bent, Bound Brook, archt.

N. J., Trenton—Hotel—L. L. Woodward, pres. Chamber of Commerce, and associates, plan to build. About $1,000,000.

N. J., Trenton—School—City plans to build 3 story on Bellevue Ave. About $200,000. T. A. Klemann, 239 Bellevue Ave., archt.

N. J., Union Hill—School—Bd. Educ. had plans prepared by J. Lugosch, archt., 21 Bergenline Ave., for 3-story, 105 x 192 ft., brick and concrete, on Hudson Ave. between 1st and 2nd Sts. About $200,000. A. Reisenberg, pres.

Buildings (Continued)

Pa., Phila.—Bank—Market St. Title & Trust Co., 52nd and Market Sts., having plans prepared by W. L. Blithe, archt., 698 Chestnut St., for 2 story, 30 x 120 ft. brick and terra cotta addition. About $75,000. A. Wilson, pres. Noted July 25.

Pa., Phila.—Store—L. W. Hirsh Co., 923 Market St., had plans prepared by F. E. Hahn, archt., 1112 Chestnut St., remodeling 5 story, 46 x 200 ft. building adjoining present store into addition for its own use. About $250,000.

Md., Baltimore—Church—C. T. Bagby, 818 Fidelity Bldg., and associates, plan to rebuild 7th Baptist church, North Ave. and St. Paul St., recently destroyed by fire. About $85,000.

Md., Baltimore—Dance Hall, etc.—R. A. Lychon, c/o Baldwin Locomotive Wks., Broad and Spring Garden Sts., Phila., plans to build dance hall, skating rink, gymnasium and natatorium on North and Maryland Aves., here. Cost between $150,000 and $200,000.

Md., Texas—Almshouse—Comrs. Baltimore Co. (Towson) plan to build steel, concrete and brick almshouse to replace one recently destroyed by fire. About $100,000. W. F. Coughlan, Towson, pres.

Md., Westminster—Chapel and Dormitory—Western Maryland Theological Seminary plans to build 3 story, 48 x 105 ft., concrete and brick, concrete foundation. About $50,000. H. L. Elderdice, pres.

Va., Roanoke—Office—See "Miscellaneous."

N. C., Gastonia—Y. M. C. A. plans to construct building here. About $100,000.

N. C., Statesville—Hotel—J. S. Hammond having plans prepared by W. H. Peeps, archt., 222 Latta Ave., Charlotte, building here. Cost between $125,000 and $150,000.

S. C., Columbia—Temple—Negro Grand Lodge, Knights of Pythias, plans to build here. About $50,000. R. S. Wilkinson, Orangeburg, chn.

Ala., Bessemer—High School—City purchased site on North Side and plans to build high school. About $150,000.

O., Cleveland—Church—Christian Scientists of Lakewood, plan to build 2½-story, brick, rein.-con. and steel, on Arthur and Detroit Aves. About $75,000.

O., Cleveland—Club House—W. S. Ferguson Co., archts., 1900 Euclid Bldg., receive bids about Apr. 15, building 3-story, 80 x 130 ft. brick steel and rein.-con., rein.-con. flooring and concrete foundation, on 79th St. and Euclid Ave. for Woodmen of the World. About $200,000.

O., Cleveland — Exchange — Cleveland Telephone Co., West 3rd St. and Champlain Ave., plans to build brick, rein.-con. and steel.

O., Cleveland—Hospital—Bd. Pub. Welfare plans to build 4-story, brick, rein.-con. and steel addition to hospital, rein.-con. flooring, on Scranton Rd. and Valentine St. About $300,000. F. H. Betz, 604 City Hall, archt.

O., Dayton — Salesroom — Frank Hill Smith Co., Inc., East 3rd St., plans to build 4-story, 50 x 200 ft. rein.-con., concrete flooring and concrete foundation on East 3rd St. About $50,000.

O., Wellsville—Restaurant, etc.—Amer. Sheet & Tin Plate Co., 30 Church St., New York City, plans to build 80 x 120 ft. restaurant, locker, bath-rooms, etc., on Wells Ave., here. B. J. Ross, Wellsville, genl. supt.

Ind., Anderson—Bank and Office—Anderson Banking Co., 10th and Meridian Sts., plans to build 4 or 5 story, 72 x 144 ft. About $150,000.

Ind., South Bend—Social Center—Notre Dame University plans to build here for students. About $50,000.

Mich., Detroit — Auditorium — Council passed resolution instructing Corporation Council to start proceedings to condemn property on river front at Jefferson and Crane Aves. for civic auditorium.

Mich., Detroit—Church—St. Hyacinth congregation, McDougall and Frederick Aves., plans to build 1-story, 110 x 220 ft. brick, rock foundation. About $225,000. E. Brielmaier & Sons, 111 Mason St., Milwaukee, Wis., archts.

Mich., Detroit—Commerce—Bd. Commerce, Lafayette Blvd., plans to build 4-story, 100 x 120 ft. concrete, brick and steel addition on Lafayette Blvd. and Wayne St. J. J. Crowley, pres.

Mich., Grand Rapids—Grade School—Bd. Educ. having preliminary sketches made by H. H. Turner, archt., 24 Division St., for brick school. About $100,000. H. M. Morrill, City Hall, secy.

Mich., Grand Rapids—High School—Bd. Educ. having plans prepared by H. Turner, archt., 24 Division St., building Creston High School rein.-con., brick and steel. About $350,000. Noted Dec. 19.

Mich., Grand Rapids—School—Bd. Educ. having preliminary sketches prepared by H. H. Turner, archt., 24 Division St., for addition. About $100,000. H. M. Morrill, City Hall, secy.

Mich., Hancock—Church and Parish House—First Congregational Church, Houghton, had plans prepared by H. T. Liebert, archt., 632 1st Natl. Bank Bldg., Milwaukee, Wis., for 2-story, 40 x 100 ft., here. About $75,000. G. L. Christensen, Houghton, secy.

Ill., Chicago—Chapel—University of Chicago, 134 South La Salle St., had plans prepared by B. Goodhue, archt., Boston, Mass., building on University grounds. Cost between $1,500,000 and $2,000,000.

Ill., Chicago—Church—Faith Presbyterian congregation, 914 Pine Ave., Austin, had plans prepared by R. W. Ermeling, archt., 155 North Clark St., building 1 story, 65 x 90 ft. brick, brick foundation on Pine Ave. and Augusta St. About 50,000.

Ill., Chicago—Hospital—University of Chicago, 134 South La Salle St., plans to build laboratory and hospital near Cook Co. Hospital on west side, also hospital on south side, cost $400,000 each; divinity and administration buildings, $250,000 each.

Ill., Chicago—Station—R. H. Ashton, regional dir. of railroads, after conference with City Officials, announced that plans have been completed for resumption of work on new Union Station. Work which will be started in future includes building viaducts over railroad yards on Harrison, Polk and Taylor Sts., Canal St. from Polk to Taylor Sts. and from Harrison to Polk Sts.; depression of railroad tracks between 12th and Van Buren Sts., and their re-arrangement to provide foundation room for viaducts; elevation of Canal St. from 12th to Taylor Sts.; 1st unit of proposed Burlington R. R. terminal; portion 12th St. viaduct. Entire project involves expenditure of about $25,000,000 of which about 20% has already been put in preliminary work. About $5,000,000 will be expended during coming year.

Ill., Chicago—Theater—Postle & Fischer, archts., 140 South Dearborn St., soon receives bids for altering and improving 65 x 190 ft. building at 55-59 West Monroe St., into motion picture theater for H. C. Moir, Morrison Hotel.

Wis., Richland Center—Bank—First Natl. Bank plans to build brick and stone. About $50,000.

Ia., Cedar Rapids—Dormitory and Science Hall—Coe College, 1220-1st Ave., plans to build on 1st Ave. between 12th and 13th Sts. Cost between $500,000 and $600,000. J. A. Marquis, pres.

Ia., Dubuque—School—Bd. Educ. receives bids about June 1, building 3 story. About $465,000. A. Harris, supt. R. Royer, Flat Iron Bldg., Urbana, archt.

Ia., Mt. Pleasant—High School—Bd. Educ. had plans prepared by G. L. Lockhart, archt., 391 Endicott Bldg., St. Paul, Minn., remodeling Y. M. C. A. building into school. About $80,000. Noted Nov. 7.

Ia., Muscatine—Biological—City having plans prepared building new biological building to replace one destroyed by fire. About $60,000.

Ia., Newton—Bank—First Natl. Bank receives bids in spring building brick and stone. About $50,000. Proudfoot, Bird & Rawson, 610 Hubbell Bldg., Des Moines, archts.

Ia., Waterloo—Church—First Presbyterian congregation, 102 Independence Ave., having sketches prepared by C. P. Shockley, archt., 719 Black Bldg. About $75,000. J. R. Macartneu, pastor.

Minn., Le Sueur—Church—St. Ann's congregation having plans prepared by W. F. Keefe, archt., 1192 Portland Ave., St. Paul, building 1 story, 65 x 180 ft. About $100,000.

Minn., Minneapolis—Exchange—Northwestern Telephone Exch. Co., 5th St. and 3rd Ave., S., soon lets contract building 11 story, 132 x 147 ft., rein.-con. and brick plant on 3rd Ave. S., between 4th and 5th Sts. Hewitt & Brown, 716 4th Ave. S., archts.

Minn., Pine Island—High School—Bd. Educ. having plans prepared by Stebbins & Haxby, archts., 445 Auditorium Bldg., Minneapolis, for 2 story, 60 x 106 ft. rein.-con. and brick. L. L. Cornwell, clk.

Minn., Rochester—Hotel—Kahler Roberts Corp. having plans prepared by F. H. Ellerbe, archt., 692 Endicott Bldg., Minneapolis, for 8 story, 50 x 140 ft.

Minn., St. Paul—Pavilion—Minnesota Agricultural Society, State Fair Grounds, plans to build rein.-con. and brick live stock pavilion. About $300,000. T. H. Canfield, secy. and mgr.

Minn., Sherburn—Church—St. Luke's congregation having revised plans prepared by W. F. Keefe, archt., 1192 Portland Ave., St. Paul, building 1 story, 50 x 160 ft. About $50,000.

Kan., Anthony—High School—W. Mampe, archt., 529 Sheidley Bldg., Kansas City, Mo., rejected bids building 3-story, 71 x 128 ft. brick, stone or terra cotta, rein.-con. flooring, for Bd. Educ. Cost, $85,000. About $50,000 available, election soon to vote on $35,000 additional bonds to finance project. Noted Oct. 31.

Neb., Kearney—Hospital—City plans to build hospital. About $100,000.

Neb., Lincoln—School—School Dist., 15th and N Sts., receives bids in April building 2 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, on 33rd and Vine Sts. About $61,000. Fisk & Meginnis, Bankers Life Bldg., archts.

Neb., Lincoln—School—School Dist., 15th and N Sts., receives bids in fall building on 22nd and Lake Sts. About $75,000. Fisk & Meginnis, Bankers Life Bldg., archts.

Mo., Columbia—Gymnasium, etc.—State University applied to State Legislature, Jefferson City, for appropriation to construct gymnasium, woman's and home economics buildings and power house here.

Mo., St. Louis—Bank—Third Natl. Bank, Bway. and Olive St., receives bids about Feb. 1, building 2 story, 41 x 127 ft. rein.-con. and steel annex, rein.-con. flooring, concrete foundation. About $100,000. G. Brueggeman, 902 3rd Natl. Bank Bldg., archt.

Tex., Galveston—Bank—City Natl. Bank, 2223 D St., having plans prepared by Weir, Alfred & Co., archts., Chicago, building 50 x 120 ft. rein.-con. and brick on Market and 22nd Sts. About $100,000.

Tex., Wichita Falls—Hotel—Chamber of Commerce plans to build 250 room. About $600,000.

Okla., Garber—Hotel—L. Moran soon lets contract building 3 story, 75 x 116 ft., brick and stone. About $60,000. R. W. Shaw, Beck Bldg., Enid, archt.

N. M., Silver City—Bank and Hotel—Silver City Natl. Bank plans to build 4 story.

Ariz., Ajo—School—School Trustees Ajo School Dist. No. 15 soon let contract building 2-story, hollow tile, rein.-con. flooring. About $195,000. Lescher & Kibbey, Bank of Arizona Bldg., Phoenix, archts.

Ariz., Phoenix — Courthouse — Bd. Supervs. Maricopa Co. plan election to vote on $250,000 bonds to build court house.

Cal., Los Angeles—School—Bd. Educ., 731 Security Bldg., having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., for 2-story, brick, rein.-con. flooring, concrete foundation on East 7th St. About $90,000.

Cal., Ocean Park—Bath House—Thompson Co. plans to build on ocean front and Raymond Ave. About $50,000.

N. S., Halifax—Theatre—J. J. Allen, Richmond and Victoria Sts., Toronto, having plans prepared for brick and steel. About $150,000.

Buildings (Continued)

N. B., St. John—Schools—School Bd. plans to build 2 schools. About $175,000. R J. Leavitt, secy.

N. B., St. John—Theatre—Jule and J. J. Allen, Richmond and Victoria Sts., Toronto, had plans prepared building here. About $125,000.

Man., Brandon — Asylum — Dept. Pub. Wks., Winnipeg, Man., plans to build addition to asylum here. About $500,000.

Sask., Yorkton — Court House — Dept. Pub. Wks., Ottawa, Ont., plans to build here. About $100,000.

Alta., Vermilion—Dormitory—School of Agriculture plans to build. About $150,000. R. Blakey, Parliament Bldg., Edmonton, archt.

B. C., New Westminster—Y. W. C. A. Columbia St., plans to construct building. About $50,000. J. R. Gilley, mgr.

BIDS DESIRED

Mich., Detroit—School—Until Jan. 23, (change of date) by Bd. Educ., 50 Bway., building 2 story, 102 x 223 ft., rein.-con., brick and steel, rein.-con. floors, concrete foundation, on Emerson Ave. south of Jefferson Ave. About $275,000. Malcolmson & Higginbotham, Penobscot Bldg., archts. Noted Dec. 25.

Neb., Eagle—School—Until Jan. 30, by H. K. Frantz, dir. bd. educ. building 1 story, 120 x 120 ft. for Dist. No. 104. About $85,000. E. Davis, Security Mutual Life Bldg., Lincoln, archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

R. I., Providence—Office—See "Industrial Works."

★Conn., Bridgeport—Bank—City Natl. Bank, 103 Wall St., let contract for altering and building addition to 4 story, steel and marble bank, concrete foundation, on Main and Bank Sts., to T. J. Pardy Constr. Co., 15 Fairfield Ave., cost plus percentage basis. Noted June 27.

★Conn., Bridgeport — Bank — Newfield Bank & Trust Co., 1360 South Main St., Stratford, let contract building 2 story, 50 x 75 ft. brick, steel, marble and tile, concrete foundation, on Stratford Ave., to Casey & Hurley, 120 Pequonnock St. About $50,000. Noted Aug. 29.

★N. Y., Brooklyn—Theatre—H. Weingarten, 1901 Bway., will build 1-story, 120 x 171 ft., steel and brick, concrete foundation, on Fulton St. and Howard Ave. About $70,000. Work will be done by day labor. Noted Jan. 2.

★N. Y., Buffalo — Store — Oppenheim Collins, 35 West 34th St., New York City, let contract altering 6 story, steel and brick, on Main St. here, to C. A. Cowan, 30 East 42nd St., New York City. About $55,000.

★Pa., Phila.—Fire and Police Stations—City let general contract building 1 and 2 story, brick and stone fire and police stations, power house and stables, on 24th and Ritter Sts., to F. G. Stewart, 1619 Sansome St., $304,245; heating, C. E. Monday & Co., 1318 Olive St., $33,600; electrical work, Electro Constr. Co., Commercial Trust Bldg., $12,950. Noted Jan. 2.

★Pa., Pittsburgh — Store — Oppenheim Collins, 35 West 34th St., New York City, let contract altering 8 story, steel and brick, on Penn Ave., to C. A. Cowan, 30 East 42nd St., New York City. About $50,000.

★Ga., Lyons—Court House—Comrs. Toombs Co. let contract building court house, recently destroyed by fire, to F. H. Heffner, Atlanta. About $50,000. Noted Dec. 26.

★O., Cleveland—Church—St. Casimir congregation, 8223 Sowinski Ave., let contract building 2-story brick, steel and rein.-con., concrete flooring on East 82nd St. and Pulaski Ave., to C. A. Carson Co., 6408 Euclid Ave. About $250,000.

★Ohio, Cleveland—Hospital—Co-operative Hospital Assn., East 71st St. and Carnegie Ave., let contract building 6-story, 159 x 206 ft., rein.-con., brick and steel, rein.-con. flooring, to Western Reserve Constr. Co., c/o owners. About $1,500,000.

★O., Columbus—Loan and Office—Railroad Employees Building & Loan Assn. let contract building 2-story, 32 x 100 ft. brick and rein.-con., concrete foundation, on East Broad St., to E. H. Latham Co., 8 East Long St. About $80,000. Noted May 9.

★Mo., St. Louis—Business—A. F. Seested, care of Kansas City Star, Grand Ave., Kansas City, let contract building 1 story, 116 x 165 ft. brick and stone on 24th and McGee Sts., to G. E. Bowling & Sons, 907 Sharp Bldg., Kansas City. About $50,000.

★Calif., Los Angeles—Club—Auto Club of South California, 1344 Figuero St., let contract building 2 story brick addition, to C. J. Kuback Co., Merchants Natl. Bank Bldg. About $50,000.

★N. S., Halifax—Administration, etc.—Dept. Pub. Wks., Ottawa, Ont., let contract constructing administration and surgical buildings, neurological ward, nurses' home, officers' ward and 2 orthopaedic active treatment wards, to Rhodes, Currie Co., Ltd., Amherst, N. S. About $551,536.

★Ont., Ft. William—Office—Canadian Car & Fdry. Co. let contract, to E. G. Penniman, Graham & Horn Blk. About $50,000.

Federal Government Work

PROPOSED WORK

Mass., Boston—Piers—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build Piers 4, 4a, 5 and 6; Spec. 3755. About $400,000.

Mass., Boston—Repairing Wharf—Bureau Yards & Docks, Navy Dept., Wash., D C., plans; Spec. 3751. About $9500.

Conn., New Haven—Repairing Yale Boat House—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3761. About $4000.

Conn., Norwalk—Improving Channel—River & Harbor Comn., Wash., D. C., appropriated $88,000 to dredge and improve channel and harbor.

N. C., Fayetteville—Extending and Developing Artillery Camp—Constr. Div., War Dept., Wash., D. C., plans to extend and permanently develop artillery camp.

N. Y., New York—Piping and Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in power house; Spec. 3759.

N. Y., Rockaway—Completing Magazine Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3754. Bids will be received at local navy yard.

Pa., Ft. Mifflin—Water Pipe Line—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3764. About $70,000.

Md., Annapolis — Foundations — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build foundations for steamship and navigation building; Spec. 3760. About $75,000.

D. C., Wash.—Turbo Alternators—Bureau Yards & Docks, Navy Dept., Wash., plans to install; Spec. 3757. About $16,000.

Ga., Columbus—Rifle Corp. Camp, etc.—Constr. Div., War Dept., Wash., D. C., plans to establish rifle, machine gun training and tank corps camp; cost plus percentage basis will run into millions.

Fla., Key West—Improving Waterfront—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3762. About $1,670,000.

Fla., Pensocola—Concrete Road—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3758. About $10,450. Bids will be received at local navy yard.

Fla., Pensacola—Fence and Gates—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3756. About $7000.

Miss., Gulfport—Toilet and Laboratory—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3763. About $3500. Bids will be received at local navy yard.

Tenn., Memphis — Boilers — Mississippi River Comn., 1st and 2nd Dists., Custom House, rejected all bids received Oct. 24, for boilers for hydraulic grader No. 1820. Noted Oct. 10.

Tenn., Memphis — Turbines — Mississippi River Comn., 1st and 2nd Dist., Custom House, rejected all bids received Oct. 24, same being in excess of appropriation.

Ky., West Point—Extending and Developing Artillery Camp—Constr. Div., War Dept., Wash., D. C., plans to extend and permanently develop present artillery camp.

Ill., Great Lakes—Paint and Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3753. About $12,000.

Colo., Denver—Drainage—Denver Civic & Commercial Assn. asked Government to proceed with San Luis Valley drainage project. About $20,000,000 may be expended for project.

Ore., Klamath Falls—Road—H. M. Shipe of Bureau of Indian Affairs, Wash., D. C., and W. G. West, supt. Klamath Indian Reservation, Klamath, will ask U. S. Government to appropriate $25,000 to build main road running north and south through Klamath Indian Reservation.

BIDS DESIRED

Mass., Chelsea—Kitchen Equipment—Until Feb. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3730. About $6500; $10 deposit required for plans and spec. Noted Jan. 2.

R. I., Newport—Double Quarters for Officers—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3603. About $12,000. Noted Oct. 31.

N. Y., Buffalo—Metal and Glass—Until Feb. 10, by Lighthouse Supt., furnishing metal work for 3rd order helical bar lantern, including plate glass, advertised in this issue.

N. Y., Ft. Lafayette—Dredging—Until Feb. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3579. About $26,000; $10 deposit required for plans and spec. Former bids rejected. Noted Dec. 5.

Pa., Phila.—Water Towers, Pump and Tank House Equipment—Until Feb. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building and installing at Grays Ferry Rd.; Spec. 3682. About $17,000; $10 deposit required for plans and spec. Noted Nov. 28.

Md., Baltimore—Foundation and Rip Rap—Until Mar. 1, by Lighthouse Supt., building concrete foundation and placing rip rap at Tangier Sound Light Sta., Va.; advertised in this issue.

Md., Indianhead—Additional Buildings, etc.—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building additional buildings and extensions at Naval Proving Ground; Spec. 3745; $20 deposit required for plans and spec.

D. C., Anacostia—Heating Hangar—Until Jan. 27, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3748. About $12,000; $10 deposit required for plans and spec.

D. C., Wash.—Bridge—Until Feb. 11, by by Dist. Comrs., Dist. Bldg., building concrete encased steel plate girder bridge on South Dakota Ave. over tracks of Baltimore & Ohio R.R. L. Brownlow, comr.; advertised in this issue.

Va., Hampton Roads—Extending Pneumatic Tube System, etc.—Until Jan. 27, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Operating Base; Spec. 3658. About $30,000; $10 deposit required for plans and spec. Noted Jan. 2.

Va., Norfolk—Coal Storage and Reclaiming Building—Until Jan. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3714. About $20,000. Noted Dec. 12.

Wis., Superior—Dredging—Until Mar. 1, by F. A. Pope, engr. for Duluth-Superior Harbor, dredging for anchorage basin at Superior entry of Duluth-Superior Harbor. About $360,000 appropriated for project.

Tex., North Ft. Worth—Gas Holders—Removing System, etc.—Until Jan. 27, (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., for 5 gas holders and CO_2 removal system; Spec. 3594. About $120,000; $10 deposit required for plans and spec. Noted Jan. 9.

Federal Government Work (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Me., Ft. Fairfield—Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 13 (1) limestone (2) sandstone, from J. W. Burrowes, 112 Preble St., Portland, (1) $73,885; R. S. Woodbury, Boston, Mass., (1) $77,499, (2) $77,999; J. Munroe, 159 Washington St., N., North Attleboro, Mass., (1) $78,384, (2) $81,000. Noted Dec. 5.

★N. H., Portsmouth—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing 2 cranes in machine shop extension, to Cleveland Crane & Eng. Co., Wickliff, O., $31,325 (150 days). Noted Dec. 5.

★N. H., Portsmouth—Extension to Machine Shop—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building extension to machine shop No. 80, to Levering & Garrigue Co., 552 West 23rd St., New York City, $122,906 (130 days). Noted Dec. 12.

★Mass., Hingham—Railroad Track—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to C. M. Leach, P. O. Box, 2285, Boston, $76,186. Noted Dec. 19.

★Mass., Weymouth (Boston P. O.)—Dredging—U. S. Eng. Office, Boston, let contract dredging at Fore River, to Boston Dredging Co., 172 Condor St., Boston, $176,000.

★N. Y., Brooklyn—Kitchen Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in building E, Nurses' Quarters, to A. Peck & Co., 208 Randolph St., Chicago, $7724. Noted Dec. 12.

N. Y., Fire Island—Barracks—Local Navy Yard received bids building at U. S. Naval Radio Sta., from H. S. Roberts Co., 1123 Bway., $44,500 (60 days) (no fire protection included); J. K. Turton Corp., 101 Park Ave., $54,468 (60 days) (kitchen equipment and fire protection not included); Northeastern Constr. Co., 225-5th Ave., $57,703 (60 days). All contractors of New York City. Noted Jan. 2.

★N. Y., Ft. Lafayette—Lighting System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to United Electric Co., 101 Park Ave., New York City, $4250. Noted Jan. 2.

★N. Y., Iona Island—Quarters for Marine Officers—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Ammunition Depot, to Brooklyn Impvt. Corp., 1607 45th St., Brooklyn, $13,936 (85 days). Noted Dec. 19.

N. Y., New York—Altering Lobby—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 10, altering lobby in post office here, from B. Knopp, 431 West 41st St., $5094 (30 days); N. B. Smith, 417 East 34th St., $5780 (120 days); I. Langner, 700 Trinity Ave., $5878 (60 days). Noted Dec. 26.

★N. Y., New York—Dredging—U. S. Eng. Office, Whitehall Bldg., New York City, let contract dredging and removing rock in East River, to E. Bregmann, New York City, $280,170.

★N. Y., New York—Electric Traveling Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in machine and electric shop, to Bedford Fdry. & Machine Co., 1107 5th St., Bedford, Ind., $17,781. (180 days). Noted Dec. 12.

★N. Y., New York—Fire Alarm and Watchman's Signal System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to Hamilton Elevator Co., Inc., 357 3rd St., Brooklyn, $5375 (60 days). Noted Nov. 28.

★N. Y., New York—Flooring—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract for wood block flooring in building No. 4, to Fleming, O'Brien & McEntegart, 116 Broad St., New York City, $45,000 (45 days). Noted Dec. 5.

N. Y., Sayville—Transformer House and Oil Tank—Local Navy Yard received bids building here, (1) work, complete; (2) transformer house, complete; (3) concrete underground oil storage tank; (4) gate house, complete; (5) transformers from E. L. Phillips & Co., 50 Church St., New York City, (1) $34,648; (2) $14,647.50; (3) $2362.75; (4) $1023.75; (5) $16,614, (65 days).

Barney-Ahlers Constr. Corp., 110 West 40th St., New York City, (1) $32,450, (45 days); (2) $27,340, (5 days); (3) $3500, (30 days); (4) $1500, (15 days); (5) $4000; deduction if Government furnishes transformer, $4,000.

North Atlantic Eng. Corp., 150 Nassau St., New York City, (1) $31,777, (45 days); (2) $11,477, (45 days); (3) $2494, (35 days); (4) $500, (15 days); (5) $17,400, (45 days).

D. Hill, 1455 McCormick Ave., Ozone Park, N. Y., (1) $34,619 (65 days); (2) $13,950, (45 days); (3) $2250, (30 days); (4) $975, (15 days); (5) $17,444, (65 days).

Hennebique Constr. Co., 1170 Bway., New York City, (1) $26,905, (75 days); (2) $22,855, (75 days); (3) $2300, (28 days); (4) $1150, (14 days); (5) $4800, (75 days); $4000 additional if oil-switch panels are used.

Neiman & Luth, 33 West 42nd St., New York City, (1) $34,173, (45 days), for buildings, transformers, 30 days additional; (2) $26,395, (45 days); (3) $1990, (15 days); (4) $988, (10 days); (5) $4800.

P. Guthy, Inc., 926 Bway., New York City, (1) $27,433, (150 days); (2) $12,749, (45 days); (3) $2187, (12 days); (4) $997, (10 days); (5) $11,500, (150 days).

H. S. Roberts & Co., 1123 Bway., New York City, (1) $29,200, (75 days). Noted Dec. 12.

★N. Y., South Brooklyn—Locomotive House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to P. Guthy, Inc., 926 Bway., New York City, $23,374 (57 days). Noted Oct. 3.

N. Y., Waterloo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 8, (a) limestone (b) sandstone, from T. H. McHale, Cahill Bldg., Syracuse, (a) $78,652 (b) $78,652; Rangeley Constr. Co., 405 Lexington Ave., New York City, (a) $75,480; G. B. Dickison, Union Bldg., Syracuse, (a) $78,700 (b) $74,000; Dreher Constr. Co., Marquette Bldg., Chicago, (a) $62,300; Wills Egelhof Co., 101 Park Ave., New York City (a) $72,330. Noted Dec. 5.

★N. J., Cape May—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Air Sta., to Post & McCord, 101 Park Ave., New York City, $128,200 (135 days). Noted Jan. 9.

★N. J., Cape May—Hospitals—Constr. Div., War Dept., Wash., D. C., let contract building at Hospital No. 11, to Caldwell Wingate, New York City; cost plus percentage.

★N. J., Denmark—Roofing for Standpipe—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to C. Meads & Co., 38 Park Row, New York City, $2717 (60 days). Noted Dec. 12.

N. J., Vineland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 10, (1) limestone (2) sandstone, from T. H. Mitchell, 207 Lake St., Salisbury, Md., (1) $78,880 (2) $81,180; F. A. Havens Co., 845 North 19th St., Phila. (1) $78,881 (2) $79,781; Rangeley Constr. Co., 405 Lexington Ave., New York City (1) $77,547. Noted Dec. 5.

N. J., Woodbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 7, work complete, from T. H. Mitchell, 207 Lake St., $63,444; J. B. Best, Woodbury, $69,800; Rangeley Constr. Co., 405 Lexington Ave., New York City, $69,995. Noted Dec. 5.

★Pa., Phila.—Coal and Ash Handling Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to Wark Co., 1757 Filbert St., $9435 (60 days).

★Pa., Phila.—Kitchen and Mess Hall Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at League Island, to S. B. Sexton Stove Mfg. Co., 500 West Conway St., Baltimore, Md., $19,947 (60 days). Noted Jan. 2.

Pa., State College—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 9 (limestone) from Wills Egelhof, 101 Park Ave., New York City, $82,653, Wills Ludwick & Co., 34 South 17th St., Phila., $79,779; J. W. Cowper Co., Fidelity Bldg., Buffalo, N. Y., $110,490. Noted Dec. 5.

★Md., Annapolis — Storehouse — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Academy, to J. L. Marshall, McLachlen Bldg., Wash., D. C., $80,858 (120 days). Noted Dec. 5.

Government to Dispose of War Stocks

The stock of machinery and engineering materials held by the War Department, but not in actual possession of troops, is shown by a report of the Statistical Division to Brig. Gen. R. E. Wood, director of purchase and storage. This report covers stock at depots, camps and ports and in transit Dec. 1, 1918, and is as follows:

Article	Quantity	
Locomotives, standard-gage:		
Set up, complete	139	
Knocked down, complete	135	
Knocked down, incomplete	5	
Spare parts	100	tons
Locomotives, narrow-gage:		
60 C.M. steam	31	
60 C.M. 50 hp	1	
36-in. gage steam	1	
Cars, standard-gage:		
Box, complete	858	
High gondola, complete	200	
Low gondola, complete	500	
Flat artillery, complete	12	
Tank, complete	87	
Dump, complete	2	
Ballast, complete	152	
Refrigerator, complete	350	
Box, incomplete	100	
High gondola, incomplete	17	
Tank, incomplete	18	
Refrigerator	250	
Cars, narrow-gage:		
Box, complete	65	
Dump	196	
Artillery trucks, complete	100	
Track Material and Fastenings:		
Rails	42,855	tons
Spikes	3,539	tons
Bolts	1,875	tons
Angle and splice bars	1,908	tons
Turnouts and switches	4,374	tons
Miscellaneous track material	2,378	tons
Pipe and fittings	9,444	tons
Machinery:		
Hoisting engines	143	
Engines	233	
Locomotive cranes	58	
Steam shovels	33	
Boilers	276	
Concrete mixers	166	
Derricks	29	
Road rollers	68	
Saw mills	66	
Gantry cranes	3,601	tons
General machinery, miscellaneous	6,488	tons
Shapers	722	tons
Miscellaneous:		
Miscellaneous engineer supplies	1,771	tons
Miscellaneous paint, oils, turpentine and painter supplies	942	tons
Miscellaneous electrical material	772	tons
Miscellaneous roofing paper and felt	69,138	rolls
Miscellaneous wall board	638	tons
Miscellaneous copper wire	1,030	tons
Miscellaneous carbide	1,014	tons
Miscellaneous floating derrick	77	tons
Steel Products:		
Beams	1,166	tons
Sheets, corrugated	280,263	shts.
Barbed wire	13,664	tons
Plain wire	736	tons
Angle posts	238,897	
Screw posts	1,592	tons
Steel shelters	3,002	
Wire netting	378	tons
Steel tanks, water, gas	1,468	tons
Steel plates	245	tons
Steel rope, hydrants, etc	546	tons
Miscellaneous	6,999	tons
Wagon Transportation:		
Limber and caisson	210	
Dump	155	
Tool spring	179	
Chess	590	
Ponton	449	
Brown type	89	
Escort	45	
Autos, trucks, trailers, tractors	6	
Explosives	984	tons
Lumber	11,785,28[illegible]	feet

It is also announced that the machinery of the Surplus Stocks Division at Washington has been decentralized as far as possible and the country has been divided into 13 zones, to facilitate the work as far as possible.

Federal Government Work (Continued)

★Md., Baltimore—Hospital—U. S. Government let contract building additions to U. S. General Hospital No. 7, Evergreen Junior, Charles St. Ave., to J. H. Miller, Inc., Eutaw and Franklin Sts. About $500,000. Noted Jan. 9.

★Md., Indianhead—Annex to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to De Kimpe Constr. Co., Dispatch Bldg., Union Hill, N. J., $25,000 (150 days). Noted Jan. 2.

★Md., Indianhead—Freight Station—Bureau Yards & Docks, Navy Dept., Wash., D C., let contract to De Kimpe Constr. Co., Dispatch Bldg., Union Hill, N. J., $12,900 (100 days). Noted Dec. 19.

★D. C., Bellevue—Railroad—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Hyde & Baxter, 711 13th St., N. W., Wash., $23,875 (40 days). Noted Jan. 9.

★D. C., Wash.—Barracks—Constr. Div., War Dept., Wash., let contract building baracks for officers and quarters for men, to Weller Constr. Co., 816-14th St. About $60,000.

D. C., Wash.—Bridge—Dist. Comrs., Dist. Bldg., received bids building bridge on Concord Ave. between 3rd and 4th Sts., from Deveral Spencer Co., 514 Garrett Bldg., Baltimore, Md., $3.95 for excav., $3.75 for concrete masonry; Continental Contg. Co., 66 Knickerbocker Bldg., Baltimore, Md., $4.75 for excav., $27 for concrete masonry; E. G. Gummel, 36 P St., N. W., $19.75 for excav., $2.75 for concrete masonry. Noted Jan. 2.

★D. C., Wash.—Chimneys—Bureau Yards & Docks, Navy Dept., Wash., let contract for 2 radial block chimneys, to M. W. Kellogg Co., 90 West St., New York City, $37,400 (120 days).

★D. C., Wash.—Experimental Laboratory—Constr. Div., War Dept., Wash., let contract building brick and hollow tile, at Amer. University, to Weller Constr. Co., 816-14th St. About $500,000; cost plus percentage basis.

★D. C., Wash.—Grease—Dist. Comrs., Dist. Bldg., let contract purchasing grease removed from garbage during January, to C. E. Woodworth, Cincinnati, O. About $10,000.

★Va., Alexandria—Electric Traveling Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Manning, Maxwell & Moore, Inc., 119 West 40th St., New York City, $17,857 (75 days). Noted Dec. 19.

Va., Front Royal—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 10, (limestone) from O. Gerlach, Frostburg, Md., $44,700; R. K. Stewart & Son, Farmville, $47,500; Wills Egelhoff, 101 Park Ave., New York City, $58,185. Noted Dec. 5.

★Va., Norfolk—Kitchen and Diet Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to L. Barth & Son, 32 Cooper Sq., New York City, $18,248 (40 days). Noted Jan. 9.

Va., Petersburg—Altering Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 13, from J. L. Robinson Constr. Co., 66 Knickerbocker Bldg,, Baltimore, Md., $7373; R. J. Stewart & Son, Farmville, $8650; W. P. Thurston Co., Merchants Natl. Bank Bldg., Richmond, $8988. Noted Jan. 2.

Va., Yorktown—Administration Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 6, from Harrison Constr. Co., Inc., 308 Mechanics Bldg., Petersburg, (1) $420,000 (180 days), (2) deduct $700. Noted Jan. 2.

Ga. West Point—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 13 (work complete) (limestone) from A. Blair, 11 South Lawrence St., Montgomery, Ala., $52,900; G. Becking, Chattanooga, Tenn., $54,722; R. P. Farnsworth, Owensboro, Ky., $55,000. Noted Dec. 5.

★Fla., Key West—Photographic Laboratory—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to South Florida Contg. & Eng. Co., Eaton and Elizabeth Sts., $6650 (60 days). Noted Dec. 19.

★Fla., Miami—Septic Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Air Sta., to St. John Constr. Co., Townley Bldg., $12,466 (100 days). Noted Jan. 2.

SHAFT—NEW YORK, N. Y.

Bids were received by Public Service Commission, 49 Lafayette St., for completing shaft No. 2 of Route No. 26, Queensboro Rapid Transit R.R. on East 42nd St., from (A) Rice & Ganey, 2786 Bainbridge Ave.; (B) James O'Leary, 929 Peace St., Pelham Manor; (C) Shailer & McCormick, 111 East 42st St.; (D) Dennis E. Conners, 15 West 91st St., $106,650; (E) Powers-Kennedy Contg. Corp., 149 Bway., $109,990; (F) Rapid Constr. Co., Times Bldg., $116,658; (G) Rodgers & Hagerty, Inc., 103 East 125th St., $119,310; (H) P. McGovern & Co., 50 East 42nd St., $120,765; (I) Snare & Triest Co., 8 West 40th St., $123,465; (J) Fraser, Brace & Co., 1328 Bway., 126,240; (K) Henry E. Fox Constr. Co., 81 East 125th St., $130,790; (L) W. J. Dempsey, 103 Park Ave., $137,425; (M) T. J. Waters Co., 271 West 125th St., $150,515; (N) John E. Riches, 23 Willow Pl., Brooklyn, $112,495 (informal). The unit bids of the lowest 3 bidders were as follows:

	A	B	C
600 cu.yd. earth excavation above M.H.W	$8.00	$11.00	$12.00
1,450 cu.yd. rock excavation	16.00	17.50	18.00
1,800 cu.yd. concrete masonry	18.00	16.00	20.00
50 cu.yd. protective concrete masonry	18.00	20.00	20.00
5 cu.yd. brick masonry	20.00	40.00	25.00
50 bbl. Portland cement grout	5.00	6.00	8.00
10 cu.yd. broken stone	3.50	5.00	5.00
300 sq.yd. waterproofing—3-ply	2.50	4.00	4.00
200 sq.yd. waterproofing—6-ply	5.00	6.00	5.00
Sewer connection—Drawing B-406 (lump sum)	1,200.00	1,000.00	1,400.00
25 tons riveted steel	150.00	170.00	150.00
82 tons steel beams and shapes	150.00	140.00	150.00
7 tons steel rods and bars	100.00	150.00	150.00
2 tons miscellaneous iron castings	150.00	200.00	150.00
800 sq.ft. steel gratings for ventilation	3.00	3.00	4.00
Support of Queensboro subway (lump sum)	3,000.00	2,000.00	500.00
Superstructure Drawing C-501 (lump sum)	12,000.00	12,000.00	10,000.00
Extended totals	$99,085	$99,305	$105,575

La., Alexandria—Post Office and Court House—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., received bids Jan. 7, extending and remodeling post office and court house, work complete, from W. O'Neil & Son, Faribault, Minn., $84,000; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $87,200; A. Blair, 11 South Lawrence St., Montgomery, Ala., $88,071. Noted Dec. 5.

★Tenn., Memphis—Levee Work—Mississippi River Comn., Custom House, Memphis, let contract for 175,000 cu.yd. levee embankment in Reelfoot Levee Dist., to J. A Burt, Gunniston, Miss., $71,750. Noted Dec. 5.

O., Fremont—Post Office—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., received bids Jan. 7, (1) limestone, (2) sandstone, from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., (1) $127,800; Pratt, Unkefer & Co., Minerva, (1) $136,000, (2) $137,000; Ohio Bldg. & Constr. Co., Burnet St. near McMillan St., Mt. Auburn, Cincinnati, (1) $155,900, (2) $157,000. Noted Dec. 5.

★Ill., Chicago—Repairing and Recovering Dome—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract repairing and recovering dome on post office here, to W. J. Scown Bldg. Co., 36 West Randolph St., $16,800 (90 days). Noted Jan. 12.

★Mich., Detroit — Boilers — **Lighthouse** Supt. let contract furnishing 2 Scotch type marine boilers for lighthouse tender "Amaranth," to Lake Erie Boiler Wks., 254 Perry St., Buffalo, N. Y. About $28,000. Noted Dec. 12.

Wyo., Cody—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids from J. H. Wiese, City Natl. Bank Bldg., Omaha, Neb., $58,830; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $65,594; W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., $63,300. Noted Dec. 5.

Ark., Prescott—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 8, from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $52,600. Noted Dec. 5.

Tex., Orange—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 9, (limestone) from W. O'Neil & Son, Faribault, Minn., $57,313; W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., $58,650; A. Motschman, Chicago, $61,800; R. P. Farnsworth, Owensboro, Ky., $62,000. Noted Dec. 5.

Colo., Durango—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 9, (1) limestone (2) sandstone, from C. E. Goodhand, Chadron, Neb., (1) $123,214; J. H. Wiese, City Natl. Bank Bldg., Omaha, Neb., (1) $131,616; W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., (1) $151,000 (2) $152,700; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., (1) $165,300. Noted Dec. 5.

N. M., San Juan—Lavatory Annexes—C. Sells, comr. Indian affairs, Wash., D. C., received bids Jan. 2, building at school here, from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $13,400 (120 days); W MacDonald Constr. Co., Odd Fellows Bldg., St. Louis, Mo., $12,785 (150 days). Noted Dec. 12 under "Wash., D. C."

Ariz., Globe—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 13, (limestone) from C. E. Goodhand, Chadron, Neb., $105,000; A. Blair, 11 South Lawrence St., Montgomery, Ala., $122,366; R. E. Campbell, Salt Lake City Utah, $127,844. Noted Dec. 5.

Cal., Mare Island (Vallejo P. O.)—Repairing Radio Station—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids for repairing and altering radio station (a) painting powers, (b) replacing present power house by building combination operating and power house, (c) building cottage, (f) installing concrete cesspool and sewerage ejector (work complete) from C J. W. Koenig, 520 Church St., $13,753; A. H. Vogt, 185 Stevenson St., $14,773; Lange & Bergstrom, 207 Sharon Bldg., $16,654; all contractors of San Francisco. Noted Jan. 9.

Cal., San Diego—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 13 building 9 additional buildings at Naval Air Sta., including tile and stucco barracks, students officer's quarters, dispensary, type A and B married officers houses, storehouse and garage, all rein.-con. foundation and flooring, wood roof framing, etc. Noted Dec. 19.

(1) net price and time for work, complete, in accordance with drawings and specifications.

(2) amount to be deducted from (1), if all work specified under "heating" is omitted

(3) unit price per cubic yard for excavating in addition to or deduction from that shown on drawing.

(4) unit price per cubic yard for concrete foundations in place, including all shoring, pumping and forms, in addition to or deduction from that shown on drawings.

(5) unit price per cubic yard for backfill in place, puddled, rammed and compacted, in addition to or deduction from that shown on the drawings from.

H. F. Friedsted Co. 327 So. La Salle St., Chicago, (1) $523,923 (230 days), (2) $9000, (3) $2.50, (4) $19.00, (5) $2.50.

Paschen Bros. Co., 111 West Washington St., (1) $579,000 (230 days), (2) $12,500, (3) $0.75, (4) $12, (5) $0.60.

C. E. Carson Co., 155 North Clark St., Chicago, (1) $658,800 (229 days), (2) $10,000, (3) add $2.00, deduct $1.50, (4) add $15, deduct $12, (5) $0.80.

Cal., South San Francisco—Repairing Radio Station—Mare Island Navy Yard received bids Jan. 8, (a) clipping and painting towers and repairing 1 broken tower, (b) minor repairs to operating house, (c) building 2 double cottages for operators, (d) building 4 room cottage, (e) providing

Federal Government Work (Continued)

suitable sewer system and connecting same to city sewer, (work complete), from C. J. W Koenig, 520 Church St., $15,992 (60 days); A H. Vogt, 185 Stevenson St., $16,984; F. Warden, 354 Sussex St., $18,250; all contractors of San Francisco. Noted Jan. 9.

★Panama, Coco Sola—Gas Holder—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to R. E. Saxton, care of Naval Air Sta., here, $4350 (70 days).

★P. R., San Juan—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to F. B. Rexach, P. O. Box 319, $5900 (30 days).

Miscellaneous

PROPOSED WORK

Developing Property—Braintree, Mass.—Comn. Water-Works & Pub. Lands asked State Legislature to appropriate $200,000 to develop property at and near Haywards Creek, Quincy and Braintree.

Dry Docks and Bulkheads—Tottenville, S. I., N. Y.—Transatlantic Shipbuilding Corp., 95 Liberty St., New York City, had plans prepared by J. M. Carver, engr., 29 Bway., New York City, for large wooden dry docks and bulkheads. About $200,000.

Boilers, Piping, etc.—Utica, N. Y.—State Hospital Comn., Albany, soon receives bids installing in Utica State Hospital. About $75,000.

Steel Tanks—Bayonne, N. J.—Standard Oil Co. of Bayonne, Constable Hook, plans to build 8 steel tanks 115 ft. long, on concrete foundation.

Incinerator—Newark, N. J.—City plans to issue $250,000 bonds to build incinerator. M. R. Sherrard, city engr.

Arch and Grandstand—Pittsburgh, Pa.—City plans to build on Grant St. between 5th Ave. and Diamond St. About $25,000. N. S. Sprague, city engr.

Oil Storage Tanks, etc.—Roanoke, Va.—Texas Co., San Jacinto St. and Rusk Ave., Houston, Tex., plans to install oil storage tank system and build office building. About $60,000.

Bulkheads, etc.—Apalachicola, Fla.—See "Industrial Works."

Dry Dock—Pensacola, Fla.—U. S. Government authorized Bruce Dry Dock Co., South Coyle St., to build 5000 ton dry dock here. The Government will finance the construction, the sum to be repaid by company in installments.

Pier and Freight House—Cleveland, O.—D. & C. Navigation Co., foot East 9th St., will submit plan to City Council for pier and freight house, on lake front. About $350,000. Bids will be received in spring if city approves plans.

Lighting System—Springfield, Ill.—City voted $60,000 bonds for lighting system in business and downtown sections. W. Seeley, city engr.

Machinery—Oshkosh, Wis.—Winnebago Co. plans to spend $6000 for machinery, mostly graders.

Park—Jefferson City, Mo.—Missouri State Game & Fish Dept. plans to improve park. About $30,000. T. Birmingham, comr.

Park, etc.—St. Louis, Mo.—Park Comrs. acquired 140 acre site and plan to build park and vacation resort to include cottages, canoe houses, bathing beaches and athletic fields. N. Cunliff, City Hall, comr.

River Terminal—Helena, Ark.—Terminal Com. plans to build river terminal. About $175,000. S. Straub, chn.

Tunnel — Yakima, Wash. — Naches-Selah Irrigation Dist. voted $75,000 bond to build 3400 ft. tunnel.

Tanks—Crane, Ore.—Standard Oil Co. plans to build three 12 x 30 ft. steel tanks on concrete foundation, 30 x 60 ft. warehouse and 10 x 20 ft. pump house and office, all to be fenced with pickets 12 ft. high.

Transmission Line—Riverside, Cal.—Southern Sierras Power Co. plans to expend $750,000 during 1919 to extend transmission lines, etc. A. B. West, mgr.

Mole—San Diego, Cal.—City having plans prepared building mole or filled pier near present city pier. Government will furnish material for filling mole when harbor is dredged. About $300,000. G. Cromwell, city engr.

Docks—San Juan, P. R.—See "Industrial Works."

BIDS DESIRED

Oils and Greases—New York, N. Y.—Until Jan. 21, by T. J. Brennan, fire comr., furnishing and delivering lubricating oils and greases.

Piping, etc.—Thiells, N. Y.—See "Industrial Works."

BARGE CANAL WORK—ALBANY, N. Y.

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, Jan. 6th. for completing canal from east guard lock to Genesee River and work in Genesee Valley Park, Erie, Oswego and Champlain Canals, Contr. No. 192, from (A) Brown & Lowe Co., Schnectady; (B) MacArthur Bros Co., 120 Bway., New York City; (C) Mohawk Dock & Dredge Co., Herkimer; (D) James F. Leary Constr. Co., Inc., 311 Cutler Bldg., Rochester, $452,864; (E) Patrick McGovern, 50 East 42nd St., New York City, $478,991. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
86,000 cu.yd. excavation	$1.70	$1.65	$1.76
65 M.ft.b.m. sheeting and bracing	90.00	120.00	100.00
3,600 cu.yd. forming embankment, 1st class	.20	20	.25
74,700 cu.yd. forming embankment, 2nd class	.15	.16½	.16½
19,500 cu.yd. loam surfacing	.85	.30	.30
200 cu.yd. lining	2.50	2.75	2.75
1,100 sq.ft. driving steel sheet-piling	.50	1.25	1.00
4,100 sq.ft. furnishing and driving steel sheet-piling	2.45	2.75	2.50
6,500 cu.yd. 2nd class concrete	12.00	13.25	13.00
1,680 cu.yd. 1st class reinforced concrete	25.00	24.00	24.00
102 cu.yd. 2nd class reinforced concrete	15.00	19.00	20.00
10,750 cu.yd. wash wall	3.60	3.50	3.50
260 cu.yd. cobblestone paving, grouted	1.50	1.60	1.60
385 cu.yd. 2nd class riprap	4.00	4.00	4.00
20 lin.ft. 6-in. vitrified pipe, laid	.40	.40	.40
40 lin.ft. 8-in. vitrified pipe, laid	.70	.70	.70
140 lin.ft. wrought-iron pipe-railing	4.00	4.00	4.00
5,200 lb. furnishing and placing metal reinforcement	.08	.09	.09
48,000 lb. placing metal reinforcement	.03	.03	.03
Placing arch ribs in foot-bridges (lump sum)	2,000.00	3,000.00	2,000.00
650 lb. metal duct	20	.20	.20
6,980 sq.ft. Portland cement sidewalks	.30	.30	.35
11,360 sq.yd. gravel walks	.30	.40	.40
210 sq.yd. relaying sidewalks	.50	.75	.75
2,700 sq.yd. asphalt pavement	4.75	4.75	4.75
17,530 sq.yd. macadam pavement	1.60	1.80	1.80
5,950 sq.yd. macadam resurfacing	.60	1.50	1.50
7,700 lin.ft. temporary wooden fence	.10	.10	.10
1,870 lin.ft. chain fence	.50	.75	.75
925 lin.ft. concrete balustrade on foot-bridges	8.00	5.00	5.00
950 sq.yd. waterproofing, one-ply	.40	.50	.50
630 sq.yd. waterproofing, two-ply	.60	.70	.70
60 acres seeding	40.00	75.00	75.00
Installing operating machinery in relief culvert (lump sum)	120.00	120.00	120.00
16 setting snubbing posts	2.50	2.75	2.75
Coffer-dams, pumps, bailing and draining (lump sum)	8,000.00	11,500.00	8,500.00
Extended totals	$428,860	$439,371	$441,237

SEWER—LONG ISLAND CITY, N. Y.

Bids were received by M. E. Connolly, president of Queens Boro., constructing combined sewer and appurtenances in Genessee St. from Liberty Ave. to North Conduit Ave. and storm water sewer in Genessee St. from North Conduit to South Conduit Aves., 4th Ward, from (A) James Ferry & Son, 97 Louisiana Ave., Brooklyn; (B) Aldene Contg. Co., 2622 Bath Ave., New York City; (C) John H. Duncan, Inc.; (D) J. L. Siegretto & Co., $463,000; (E) U. S. Drainage & Irrigation Co., 17 Battery Pl., New York City, $477,000; (F) Rodgers & Hagerty, Inc., 103 East 125th St., New York City, $485,000. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
2,129 lin.ft., 8 ft., 3 in. x 8 ft., 6 in. double barrel reinforced concrete sewer	$107.00	$150.00	$140.00
295 lin.ft. 8 x 8 ft. double barrel reinforced concrete siphon sewer	150.00	175.00	165.00
640 lin.ft. 24 in. c.-i. pipe siphon	7.50	300.00	9.00
11 manholes (complete)	100.00	100.00	125.00
1 cleaning shaft (complete)	200.00	500.00	200.00
4 basin manholes (complete)	150.00	100.00	200.00
7 inlets (complete)	150.00	30.00	150.00
50 lin.ft. 12-in. vitrified pipe basin connections	1.75	1.00	3.00
100 lin.ft. 10-in. vitrified pipe basin connections	1.75	1.00	3.00
144 6-in. spurs (24 in. long) on concrete sewer	1.00	.50	2.00
1 grit chamber (complete)	15,000.00	4,000.00	16,000.00
1 up-stream drop chamber (complete)	7,000.00	4,000.00	4,478.00
1 down-stream drop chamber (complete)	6,000.00	4,000.00	4,733.00
1 transition section (complete)	11,000.00	4,000.00	10,689.00
Underpinning northerly 48-in. c.-i. pipe watermain (complete) as shown on plan	1,300.00	700.00	1,244.00
Underpinning masonry aqueduct and southerly 48-in. c.-i. pipe water main (complete), as shown on plan	17,000.00	1,000.00	20,000.00
Underpinning 72-in. steel pipe water main (complete), as shown on plan	2,000.00	1,000.00	1,636.00
18,400 cu. yd. earth fill for sewer embankment, as shown on plan	.40	.01	.50
1,200 cu.yd. cinder fill for sewer embankment, as shown on plan	1.00	.01	1.00
19.5 lin.ft. breast wall (8 ft., 8 in. high)	15.00	.01	12.00
180 lin.ft. galvanized pipe rail	5.00	.01	5.00
3,200 lin.ft. wooden fence	.50	.01	.70
8,000 lin.ft. piling	.30	.01	.70
40,000 ft., B.M. timber for foundation	75.00	90.00	60.00
83,000 ft., B.M. timber for sheeting and bracing	35.00	.01	60.00
1,500 lb. structural steel (bolts, nuts and washers)	.10	.05	.10
25 cu.yd. Class "A" concrete (exclusive of concrete shown on plan)	15.00	10.00	15.00
2,000 lb. reinforcing steel (exclusive of steel shown on plan)	.10	.05	.10
20 cu.yd. rock excavation	5.00	10.00	1.00
530 sq.yd. of cobble stone gutter (cement grouted joints)	1.50	1.00	.50
Underpinning elevated railroad column, together with permanent foundation	3,000.00	.01	4,291.00
16 lin.ft. 6-in. virtrified pipe house connection drains	2.00	.01	2.00
Extended totals	$363,820	$421,000	$447,000

Miscellaneous (Continued)

Wharf—Esquimalt, B. C.—Until Jan. 24, by Dept. Pub. Wks., Ottawa, Ont., building dockyard wharf here. R. C. Desrochers, secy.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Coal Trestle—Binghamton, N. Y.—L. F. Pilcher, state archt., Albany, let contract building steel coal trestle at State Hospital here, to Lehigh Structural Steel Co., foot of Allen St., Allentown, Pa. About $24,284. Noted Jan. 9.

Structural Steel, New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., received lowest 3 bids Jan. 7, supplying and erecting structural steel for Sect. 6, Route 8, part of 14th St.—Eastern Dist. Rapid Transit R. R., from Terry & Tench, Grand Central Terminal, $1,712,780; Rodgers & Hagerty, 103 East 126th St., $1,728,859; Snare & Triest, 8 West 40th St., $1,742,000. Noted Jan. 2.

Contracts are being let at the rate of more than $1,000,000 a day. In the first nine days of this year the amount of new work reached $12,692,000 divided thus:

Industrial Work	$4,610,000
Federal Government	3,032,000
Buildings	1,390,000
Excavation and Dredging	797,000
Streets and Roads	757,000
Sewers	414,000
Water-Works	324,000
Bridges	267,000
Railways	145,000
Miscellaneous	956,000

So much for jobs already placed and those being placed; how about projects that have left the possible stage and entered upon the certain? During the first nine days of January, bids were invited on 180 jobs; during the first 16 days, on 245 jobs.

To keep posted, read this section.

★Coal and Ash Handling Equipment—Wards Island, N. Y.—L. F. Pilcher, state archt., Albany, let contract installing coal and ash handling equipment at Manhattan State Hospital, here, to Gifford Wood Co., Hudson. About $45,950. Plans include conveyor, coal hoppers, apron feeder, coal crusher, etc.

★Pile Breakwater—Ocean City, N. J.—City let contract building pile breakwater on ocean front, in southern section of city, to J. Marts Lumber Co., 9th and Haven Sts., $16,640.

★Elevated Railways—Philadelphia, Pa.—Dept. of City Transit, 754 Bourse Bldg., let contract furnishing and placing steel frame work and railings, concrete floors and parapets, side enclosures, etc., for 4 station platforms with connecting passages between platforms and station buildings of Frankford Elevated Ry., at Orthodox-Margaret Sts. and Ruan-Church Sts., together with 1 overpassage bridge and stairs, to W. Steele & Sons, 16th and Arch Sts., $98. Noted Jan. 2.

★Pier — Seattle, Wash. — Seattle Port Comn. let contract for substructure on **Smiths Cove Pier to Harrington Peters Co.,** Seattle, $617,725; rock rip rap work to Independent Asphalt Co., 2601 Railroad Ave., $113,525. Work involves 40 tons dry rock. Noted Oct. 31.

Bulkheads—Warrenton, Ore.—City received bids building bulkheads on Skipanon Waterway involving 6600 lin.ft. 2 in., 1350 lin.ft. 3 in. pile bulkheads, 135,000 lin.ft. piling, 680 N. B. N. lumber and 47,000 lbs. iron, etc., from A. Guthrie Co., Sherlock Bldg., Portland, $86,940; McEachern Co., Kellogg St., Portland, $96,240; R. Wakefield, Warrenton, $98,610. Noted Jan. 2.

★Retaining Wall—Halifax, N. S.—See "Excavation & Dredging."

★Jetty—New Westminster, B. C.—Dept. of Pub. Wks., Ottawa, Ont., let contract repairing jetty, to Hodgson & King, 626 Pender St., W., Vancouver. About $1,000,000. Noted Nov. 7.

STRUCTURAL STEEL—NEW YORK, N. Y.

Bids were received by Public Service Commission, 49 Lafayette St., Jan. 7th, for supply and erection of structural steel for Sect. 6, Route 8, part of 14th St.—Eastern District Rapid Transit R.R., from (A) Terry & Tench Co., Grand Central Terminal; (B) Rodgers & Hagerty, 103 East 125th St.; (C) Snare & Triest Co., 8 West 40th St.; (D) Post & McCord, 101 Park Ave., $1,778,042; (E) Underpinning & Foundation Co., 29 East Bway., $1,786,120; (F) Bethlehem Steel Bridge Corp., 111 Bway., $1,817,835; (G) McClintic-Marshall Co. 50 Church St., $1,903,719. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
15,800 tons riveted steel painted and erected	$106.00	$106.60	$107.50
280 tons steel beams and shapes painted and erected	106.00	106.60	107.50
12 tons steel beams and shapes furnished and delivered	100.00	92.60	95.00
85 tons steel rods and bars furnished and delivered	100.00	72.00	80.00
10 tons cast iron column fenders in place	120.00	140.00	135.00
1,350 lin.ft. electric (overhead trolley) R.Rs.	2.00	4.00	2.80
7 electric ground connections to R.R. structure	100.00	100.00	80.00
Extended totals	$1,718,780	$1,728,859	$1,742,230

FILTRATION PLANT—WYANDOTTE, MICH.

Bids were received by City, Dec. 30, constructing filter plant with 6,000,000 gal. daily capacity to include filtered water reservoir, etc., from (A) Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa. (awarded contract); (B) Rice Constr. Co., Wyandotte; (C) The Bentley & Sons Co., 201-31 Belmont Ave., Cleveland, O.; (D) Minnick-Gibbons Co., 5309 Prospect Ave., Cleveland, O., $258,400, $252,408, $240,608; (E) Walbridge-Aldinger Co., 2356 Penobscot Bldg., Detroit, Mich., $263,265, $254,915; (F) Kelley-Demarest Co., 418 American Trust Bldg., Cleveland, O., $278,334, $269,334, $261,634. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
6,250 cu.yd. excavation and backfilling	$7.75	$1.25	$2.25
3,300 cu.yd. embankments	.50	.50	1.25
10,000 lin.ft. concrete piles	2.25	2.05	2.35
820 cu.yd. concrete in foundation floors	14.00	16.00	13.50
1,7 20 cu.yd. concrete in walls, beams, columns	17.00	25.00	24.50
320 cu.yd. concrete in filter boxes and tanks	19.00	25.00	22.50
10 bbl. additional Portland cement	3.00	3.00	3.30
26,00.0 lb. steel reinforcement	.0405	.05	0.055
Filtered water reservoir	17,500.00	24,000.00	27,900.00
100 tons c.-i. bell and spigot pipe	75.00	76.00	76.00
23 tons c.-i. bell and spigot specials	160.00	175.50	158.00
10 tons c.-i. flanged specials	250.00	195.50	208.00
Filter house gate valves (lump sum)	5,500.00	4,975.00	5,210.00
Other gate valves (lump sum)	2,300.00	1,850.00	1,760.00
Sluice gates (lump sum)	3,100.00	2,450.00	2,290.00
Venturi meters (lump sum)	3,500.00	2,925.00	2,975.00
Float valve (lump sum)	360.00	300.00	300.00
34 tons filter and head house pipe	50.00	67.00	40.00
99 tons outside piping	25.00	35.00	15.00
Filter house valves (lump sum)	500.00	440.00	270.00
Outside valves (lump sum)	400.00	30.00	100.00
Sluice gates (lump sum)	300.00	110.00	100.00
Venturi meters (lump sum)	300.00	90.00	270.00
3,000 lb. miscellaneous cast iron	.15	.20	105
500 lb. wrought iron and steel	.15	.30	12
Screens (lump sum)	100.00	90.00	60.00
100 lin.ft. iron pipe rail	2.00	2.00	2.00
6M.ft.b.m. miscellaneous wood work	100.00	150.00	300.00
730 sq.yd. proved walks and drives	2.25	3.00	4.50
Superstructure for filter and head house (lump sum)	17,000.00	26,000.00	21,000.00
Addition to existing pumping station (lump sum)	2,000.00	3,600.00	3,100.00
Steam heating (lump sum)	4,000.00	5,000.00	6,000.00
Plumbing and gas fitting (lump sum)	1,000.00	2,000.00	2,650.00
Electric wiring for light and power (lump sum)	1,500.00	2,000.00	2,060.00
Freight elevator (lump sum)	3,000.00	3,500.00	3,800.00
6 filter manifold systems	1,200.00	950.00	1,035.00
18 wash water troughs	250.00	265.00	300.00
6 filter rate controllers	1,200.00	820.00	550.00
6 filter operating tables	600.00	800.00	650.00
Miscellaneous gauges (lump sum)	800.00	280.00	390.00
117 cu.yd. filter gravel	10.00	12.80	9.50
196 cu.yd. filter sand	10.00	12.25	11.50
Coagulant stirring machinery (lump sum)	1,200.00	700.00	680.00
Miscellaneous wrought iron pipes and fittings (lump sum)	500.00	240.00	690.00
Orifice boxes and connections (lump sum)	350.00	360.00	475.00
Wash water tank (lump sum)	6,000.00	*7,000.00	6,800.00
Filtered water reservoir (alternate) (lump sum)	16,000.00	20,000.00	21,800.00
11,000 lin.ft. wood piles (alternate)	.75	1.10	1.25
Extended totals with concrete piles and item 9	$211,235	$242,496	$249,355
Extended totals with concrete piles and alternate reservoir	$209,735	$238,496	$243,555
Extended totals with wood piles and alternate reservoir	*$195,485	$230,096	$233,505

*Indicates award of contract.

Sewers (Continued)

Tex., Dallas—City and Dallas Co. plan to build 5300 ft. sanitary sewer in Lancaster Ave. from Ceder Creek outlet to County Detention Home. About $11,686. Work involves 5300 ft. 8 in. vitr. pipe, 335 cu.yd. concrete and 1490 cu.yd. rock trenching. J. F. Witt, Dallas, engr.

Wash., Spokane—City had plans prepared by A. D. Butler, city engr., building downtown intercepting sewer in Main Ave. from Lincoln to Stevens Sts., Stevens St. from Main to 1st Aves., 1st Ave. from Stevens to Howards Sts., Riverside Ave. from Stevens to Bernard Sts., Bernard St. from Riverside to Sprague Aves., Washington St. from Riverside to Sprague Aves., etc. About $250,000. Work involves 5934 lin.ft. 33-63 in. concrete pipe, etc. Noted Jan. 9.

Cal., Newport Beach—City cancelled contract for sewerage system let, to J. D. Kneen Contg. Co., Santa Monica. Plans will be revised and new bids taken. Noted Sept. 19.

Cal., Redwood City—City plans to improve sewerage system. About $35,000. Plans include building outfall sewer, sewage pumping plant and macadam road to pumping station. Work involves 3400 lin. ft 18 in. vitr. pipe. C. E. Dimmick, city engr.

BIDS DESIRED

Ill., Granite City—Until Feb. 8, by Bd. Local Impvts., building 18,000 lin.ft. concrete sewer, 3½-6 ft. diam. E. Hall, 1st Natl. Bank Bldg., engr.; advertised in this issue.

Neb., Lincoln—Until Feb. 1, by city, building 48 in. sewer, rein.-con., brick or segemental block, in O St., from 20th to 23rd Sts.; also 36 in. sewer brick or segemental block in H St. from 5th to 6th Sts. Total length of both 1608 ft. About $10,450.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

N. Y., Long Island City—M. Connolly, pres. Queens Boro., received bids Jan. 15, building sewer in 80th St. from Liberty to Atlantic Aves., Atlantic Ave. from 80th to 76th Sts., 76th St. from Atlantic to 93rd Aves., 93rd Ave. from 76th St. to Elderts Lane, Elderts Lane from 93rd St. to Jamaica Ave., 78th St. from Atlantic to Jamaica Aves. and Jamaica Ave. from Elderts Lane to the Crown, Queens and Brooklyn Boroughs, from H. J. Mullen, Fulton St., Brooklyn, $209,068; U. S. Drainage & Irrigation Co., 17 Battery Pl., New York City, $293,630; J. Jennings Co., 3927 Ferris Ave., New York City, $314,757.

Sewers in Hobson Ave. from Newtown Creek to Halle Ave., Hobson Ave. from Halle to Jones Aves., Jones Ave. from Clinton Ave. to Laurel Hill Blvd., Laurel Hill Blvd. from Jones to Borden Aves., Montgomery Ave. from Columbine to Jones Ave., Congress Ave. from Laurel Hill Blvd. to Montgomery Ave., Townsend Ave. from Laurel Hill Blvd. to Hobson Ave., Waters Ave. from Hobson to Clifton Aves., Joy Ave. from Montgomery to Clifton Aves., Columbine Ave. from Hobson to Clifton Aves., Clifton Ave. from Water to Columbine Aves., with temporary connection to sewer in Columbine Ave., from Green Contg. Co., 734 Verona Ave., $181,896; F. L. Paino, 67 Bay 47th St., Brooklyn, $218,757; Peace Bros., 20 Main St., Flushing, $220,930.

Sewers in Woodland Ave. from Huntington St. to Beaufort Ave., Beaufort Ave. from Boyd to Hatch Aves., Walker Ave. from Beaufort to Woodhaven Aves., Woodhaven Ave. from Walker Ave. to Fulton St., from A. Paino, 2622 Bath Ave., Brooklyn, $188,801; Ajax Drainage Contg. Corp., 60 Herkimer St., Brooklyn, $199,065; E. W. Fitzpatrick, 244 Jackson Ave., $212,098.

Bridges

PROPOSED WORK

Mass., Boston—Metropolitan Park Comn., 18 Tremont St., applied to State Legislature for appropriation of $170,000 to build bridge over Neponset River from here to Quincy, 70 ft. wide. Total cost, $500,000.

Conn., Stratford (Bridgeport P. O.)—State Highway Comn., Hartford, receives bids in spring building bridge over Housatonic River between Stratford and Milford Twps., Fairfield and New Haven Counties, to replace present Washington Bridge; 700 ft. long, 60 ft. wide, concrete and steel, 5 main arches and 2 approach arches, 44 ft. from curb to curb and 2-8 ft. sidewalks, double trolley tracks in center of bridge. About $350,000. Noted Aug. 15.

N. J., Elizabeth—Bd. Freeholders Union Co. soon receives bids building lift span bridge over Elizabeth River. About $10,000.

Pa., Ellwood—Connoquenessing Bridge Co. authorized by State Water Supply Comn., Harrisburg, to build a bridge across Connoquenessing Creek about 2.5 mi. above mouth and 0.6 mi. easterly from 5th St. bridge.

Fla., Miami—Miami Ocean View Co. soon receives bids building 720 ft. concrete bridge, 22 ft. wide, to connect Star Island with causeway.

Tenn., Knoxville—City election Mar. 11, to vote on bonds to build rein.-con. viaduct over Southern Ry. tracks on Gay St. About $150,000 available. Southern Ry. and Knoxville Ry. & Light Co. will appropriate toward cost. J. B. McCalla, city engr.

O., Columbus—Franklin Co. will have revised plans prepared for bridge over Scotia River on Mound St. because original plans did not take into account fact that bridge crossed river at angle of 45 degrees.

Wis., Janesville—City soon receives bids building 349 ft. bridge over Rock River on Jackson St. C. V. Kerch, city engr. Noted Jan. 17, 1918.

Kan., Lyons—Rice Co. having plans prepared building 500 ft. rein.-con. bridge, 24 ft. roadway. S. Ainsworth, co. engr.

Mont., Helena—See "Streets and Roads."

Mo., Jefferson City—A. Houck, representative, Madison Hotel, plans to introduce bill in State Legislature to build 14 bridges over Little River Diversion of St. Francis D. D. About $500,000.

Mo., Kansas City—City soon receives bids building concrete and steel viaduct over Kaw River on 23rd St., 1600 ft. long, 60 ft. roadway with approach having 40 ft. roadway. City, street railways and railroads whose tracks viaduct will span, will each bear one-third of cost. City voted $250,000 bonds for project.

Ore., St. Helens—Columbia Co. will expend about $40,978 of General Road Fund on bridge work during year.

Cal., San Bernardino—Bd. Supervs. San Bernardino Co. plans to build bridge over Santa Ana River.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Fla., Marianna—State Rd. Dept., Tallahassee, let contract building 1034 ft. rein.-con. arch bridge, 18 ft. roadway, consisting of seven 110 ft. concrete arches and one 100 ft. clear bascule lift span steel, involving 2279 cu.yd. rein.-con., 2837 cu.yd. concrete, 210 tons steel, 5000 cu.yd. stone, 13,750 lin. ft. wooden piling and 4800 ft. concrete piling, to Masters & Mullen Constr. Co., 601 Electric Bldg., Cleveland, O., for bridge, and to Converse Bridge & Steel Co., Anderson St., Chattanooga, Tenn., for lift. Cost of bridge and lift complete, $187,000. Noted Nov. 21.

★Ill., Aurora—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, will build viaduct on High St. here by day labor. About $3,000,000. A. W. Newton, Chicago, ch. engr.

★Kan., Girard—Comrs. Crawford Co. let contract building rein.-con. bridge over Cow Creek near Pittsburg, to include 2 rein.-con. abutments, 2 rein.-con. piers and three 54 ft. rein.-con. girder spans, to J. M. Leeper, State House, Topeka, $18,965. Noted Jan. 9.

Cal., Eureka—State Highway Comn., Forum Bldg., Sacramento, received bids Jan. 13, building timber bridge, 712 ft. long, 21 ft. wide; with concrete trestle approaches at Eureka Slough, Humboldt Co., involving 3360 lin.ft. excav. and backfilling, 902 cu.yd. rein.-con., 112 cu.yd. concrete, 101.9 tons steel, piles and deck on approaches, foundations for draw span, etc., from Mercer Fraser Co., Eureka, $62,850; T. Engelhart, Eureka, $64,500; Duncanson, Harrelson Co., Chronicle Bldg., San Francisco, $68,900. Noted Jan. 9.

★Cal., Los Angeles—See "Streets and Roads."

Cal., Los Angeles—State Highway Comn., Forum Bldg., Sacramento, received bids Jan. 13, building 210 ft. rein.-con. bridge, 21 ft. wide, over Santa Clara River, Los Angeles Co., involving 241 cu.yd. Class A Portland cement concrete, all necessary excav. and backfilling, etc., from J. P. Hunter and R. A. Wattson, $8420; H. G. Grunwood, $13,473; both contractors of Los Angeles. Noted Jan. 9.

Structural Steel

PROPOSED WORK

La., New Orleans—See "Buildings."

Wis., Milwaukee—See "Buildings."

Minn., St. Cloud—See "Industrial Works."

B. C., Vancouver—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Fla., Marianna—See "Bridges."

Reinforced Concrete

PROPOSED WORK

La., New Orleans—See "Buildings."

Tenn., Knoxville—See "Bridges."

Ind., South Bend—See "Buildings."

Ill., Chicago—See "Miscellaneous."

Kan., Lyons—See "Bridges."

Neb., Columbus—See "Streets & Roads."

Neb., North Platte—See "Streets & Roads."

Neb., Wayne—See "Streets & Roads."

Mo., St. Louis—See "Buildings."

Okla., Miami—See "Waterworks."

Wash., Bremerton—See "Buildings."

Ore., Portland—See "Buildings."

Cal., Sacramento—See "Miscellaneous."

Cal., San Jose—See "Industrial Works."

PRICES AND CONTRACTS AWARDEI

(★Indicates award of contract)

★Pa., Hamburg—See "Buildings."

★Fla., Marianna—See "Bridges."

Cal., Los Angeles—See "Bridges."

Streets and Roads

PROPOSED WORK

Massachusetts—State Highway Comn., Boston, has been requested to improve roads in Westboro Twp., from Westboro to North Grafton, cost, $10,000; Ware Twp., from Ware to West Brookfield, $7500; Belchertown Twp., $7500; Lunenburg Twp., from Shirley to Leominster, $5000; Great Barrington Twp., from Blandford to Great Barrington, $25,000; Milford Twp., from Hopkinton to Southborough, $10,000; Holland and Brunfield Twps., $5000; Williamstown Twp., from Williamstown to New York line, $50,000; North Brookfield Twp., from North Brookfield to New Braintree, $20,000; Hubbardston Twp., from Gardner to Worcester in Hubbardston and Rutland Twps., $30,000.

Mass., Dedham—A. Wragg, representative, petitioned State Legislature to authorize Metropolitan Park Comn. to lay out streets and complete Dedham Parkway. About $25,000.

Mass., Medford—City applied to State Legislature for authority to borrow $10,000 to rebuild Riverside Ave. and $10,000 for improving Main, Salem and High Sts.

Mass., Woburn—A. Brown, representative, petitioned State Legislature to authorize Metropolitan Park Comn. to acquire land and build extension to Woburn Parkway from Wildwood St., Woburn Twp. to Pond St., Winchester Twp. About $25,000.

N. Y., Penn Yan—Bd. Supervs. Yates Co. requested State Highway Comn., Albany, to improve 6 mi. Crystal Springs Valley Rd. from Rapalee bridge, Barrington Twp. through Barrington, Tyrone and Wayne Twps.

New Jersey—State Highway Comrs., State House, Trenton, plan to build about 50 mi. state highways during year. About $1,980,851 will be expended. W. G. Thompson, engr.

N. J., Jersey City—Hudson Co. Blvd. Comn. appropriated about $231,000 to improve both ends of Boulevard.

N. J., Newton—Bd. Freeholders Sussex Co. plans to expend about $40,000 to improve roads throughout county.

N. C., Durham—City receives bids in spring paving 1½ mi. road. H. W. Kueffner, city engr.

S. C., Charleston—Sanitary & Drainage Comn. requested Comrs. Charleston Co. to authorize $1,000,000 bond issue to build 50 mi. road in county.

Ga., Dublin—Comrs. Laurens Co. plan to issue $500,000 bonds for building roads in county.

Fla., Miami Beach—City plans to issue $50,000 bonds for repairing and paving all cross streets.

Ala., Selma—Bd. Revenue Dallas Co. soon receives bids resurfacing Benton Rd. between here and Safford, about 51 mi. long. W. M. Vaughan, judge.

Miss., Grenada—Bd. Supervs. Grenada Co. receive bids in February building roads in Dist. No. 4. M. E. Powell, clk.

Streets and Roads (Continued)

La., New Iberia—City plans to pave various streets. About $150,000 available for work. J. B. McGrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr.

O., Circleville—Comrs. Pickaway Co. and State Highway Comn. Columbus. receive bids in spring grading and paving Columbus-Washington C. H. Rd., I. C. H. No. 50, Darby Twp. C. Cowen, Stoneman Bldg., Columbus, state highway comr.

O., Cleveland—Comrs. Cuyahoga Co. having plans prepared by W. A. Stinchcomb, co. engr., paving and widening Lake Shore Blvd. from Euclid Twp. to county line, from 60 ft. to 100 ft. About $300,000.

O., Rocky River—Comrs. Cuyahoga Co. (Cleveland) plan to repave West Lake Rd., bithulithic concrete. About $187,000. W. A. Stinchcomb, co. engr.

Mich., Greenville—Comrs. Montcalm Co. (Stanton) had estimates made by F. H. Rogers, state highway engr., Lansing, for 2 mi. concrete road from here west, Eureka Twp., 14 ft. wide, involving 16,500 sq.yd. concrete. About $50,000.

Mich., Jackson—Bd. Supervs. Jackson Co. plans election in April to vote on $1,400,000 bonds to pave and gravel roads.

Mich., Pontiac—Oakland Co. Rd. Comn. receives bids about Mar. 1, building 21 mi. concrete roads including bridges and culverts. About $630,000. P. M. Law, eng. Noted Jan. 2.

Mich., Pontiac—Oakland Co. plans to build 3 mi. gravel road in Commerce Twp., 3 mi., Brandon Twp., 1¼ mi., Holly Twp., also ½ mi. Franklin Rd., 4 mi. Grand River Rd., Lyon Twp., 4 mi. Baldwin Ave., Orion Twp., 4 mi. Davidsburg Rd., Rose Twp. About $250,000. P. M. Law, co. engr.

Ill., Belleville—St. Clair Co. and East Side Levee & Sanitary Dist. Bd., East St. Louis, plan to build hard road from East St. Louis to Venice, Madison and Granite City. D. O. Thomas, co. supt. highways.

Wis., Milwaukee—Comrs. Milwaukee Co. plan to build 3 boulevards across county along Oklahoma Ave. and Lake and 35th Sts. to cover 30 mi. roadway.

Minnesota—State Highway Comn., St. Paul, plans to pave road from St. Paul to Duluth and from St. Cloud to Fergus Falls, gravel, total length 175 mi. About $450,000 and $400,000 respectively. C. M. Babcock, rd. engr.

Minnesota—State Highway Comn., St. Paul, receives bids in March paving with gravel 4 mi. Jefferson Highway, south from St. Paul. About $100,000. C. M. Babcock, rd. engr. Noted Jan. 17, 1918.

Kan., Larned—Pawnee Co. had preliminary surveys made for paving Santa Fe Trail with brick on concrete base. 23 mi. long, 18 ft. wide. Black & Veatch, 507 Interstate Bldg., Kansas City, Mo., engrs. Noted May 9.

Kan., Lawrence—Douglas Co. had plans prepared for 18½ mi. Fort to Fort Highway, 18 ft. wide, concrete. About $445,000. L. Duffee, co. engr. Noted Dec. 19.

Kan., Lindsborg—City having plans prepared for 2 mi. brick paving. H. A. Rowland, McPherson, engr.

Neb., Columbus—Comrs. Platte Co. (Columbus) and Madison Co. (Madison) receives bids in March building 48.1 mi. road from Norfolk to Columbus, 24 ft. wide. About $104,455. Work involves 212,031 cu.yd. earth excav., 16,795 yd.-mi. sand clay and 265 cu.yd. rein.-con. culverts.

Neb., Lincoln—Comrs. Lancaster Co. receive bids in March building 4 mi. O St. from west county line 4 mi. east, 24 ft. wide. About $19,250; cost to be borne by county, State and Federal Government. Work involves 50,000 cu.yd. earth excav.

Neb., North Platte—Comrs. Lincoln Co. receive bids in March building 19.2 mi. road from North-Platte to Sutherland, 24 ft. wide. About $43,028. Work involves 102,711 cu.yd. earth excav., 124 cu.yd. rein. con. culverts.

Neb., Wayne—Comrs. Wayne Co. (Wayne) and Cedar Co. (Hartington) receive bids in March building 38.2 mi. road from Wayne to Coleridge, 24 ft. wide. About $105,676. Work involves 232,531 cu. yd. earth excav., 318 cu.yd rein.-con. and bituminous concrete culverts.

South Dakota—State Highway Comn., Pierre, plans to build roads throughout state. Total cost $3,650,000. State will appropriate $400,000 toward cost, Federal Government $500,000 and counties $2,750,000. F. S. Peck, state highway engr.

Montana—State Highway Comn., Helena, completed surveys for following Federal-Aid projects:

Blaine Co., Chinook-Havre Rd., 5 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $19,447; Chinook-Havre Rd., 3 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $10,472; Chinook-Havre Rd., Milk River Bridge, 295 ft. span, $20,900; Chinook-Malta Rd., 5 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $15,398; Chinook-Malta Rd., 6 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $22,000.

Broadwater and Gallatin Counties, Three Forks-Helena Rd., 3.75 mi. earth graded road and 2-span combination bridge, total length 280 ft., $21,686.

Carbon Co., Billings-Cody Way, 3 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, $22,000; Billings-Cody Way, Sec. 2, (Survey not made), 3 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, $22,000.

Cascade Co., Sun River Rd., 18 mi. of gravel road surfaced, 16 ft. wide, 8 in. thick, $77,933.

Custer Co., Tongue River Rd., 4 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 8500 cu.yd. excav., $22,000; Tongue River Rd., Sec. 2, 4 mi. gravel road surfaced, 16 ft. wide and 8 in. thick, 10,500 cu.yd. excav., $22,000.

Fergus Co., Grassrange-Roundup Rd., Sec. 1, 9.5 mi. earth graded road, $20,000; Grassrange-Roundup Rd., Sec. 2, 8 mi. earth graded road, $20,000; Grassrange-Roundup Rd., Sec. 3, 7 mi. earth graded road, $20,000.

Madison Co., Virginia City-Ennis Rd., 10 mi. earth graded road, $22,800; Cardwell-Harrison Rd., Sec. 1, 7.5 mi. gravel or sand-clay construction, $22,000; Cardwell-Harrison Rd., Sec. 2, 7.5 mi. gravel or sand-clay construction, $22,000.

Meagher Co., North Fork Rd., 10.5 mi. earth graded road, $24,090.

Missoula Co., Ronan Project, 7 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $19,899; St. Ignatius Project, 7 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $19,925.

Missoula Co., Marshall Grade, 0.5 mi. earth grading, $14,355.

Musselshell Co., Roundup-Farrall Rd., 5 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $21,658.

Park Co., Yellowstone Trail, Carter Bridge, 270 ft. span, probable three 90 ft. concrete arches, $33,210; Yellowstone Trail, 3.6 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 11,000 cu.yd. excav., $21,903; Yellowstone Trail, 3.1 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 8000 cu.yd. excav., $21,320.

Ravalli Co., Bitter Root Project, 6 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $19,174; Bell Crossing Bridge over Bitter Root River, 240 ft. span with approaches, $21,000.

Wibaux Co., Red Trail, 3.4 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $14,000; Red Trail, 4.1 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $15,000; Black Trail, Sec. 1, 7 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $22,000; Black Trail, Sec. 2, 7 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $22,000.

Yellowstone Co., Huntley Bridge Project, five 190 ft. steel spans, $95,000; earth graded approaches, $7500; river protection works, $47,500

Montana—State Highway Comn., Helena, completed plans for following Federal-Aid projects:

Blaine Co., Chinook-Malta Rd., 4.25 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, $20,000.

Broadwater Co., Toston Bridge, three 175 ft. steel spans, 16 ft. roadway, approaches include 4500 cu.yd. of earth, $65,192.

Park Co., Yellowstone Trail, 4.25 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 7000 cu.yd. excav., $19,800.

Rosebud Co., Yellowstone Trail, 3.56 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 15,000 cu.yd. excav., $22,000; Forsyth-Ashland Rd., 4 mi. gravel road surfaced, 16 ft. wide, 8 in. thick, 11,000 cu.yd. excav., $20,000.

Wibaux Co., Red Trail, Dawson Co. line east, 4.6 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, 17,000 cu.yd. excav., cost, $22,000; Red Trail, City of Wibaux east, 5.1 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, 14,000 cu.yd. excav., $22,000.

Montana—State Highway Comn., Helena, authorized construction work on following Federal-Aid roads:

Big Horn Co., Hardin-Custer Rd., 2.02 mi. gravel road surfaced, 18 ft. wide, 9 in. to 12 in. thick, about 4000 cu.yd. excav., $12,532.

Carbon Co., Black and White Trail, 2.69 mi. gravel road surfaced, 10 ft. wide, 6 in. thick, about 19,000 cu.yd. excav., $17,551.

Dawson Co., Red Trail, east of Glendive, 7.5 mi. gravel road surfaced, 9 ft. wide, 6 in. thick, about 12,000 cu.yd. excav., $21,940; Red Trail, west of Glendive, 9 mi. gravel road surfaced, 9 ft. wide and 6 in. thick, about 9500 cu.yd. excav., $21,368.

Montana—State Highway Comn., Helena, applied to U. S. Government for aid in constructing following highways:

Flathead Co., Kalispell-Ovando Rd., 9 mi. earth graded road, $15,895.

Powell Co., Drummond-Ovando Rd., Sec. 1, 5 mi. road surfaced with gravel, $15,000; Drummond-Ovando Rd., Sec. 2, 5 mi. road surfaced with gravel, $15,000.

Sheridan Co. Culbertson-Medicine Lake Rd., Sec. 1, 14.5 mi. earth graded road, $18,087; Culbertson-Medicine Lake Rd., Sec. 2, 16.5 mi. earth graded road, $17,313.

Yellowstone Co., Billings-Huntley Rd., 4.5 mi. road surfaced with gravel, $18,000; Worden-Pompey's Pillar Rd., 5 mi. road surfaced with gravel, $20,000.

Mont., Bozeman—Gallatin Co. plans to build following roads during year:

2.75 mi. gravel road on Sour Dough Rd. near Bozeman. Cost, $13,500.

5 mi. gravel road, Salesville south on Gallatin Canyon Rd. $25,000.

2.75 mi. gravel road north of Belgrade—Federal aid has been asked on this road through State Highway Com. $13,750.

1 mi. gravel road east of Belgrade. $5000.

2 mi. gravel road north of Belgrade—Federal aid has been asked on this road through State Highway Com. $10,000.

5 mi. gravel road south of Manhattan—Federal aid has been asked on this road through State Highway Com. $25,000.

0.5 mi. gravel road west of Logan. $2500.

3.5 mi. gravel road south of Three Forks. $17,500.

2 mi. gravel road near town of Willow Creek. $10,000.

0.75 mi. gravel road north of Willow Creek. $3750.

2 mi. gravel road Bozeman-Salesville Rd. $10,000.

1.5 mi. east of Central Park, hard surface road. $30,000.

3 mi. hard surface road west of Central Park. $60,000.

1 mi. hard surface road east of Manhattan. $20,000.

2.2 mi. hard surface road north of Three Forks. $44,000.

1 mi. of hard surface road east of Willow Creek. $20,000.

Mo., Jefferson—A. Gardner, governor, recommended that State Legislature re-appropriate $1,218,215 to State Highway Comn. to complete 122 road building projects approved, but deferred by the war.

Ark., Hot Springs—City soon lets contract for 5 mi. cement and 5 or 6 mi. macadam paving on Arkadelphia Highway, cost, $150,000; also 60 mi. asphalt paving on Little Rock and Hot Springs Highway. F. A. Stearns, comr.

Tex., Madisonville—Comrs. Madison Co. soon let contract building 21 mi. road. J. E. Webb, co. judge.

Utah—State Highway Comn., Salt Lake City, plans to build Federal Aid Projects during coming year as follows:

Project 2, 9.25 mi. Ogden Hooper Rd., cost, $61,340; project 4, 63 mi. Price Emery Rd., $109,923; project 5, 35 mi. Thompson-Moab Rd., $50,686; project 6, 24 mi. Moab-La Sal Junction Rd., $34,755. I. R. Browning, engr.

Wash., Seattle—Street Com. recommended paving and grading Wilson Ave. through Rainier Valley Dist. About $233,620. A. H. Dimock, city engr.

Wash., Spokane—Spokane Co. prepared plans paving and improving 4½ mi. Sunset Blvd. and 4½ mi. Apple Way. About $200,000. Work will be done if State Legislature appropriates toward cost. A. R. Scott, co. engr.

Wash., Yakima—Yakima Co. plans to build 3½ mi. road from Sunnyside to Outlook, cost, $80,000 and 3 mi. road from Parker to Pilands bridge, cost, $60,000.

Wash., Yakima—Yakima Co. soon receives bids building 7½ mi. road to Naches. About $225,000.

Wash., Waterville—Douglas Co. plans to build about 40 mi. highway during year, including grading 30 mi. road, cost, $6000 per mi. R. L. Richards, co. engr., preparing plans for 7½ mi. road between Farmer and Winthrop. County and State work will total about $250,000.

Oregon—Representatives from various counties asked State Highway Comn., Portland, to improve roads as follows:

Wheeler Co., Fossil, graveling 2 mi. John Day highway, at Service Creek Hill, cost $33,000.

Sherman Co., Moro., grading 10 mi. highway from Moro to Wasco, $30,000; county and state to bear ½ of cost.

Multnomah Co., Portland, paving road from Canyon to Beaverton. County will complete Canyon Rd. to county line.

Tillamook Co., Tillamook, hard surfacing road between Hebo and Sulphur Springs and widening same 7 ft.; ½ of cost to be borne by county.

Streets and Roads (Continued)

Oregon—State Highway Comn., Salem, soon receives bids for (a) paving from Multnomah Co. line at Bertha to Hillsboro and Beverton; (b) from Josephine Co. line to Grants Pass; (c) from Polk Co. line to Corvallis; (d) grading and graveling Columbia River Highway across Morrow Co., (e) grading from Stage Coach Pass, north, near Glendale, in Douglas Co., (f) from Yoncolla to Drain; (g) overhead crossing on Douglas Lane Co. lines at Divide; (h) at Comstock, at Pass Creek Canyon. Highway Comn. will pave 7.7 mi. road from Albany to Jefferson in Linn Co., and 10½ mi. in Benton Co. from Corvallis to Polk Co. line if counties will do grading. Noted Dec. 26.

Ore., Astoria—A. S. Tee, acting city engr., submitted report to City Council recommending improvements to following streets: Exchange St. from 17th to 23rd Sts., to portion street between 38th and 43rd Sts., Commercial St. from 37th to 43rd Sts., branch road from Columbia Highway to Astoria; also part of sewer systems in Nos. 9 and 10 and outlet to Sewer Dist.

Ore., Prineville—Crook Co. having surveys made for building Crooked River Rd. About $190,000. State and county will each bear ½ of cost.

Ore., St. Helens—Columbia Co. levied 10 mill road tax and will expend about $95,000 on road work in county during year.

California—State Highway Comn., Sacramento, will ask State Legislature to appropriate $5,000,000 for coast highway from Santa Barbara to San Diego, concrete base. A. B. Fletcher, state highway engr.

California—State Highway Comn., Forum Bldg., Sacramento, soon receives bids grading 8 mi. and building 3 mi. concrete base roads between Oakdale and East Co. lines near Nights Ferry, Stanislaus Co.; also concrete road through Rockland Twp. and unpaved gap near Penryn, Placer Co. A. B. Fletcher, engr.

Cal., Fresno—C. Dillon, city clk., receives bids about March, grading, oiling and curbing 1 mi. Trinity Ave. C. Murray, city engr.

Cal., Holtville — City Trustees plan to form 2 paving districts. Dist. No. 1 will encompass portions 5th, 6th, Palm, Pine and Holt Sts. and involve 252,220 sq.ft. paving; Dist. No. 2, portions 6th, 7th, Olive, Pine, Palm and Holt Sts. and involve 244,800 sq.ft. paving.

Cal., Los Angeles—Los Angeles Co. having plans prepared by F. H. Joyner, co. engr., building 22 mi. highway through Malibu ranch north of Santa Monica. Project includes heavy grading, concrete head walls, building c. i. culverts, timber bridges, etc.

Cal., Martinez—City plans extensive improvements to various streets.

Cal., Santa Ana—Bd. Supervs. Orange Co. having plans prepared by E. L. McBride, co. surv., grading, widening and paving 3.65 mi. Santa Ana-Canyon Rd., concrete; paving 1⅝ mi. East 17th St. near Santa Ana; grading, surfacing and oiling ¼ mi. Magnolia Ave. west of Fullerton.

Ont., Listowel — Town plans to extend pavements. About $15,000.

BIDS DESIRED

N. Y., Albany—Until Feb. 18, by W. W. Wotherspoon, supt. pub. wks., building certain parts of approach from Court St. and South Ave. to Barge Canal Terminal at Rochester, Contr. 57, involving 13,000 cu. yd. excav. 12,650 cu. yd. forming embankment, 42 cu.yd. 1-1 1:2:3 rein.-con., 1340 cu.yd. 1st class rein.-con., 180 cu.yd. 2nd class concrete in column bases, 2285 cu.yd. 2nd class concrete except as provided for by previous item No. 5, 23,000 ft. b.m. timber in temporary cribs and fender, 143 cu. yd. stone filling for cribs, 294,000 lb. metal reinforcement, 7000 lb. c. i. drains and outlet pipes, 126 lin. ft. pipe railing, 1525 lb. metal duct, 796 lin. ft. 3 in. fibre duct, 120 lin. ft. 10 in., 163 lin. ft. 12 in. and 168 lin. ft. 15 in. vitr. pipe and specials, 1675 sq. yd. brick pavement, 24,200 sq. ft. waterproofing concrete, 167 lin. ft. drilling holes in existing masonry, 500 lin. ft. pointing masonry, etc. About $131,003.

N. Y., New York—Until Jan. 29, by M. E. Connolly, pres. Queens Boro., regulating and grading roadway and setting curb, regulating and grading sidewalk and laying sidewalks where not already laid, together with all work incidental thereto, in 88th Ave. from 102nd to 104th Sts.; regulating, grading, curbing, laying sidewalks and paving Hancock St. from Wyckoff Ave. to Evergreen branch of Long Island R.R., sheet asphalt on 6 in. concrete base; regulating, grading, curbing and laying sidewalks in 124th St. from Metropolitan to Jamaica Aves., 125th St. from Jamaica to 89th Aves., 150th St., from Beaver Rd. to South Rd., Barclay Ave. from Parsons Blvd. to 147th St., Emerson St. from Freedom Ave. to Oxford St., Delaware Ave. from Parsons to 147th Aves., 153rd St. from Northern Blvd., to 34th Ave., Gates Ave. from Grandview to Forest Aves., Grove St. from Prospect to Forest Aves., Armand Pl. from Walter St. to point southwest, 102nd St. from Jamaica Ave. to Park Lane, S., 123rd St. from point north of 85th to 89th Aves.

N. J., Rumson—Until Feb. 20, by Boro. Council, improving Rumson Rd., bituminous surface on concrete foundation, involving 29,175.55 sq.yd. surface pavement and 5203.8 cu.yd. foundation. G. K. Allen, 60 Broad St., Red Bank, engr.; advertised in this issue.

W. Va., Hamlin—Until Feb. 20, by Lincoln Co. hard surfacing portion Hamlin-West Hamlin Rd. from Sta. 196 to Sta. 292; Hamlin-Griffithsville Rd. from Main and Lynn Sts. in Hamlin Twp., extending 6½ mi. toward Griffithsville; Mud River Rd. from Hamlin-West Hamlin Rd. extending 3 mi. up main Mud River, 14 ft. wide; grading portion Mud River Rd. from end of Adkins & Adkins contract extending 3 mi. to east end Palermo Bridge; Valley Fork Rd. from Oil Field Natl. Bank in Griffithsville Twp., extending 3 mi. up Valley Fork; Alum Creek-Griffithsville Rd. from South end Alum Creek Bridge extending 4 mi. up Fuquays Creek; Hamlin-Huntington Rd. from Hamlin-West Hamlin Rd. extending 3 mi. toward Huntington to intersection of Lincoln-Cabell Co. line; Guyan River Rd. from Hager & Hager contract at mouth of Ten Mile Creek extending 3 mi. to Ranger. A F. Black, co. clk.; advertised in this issue.

W. Va., Philippi—Until Feb. 17, by Barbour Co., building 3.2 mi. Fairmont and Beverly Turnpike, Federal Aid Project No. 16, 14 ft. wide, also 2.85 mi. Junior Rd., 14 ft. wide, both bituminous macadam. S. F. Hoffman, clk.; advertised in this issue.

W. Va., Ripley—Until March 4, by Jackson Co., grading and draining 2 sections of 1 course concrete road, 1 mi. each. J. S. Chase, co. rd. engr.

Indiana—By Bd. Co. Comrs. building roads in following counties:

Feb. 3—Warren Co., Williamsport, 9588 ft. road, Liberty Twp.; 5900 ft. gravel road, Pine and Adams Twps.; 5349 ft. gravel road, Pine Twp. W. H. Stephens, aud.

Decatur Co., Greensburg, 38,485 ft. roads, Salt Creek, Fugit and Marion Twps. J. C. Barbe, aud.

Orange Co., Paoli, 6876 ft. road, Northeast and Orleans Twps. P. M. Stephenson, aud.

Ripley Co., Versailles, crushed stone road, Franklin Twp., J. F. Lochard, aud.

Jennings Co., Vernon, crushed stone road, Campbell Twp. E. Bemish, aud.

Feb. 4—Montgomery Co., Crawfordsville, 7233 ft. gravel and crushed limestone road, Scott Twp.; 25,900 ft. gravel road, Walnut and Coal Creek Twps. W. F. Batman, aud.

Hamilton Co., Noblesville, 4 roads, Noblesville, Adams and Wayne Twps. H. O. Cottingham, aud.

Fountain Co., Covington, gravel and stone road, Troy, Fulton, Wabash, Cain, Shawnee, Mill Creek, Richland and Van Buren Twps. H. W. Newlin, aud.

Carroll Co., Delphi, gravel and macadamized road, Clay Twp. H. D. Good, aud.

Clinton Co., Frankfort, brick roads, Center and Jackson Twps. E. Spray, aud.

Feb. 5—De Kalb Co., Auburn, 2 concrete roads, Union Twp. S. P. Nelson, aud.

Huntington Co., Huntington, road in Dallas Twp. O. E. Eviston, aud.

Feb. 11—Pike Co., Petersburg, stone and gravel road, Jefferson Twp. W. F. Risely, aud.

Feb. 18—Allen Co., Ft. Wayne, gravel road, between Milan and St. Joseph Twps. W. Johnson, aud.

Ia., Davenport—Until Feb. 18, by Bd. Pub. Wks., grading, paving and curbing following streets and alleys with asphaltic concrete, brick or bitulithic:

Arlington Ave. from south line Columbia Ave. to south line South Ave. Cost. $8003.

Alma Ave. from north line 5th St. to south line Taney St. $11,667.

Ainsworth St. from north line 5th St. to south line Marshall St. $11,067.

Belle Ave. from north line Locust St. to south line Elm St. $12,716.

Bowditch St. from west line Lincoln Ave. to east line Linwood Ave. $3601.

Bridge Ave. from north line High St. to north line Nicholas Ave. $12,412.

Clark St. from north line Rockingham Rd. to south line Telegraph Rd. $32,975.

Columbus Ave. from north line Prospect Lane to south line Eddy St. $2476.

Cedar St. from north line 6th St. to south line Telegraph Rd. $7241.

Claussen St. from east line Hancock Ave. to point 125 ft. east. $1524.

Carey Ave. from north line High St. to south line Henry St. $7374.

Davie St. from north line Prairie St. to south line Locust St. $4952.

Davie St. from north line 6th St. to south line 7th St. $3663.

Division St. from north line South Ave. to south line Prairie St. $23,262.

Eastern Ave. from south line Kirkwood Blvd. to south line of High St. $18,347.

Elm St. from east line Eastern Ave. to west line of Jersey Ridge Rd. $27,220.

8th St. from east line Grand Ave. west to end of paving. $2217.

Elmwood Ave. from north line Rockingham Rd. to south line McKinley Ave. $8408.

Eola St. from north line Prairie St. to south line Locust St. $4095.

Eddy St. from east line Mississippi Ave. to east line Spring St. $14,640.

Fair Ave. from south line 13th St. to south line 31st St. $4029.

Grand Ave. from north line Henry St. to south line South Ave. $25,710.

Gaines St. from north line Locust St. to north line Lombard St. $16,894.

Grand Court from east line Grand Ave. to west line of Carey Ave., and Park Court from High to Henry St. $26,483.

Grant St. from east line Harrison St. to west line Main St. $1686.

High St. from east line Iowa St. to west line Farnam St. $6065.

Hayes St. from east line Harrison St. to west line Brady St. $13,169.

Henry St. from west line Bridge Ave. to west line Eastern Ave. $21,578.

Howell St. from north line Union St. to south line Locust St. $7315.

Hancock Ave. from west line Lincoln Ave. to west line Linwood Ave. $4513.

Hildreth St. from north line Eddy St. to south line Fulton Ave. $2554.

Hancock Ave. from east line Lincoln Ave. to north line Rockingham Rd. $15,173.

Harris St. from north line 5th St. to south line 7th St. $4842.

Koester Ave. from east line Western Ave. to west line Scott St. $2295.

Locust St. from east line Carey Ave. to west line Eastern Ave. $28,230.

Locust St. from east line Eastern Ave. to east line Jersey Ridge Rd. $30,984.

Lombard St. from west line Scott St. to east line Gaines St. $6535.

Lombard St. from west line Sturdevant St. to west line Marquette St. $26,456.

Linwood Ave. from north line Hancock Ave. to south line Telegraph Rd. $18,210.

LeClaire St. from north line Central Park Ave. to south line South Ave. $9954.

McKinley Ave. from east line Clark St. to west line of Lincoln Ave. $42,473.

Myrtle St. from north line Locust St. to south line of High St. $7387.

Mrytle St. from north line 9th St. to north line 10th St. $3629.

Norwood Ave. from east line Western Ave. to west line Ripley St. $7457.

Oak St. from north line 6th St. to south line Telegraph Rd. $4258.

Park Lane from west line Harrison St. to alley west of Western Ave. $19,163.

Prairie St. from west line Howell St. to west line Division St. $10,892.

Pleasant St. from east line Mitchel St. to west line Myrtle St. $13,226.

South Ave. from west line Farnam St. to east line Arlington Ave. $17,254.

Scott St. from north line Locust St. to south line Lombard St. $12,242.

Scott St. from north line Norwood Ave. to south line Park Lane. $5036.

2nd St. from west line Lincoln Ave. south to east line Elmwood Ave. $9377.

6th St. from west line Davie St. to east line Ainsworth St. $21,865.

3rd St. from east line Telegraph Rd. east to end of paving. $6900.

12th St. from west line Farnam St. to west line Grand Ave. $5192.

Telegraph Rd. from west city limits Farnam St. $3393.

Telegraph Rd. from west city limits to 3rd St. $68,131.

Telegraph Rd. from north line 3rd St. to west line Davie St. $34,659.

Taney St. from east line Davie St. to west line Fillmore St. $22,279.

Union St. from west line of Howell St. to west line Washington St. $26,219.

Vine St. from north line 9th St. to south line 10th St. $3923.

Western Ave. from north line Lombard St. to south line Park Lane. $11,898.

Western Ave. from north line 5th St. to south line 6th St. $4369.

Grading, repaving and curbing with asphaltic concrete, brick or bitulithic following streets and alleys:

4th St. from east line Warren to east line Iowa St. $57,250.

Iowa St. from north line 2nd St. to south line 4th St. $13,165.

Streets and Roads (Continued)

14th St. from east line Brady St. to east line Carey Ave., $46,556.

Harrison St. from south line Front St. to south line 2nd St., $6714.

Kirkwood Blvd. from east line Brady St. to east line Grand Ave., $27,100.

2nd St. from east line Warren St. to east line Fillmore St., $40,177.

3rd St from east line Warren St. to east line Fillmore St., $47,667.

Pershing Ave. from north line 2nd St. to south line 4th St., $17,450.

R. Sawistawsky, city engr.

Kan., Norton—Until Feb. 1, by city paving ½ mi. State St. from Rock Island Ry. to Chicago, Burlington & Quincy R. R. tracks, 40 ft. wide. Work involves 9418 sq.yd. pavement, 2944 lin.ft. 24 in. concrete curb and gutter, 4000 cu.yd. earth excav. and 25,000 lbs. reinforcing steel. Bids will be received on vertical fibre brick, 5 in. concrete base, asphaltic concrete, 5 in. concrete base, also 1 and 2 course concrete, 6-8 in. thick. O. E. Noble, Manhattan, engr.

Mo., Hartville—Until Feb. 5, by F. G. Purtle, clk. Wright Co., building, improving, clearing, grading and surfacing with gravel road between Mountain Grove and Cedar Gap. Noted Nov. 7.

Cal., Santa Barbara—Until Feb. 3, by Bd. Supervs., Santa Barbara Co., grading, building culverts, and retaining end walls under railway on Los Olivos-Zaca Rd.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★W. Va., Pineville—Comrs. Wyoming Co. plan to grade 4½ mi. road, 18 ft. wide, involving 40,000 cu.yd. grading and build 3 arch bridges. About $70,000. Work will be done by day labor under supervision of A. B. Shannon, co. rd. engr.

★Tex., Dickens—Comrs. Dickens Co. let contract grading, graveling and constructing 6½ mi. State Highway No. 18, to J. T. Rose & Son, McAdoo. About $36,000. Noted Dec. 12.

★Ariz., Tucson—Comrs. Pima Co. will grade and build timber bridges, corrugated iron culverts, concrete wing walls, etc. on road from Ajo to Gunsight, cost, $40,000; Tucson to Pinal, $40,000; Vail to Benson, $20,000; Mt. Lemmon Rd., $25,000. Work wil be done by day labor. Address H. L. Hetch, Schrader Bldg., Tucson, secy. Noted June 27.

Wash., Seattle—King Co. received bids grading and graveling 3252 ft. Boddy-Hindle Rd., 20 ft. wide, including 5000 cu.yd. grading, also building 1600 ft. trestle involving 5000 cu.yd. excav., 173,000 ft. lumber and 9000 lin.ft. piling, etc., from C. C. Snyder Co., Pacific Blk., $15,850; Anacortes Pile Driving Co., Anacortes, $16,744; P. H. Palmer, Seattle, $17,589. Noted Dec. 26.

Oregon—State Highway Comn., 1301 Yeon Bldg., Portland, received bids (1) paving and grading 1.4 mi. Hood River Mosier Sect. Columbia Highway Unit 1, involving 36,000 cu.yd. excav., (a) using gal. No. 1 corrugated iron pipe, (b) concrete pipe, (c) either pipe; (2) 2.7 mi. Unit 2, involving 92,000 cu.yd. excav., (a) concrete pipe, (b) metal pipe; (3) 2.3 mi. Unit 3, involving 138,027 cu.yd. excav., 200 ft. tunnel, (a) concrete pipe, (b) metal pipe; (4) 7.35 mi. Salem-Aurora Sect., Unit 1, involving 69,000 sq.yd. pavement, (a) type D, (b) type G; (5) 10.65 mi. Unit 2, involving 100,000 sq.yd. pavement, (a) type D; (6) 8 mi. Arlington-Blalock Sect., (a) metal pipe, (b) concrete pipe, from A. D. Kern, (1a) $38,700, (1b) $37,888, (2a) $75,526, (2b) $75,548, (3a) $129,803, (3b) $130,133; O. Huber, Sherlock Bldg., Portland, (1c) $33,852, (3c) $146,206, (4a) $165,852, (4b) $169,392, (5a) $334,048; H. J. Hildeburn, (1a) $48,527, (1b) $47,645, (2a) $101,245, (2b) $101,649; A. Johnson (2a) $92,781, (2b) $93,151; Porter & Conley, (3a) $159,630, (3b) $159,771; Blake Compton Co., McMinnville, (4a) $153,572; Oregon Eng. & Constr. Co., Oregon City, (4a) $162,090, (5a) $235,145; Johnson Contg. Co., Lumber Exch. Bldg., Portland, (6a) $120,238, (6b) $119,296; Elliott & Scoggins, McKay Bldg., Portland, (6a) $166,695, (6b) $165,925. Noted Jan. 9.

Cal., Glendale—City received bids grading, paving, building cement curbs and sidewalks, etc., on East Bway., from Glendale Ave. to Verdugo Rd., 7400 ft. long, 16½ ft. wide, from G. R. Curtis, 2440 East 26th St., Los Angeles, $43,794; H. E. Cox, Pasadena, $45,272; P. L. Ferry, Glendale, $59,382. Work involves 189,850 sq.ft. 5 in. concrete pavement, including grading, 22,000 sq.ft. cement sidewalks, 6810 lin.ft. cement curbs, 8500 ft. surfacing and oiling, 926 ft. 2 in. pipe conduits, corrugated iron and concrete culverts, etc. Noted Jan. 2.

★Cal., Los Angeles—City let contract grading and oiling, constructing cement curbs and gutters and installing storm drains and sewers on Pico St. and West Blvd., also building rein.-con. bridge over tracks of Pacific Electric Ry., to M. S. Cummings, 1302 West 22nd St., $27,777.

Railways

PROPOSED WORK

Ohio—Columbus Ry., Light & Power Co., 14 North High St., Columbus, plans to improve tracks on High St., from Poplar to 5th Ave., Broad St., from Anson to Sandusky Sts., 3rd St. from Naghten St., to Livingston Ave., Main St., from Allen St. to Alum Creek, Goodale St., from High to Henry St. and Livingston Ave. from High St. to Parson Ave.

Washington—Great Northern Ry., 313 Nicolett St., St. Paul, Minn., plans to lay 30 mi. standard 90 lb. rails on Spokane Div.; 10 mi. east and 20 mi. west of Spokane, cost, $325,000; also lay 10 mi. tracks in Hillyard yards, cost, $150,000; block signal system on Cascade Div. between Skykomish and Delta, cost, $166,000. A. H. Hogeland, St. Paul, Minn., ch. engr.

Excavation and Dredging

PROPOSED WORK

Mass., Boston—Dredging—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $200,000 to dredge Boston harbor.

Mass., Boston—Dredging—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $500,000 for dredging and filling near South and East Boston.

O., Cleveland — Channel — Cuyahoga Co. receives bid in spring cutting 1900 ft. new river channel from Columbus Rd. to Central viaduct, 120 ft. deep. About $4,000,000. W. A. Stinchcomb, co. engr.

Ill., East St. Louis—Canal—East Side Levee & Sanitary Dist. Bd. will expend $300,000 for improvements during year, to include building canal along foot of bluffs from Alton to Prairie du Pont to relieve lowlands of flood waters from watershed formed by bluffs, also work on diversion of Cahokia Creek. H. S Kramer, pres.

Neb., Columbus — Excavation — See "Streets and Roads."

Neb., Lincoln—Excavation—See Streets and Roads."

Neb., North Platte — Excavation — See "Streets and Roads."

Neb., Wayne—Excavation—See "Streets and Roads."

Mo., Jefferson City—Levee—Dumm & Irwin plan to build 5 mi. levee in Cole Co. About $75,000. J. R. Nolen, Jefferson City, engr.

Ariz., Phoenix—Canal—Salt River Valley Water Users Assn. having plans prepared moving 1½ mi. Arizona canal ¼ mi. to prevent breaks during floods. About $35,000.

Ore., Gold Hill—Gold Hill Irrigation Dist. election Feb. 11, to vote on $15,000 for completion of irrigation system. Kramer & Carter, San Francisco, engrs.

— BIDS DESIRED

N. Y., Albany—Barge Canal Work—Until Feb. 19, by W. W. Wotherspoon, supt. pub. wks., building pile dolphins for aids to navigation on Cayuga and Seneca Lakes, Contr. Q, cost, $5225; driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport, Contr. 200, involving 5300 cu. yd. excav., 22,000 ft. b. m. sheeting and bracing, 770 cu. yd forming embankment, furnishing 2300 sq.ft. ¼ in. steel sheet piling, 77,000 sq.ft. ⅜ in. steel sheet piling, driving, 79,300 sq. ft. steel sheet piling, 2900 cu. yd. 2nd class concrete, 500 cu. yd wash wall, 460 lb. structural steel, 1040 lb. metal reinforcement, removing 730 cu. yd. concrete, cofferdams, pumping, draining, etc., cost, $257,992; providing for completion of concrete prism lining at Cartersville and building stream entrance near Knapps bridge, Contr. 201, cost $48,455; advertised in this issue.

N. Y., Buffalo—Barge Canal Work—Until Feb. 18, by W. W. Wotherspoon, supt. pub. wks., capitol, Albany, protecting shore of Erie Basin between Lake St. and Slip No. 1, Buffalo Contr. 69, involving 150 cu. yd. excav., 300 cu. yd. cinder backfill, 19,000 ft. b. m. sawed lumber, 110 cu. yd. 2nd class concrete, 100 cu. yd. stone filling in cribs, 900 lb. structural steel, 60 cu. yd. 1st class rip rap, cost, $6780; installing electric, writing, lighting, power and battery charging equipment for canal terminal at Erie Basin, Buffalo, Contr. 107, cost $35,025; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★N. Y., Albany—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., let contract drilling holes in sill of dam and toe of river wall of lock near Rotterdam, to J. W. Holler, Ft. Edward, $27,780; installing two 3 ton semi portal jib cranes on Pier 6, New York City, Contr. 102, to E. F. Terry Mfg. Co., Grand Central Terminal, New York City, $41,081. Noted Dec. 26.

★N. Y., Albany—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., let contract completing canal from east guard lock to Genesee River, and work in Genesee Valley Park, Contr., 192, to Brown & Lowe, Foster Ave., Schenectady, $428,860. Noted Jan. 16.

N. Y., Seneca Falls—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., capitol, Albany, received bids Jan. 14, extending core wall and other work at north end of Dam No. 2, Seneca Falls, Contr. T, from Kennedy & Scullen Contg. Co., Inc., Cohoes, $22,301; Mohawk Dredge & Dock Co., Inc., Herkimer, $22,325; C. Kiehm, Gardner Bldg., Utica, $22,958. Work involves 870 cu.yd. excav., 740 cu. yd. backfill, 21,400 ft. b. m. sheeting and bracing, 120 cu. yd. 2nd class concrete; contingent items are 900 cu. yd. excav., 760 cu. yd. back fill, 26,000 ft. b. m. sheeting and bracing, 120 cu. yd. 2nd class concrete; contingent items are 900 cu. yd. excav., 760 cu. yd. back fill, 26,000 ft. b. m. sheeting and bracing, 150 cu. yd. 2nd class concrete, furnishing, installing and removing plant for drilling and grouting, etc. Noted Dec 26.

Industrial Works

PROPOSED WORK

Mass., South Boston (Boston P. O.)—S. A. Woods Machine Co., 27 Damrell St., Boston, plans to rebuild plant on Dorchester Ave. recently destroyed by fire. Loss, $500,000.

R. I., Providence—Page & Page, archts., 87 Weybosset St., soon receive bids for altering and building 30 x 33 ft. brick, rein.-con. and steel addition to Barnaby Bldg., rein.-con. flooring and concrete foundation, on Union St. About $50,000. Owners name withheld.

N. Y., Brooklyn—Mollers & Schuman, Marcy Ave., having plans prepared by H. Holder, archt., 242 Franklin Ave., for 2 story, steel and brick addition to factory, concrete foundation, on Gerry and Wallabout Sts. About $80,000.

N. Y., Geneva—C. C. Davison had plans prepared for flour mill with 500 bbl. daily capacity.

N. Y., New York—T. Demmerle, 1510 Bryant Ave., had plans prepared by W. A. Geison, archt., 104 West 42nd St., for 2 story, 78 x 94 ft. brick and steel garage, concrete foundation, on 181st St. and Davidson Ave. About $30,000.

N. Y., West Carthage—Local Dairymen's League having plans prepared for 2 story milk condensary. About $25,000. S. Balcom, chn.

Pa., Honesdale—Smith & Clark Co., Tannery and Water Sts., having plans prepared for 2 story milk condensary. About $75,000.

N. C., Durham—City plans election to vote on $90,000 bonds to build ice plant. H. W. Kueffner, city engr.

O., Toledo—Modern Glass Co. plans to build 6 brick and steel buildings on 9 acre site on Toledo Terminal Ry. near Dorr St. crossing. About $250,000.

Mich., Bay City—City plans to build addition to electric light and power plant. About $125,000. C. L. DeBates, supt.

Mich., Detroit—Morgan & Wright Tire Co., foot Bellevue St., plans to build 7 story, 140 x 215 ft. brick and rein.-con. warehouse, rein.-con. flooring and concrete foundation. About $750,000. Lockwood Greene & Co., 38 South Dearborn St., Chicago, engrs.

Mich., Menominee—Lloyd Mfg. Co. having plans prepared by D. Hubert, archt., for 1 story, 100 x 800 ft. brick and concrete factory warehouse. M. B. Lloyd, pres.

Ill., Chicago—P. E. Erlinder & Co., 3213 Wentworth Ave., soon receives bids building 1 story, 75 x 160 ft. brick and rein.-con. auto service building, rein.-con. flooring and concrete foundation on 43rd St. and Wabash Ave. About $25,000. R. R. Cenek, 105 South La Salle St., archt.

Ill., Chicago—Lindstrom & Hedberg, 127 North Dearborn St., plan to build 1 story, 100 x 200 ft. brick and timber garage, brick foundation, on East 71st St. and Jeffrey Ave. About $30,000.

Industrial Works (Continued)

Ill., Chicago—Standard Oil Co. of Indiana, 910 South Michigan Ave., having plans prepared by Schlinz & Bailey, archts., 802 Monadnock Bldg., building two 1 story, 75 x 120 ft. brick and rein.-con. distributing stations, rein.-con. flooring and concrete foundation, one on 71st and Halsted Sts. and other on Stoney Island and Marquette Rd. About $40,000 each.

Ill., Chicago—Weir & Craig, 6316 Wentworth Ave., having plans prepared by F. Lindquist, archt., 179 West Washington St., for 3 story, 100 x 125 ft. brick and timber warehouse on 63rd St. and Wentworth Ave. About $75,000.

Ill., Chicago Heights—Armour Fertilizer Wks., Union Stock Yards, Chicago, having plans prepared by R. C. Clark, archt., care of company, building 1 story, 240 x 520 ft. steel and concrete fertilizer plant here on State St. and Chicago Heights Terminal Transfer R.R. About $500,000. Noted Nov. 28.

Ill., South Bartonville (Peoria P. O.)—Amer. Milling Co. plans to rebuild plant recently destroyed by fire. Loss, $750,000. H. G. Atwood, pres.

Ill., Woodriver—Tidewater Oil Co., Constable Hook, Bayonne, N. J., plans to build oil refinery here and extend pipe line from here to Tulsa, Okla.

Wis., Amery—Apple River Milling Co. plans to rebuild mills. Loss, $60,000.

Wis., Appleton—Konz & Co. plan to build box factory. About $30,000.

Wis., Milwaukee—Natl. Oil Products Co., 220 Bway., New York City, plans to build plant on Keefe and Humboldt Aves., here. About $100,000.

Wis., Sheboygan—Lake Side Craft Shop plans to build 2 story, 70 x 100 ft. addition to factory on South 12th St. and Kentucky Ave.

Wis., Two Rivers—Aluminum Goods Mfg. Co., Manitowoc, purchased 60 x 300 ft. lot adjacent to works here and plans to build addition. G. Vits, genl. mgr.

Minn., Milaca—Hanson Bros. plan to build 1 story, 65 x 130 ft. brick garage.

Minn., St. Cloud—Pan Motor Co. had plans prepared for 1 story, 130 x 180 ft. steel foundry.

Kan., Topeka—J. V. Deever, Big Springs, plans to build 75 x 100 ft. garage at 1032 Kansas Ave. here.

Kan., Topeka—Whiteker Bros., 1st St. and Kansas Ave., plan to build garage on Kansas Ave. About $30,000.

Mo., Valley Park—Universal Glass Co. of Pennsylvania, plans to remodel, re-equip and reopen glass plant on 11 acre site; also rehabilitate 200 workmen's homes, bank building and hotel. Address owners through R. K. Kauffman, Mercantile Trust Bldg., St. Louis.

Tex., McKinney—A. E. Boqer, Dallas, plans to build refinery here. About $500,000.

Okla., Tulsa—U. S. Compression Inner Tube Co. had plans prepared building 50 x 300 ft. factory. M. C. Hale, pres.

Colo., Colorado Springs—Hassel Iron Wks., Moreno and Sierra Madre Sts. plans to build addition to factory. About $50,000 W. W. Hassell, pres.

Colo., Greeley—Natl. Food Products Co. plans to build 200 x 200 ft. dehydrating plant here.

Ariz., Humboldt—Humboldt Impvt. Co. plans to build water-works and electric light plants. About $200,000.

Wash., Seattle—East Waterway Dock & Warehouse Co., 2901 Kitsap St., plans to build warehouse and 350 ft. extension to present wharf at terminal on Harbor Island. About $200,000 will be expended.

Cal., Sacramento—See "Miscellaneous".

Cal., San Jose—Salsini Packing Co. plans to build 2 story, 60 x 600 ft. rein.-con. addition to fruit packing plant on Lincoln and Salvator Sts. About $100,000.

Ont., Toronto—Dominion Government, Ottawa, soon lets contract building 2 story, 60 x 150 ft., orthopedic hospital. About $65,000. R. C. Wright, archt.

Sask., Regina—International Harvester Co. plans to build plant on 6th Ave. and Broad St. About $1,000,000.

B. C., Vancouver—Foundation Co., Ltd., 709 Electric Ry. Chambers, Winnipeg, Man., plans to build steel shipyards here. B. Hipkins, mgr.

BIDS DESIRED

N. Y., Brooklyn—Until Feb. 18, by W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, building Barge Canal Terminal freight shed at Greenpoint, Contr. 223, involving 594,500 lb. structural steel, 450 ft. 8 in., 300 sq.ft. 6 in. and 2100 ft. 4 in. terra cotta tile, 610 sq. ft. wood flooring, 6048 sq.ft. warehouse doors, 9800 sq.ft. corrugated metal siding, 4900 sq.ft. flashing, 21,900 sq. ft. roof covering, 810 lin. ft. gutters, 240 lin. ft. corrugated conductors, 250 lin. ft. 4 in. pipe conductors, etc. About $99,710.

N. Y., Brooklyn—Until Jan. 27, by W. Higginson, archt., 21 Park Row, New York City, for 1 story, 50 x 55 ft., steel and brick power house, rein.-con. flooring, concrete foundation, on Classon Ave., for J. Kayser, 45 East 17th St., New York City. About $60,000.

N .Y., New York—Until Feb. 3, by F. G. Frost, archt., 19 West 44th St., for 6 story, 100 x 200 ft., garage and 9 story, 75 x 100 ft storage building, steel and brick, rein.-con. flooring, concrete foundation on 36th and 37th Sts., between 2nd and 3rd Aves., for B. Altman Co., 5th Ave. and 34th St. About $350,000. Noted Jan. 2.

N. Y., New York—Until Jan. 28, by D. M. Ach, archt., 1 Madison Ave., building 2 story, 125 x 200 ft, brick and steel factory and garage at 510-14 West 22nd St., for A. Louy, 511-19 West 21st St. About $95,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Bridgeport — Susman-Feuer—Brownstein Co., 23 Bank St., let contract building 4 story, 78 x 100 ft. brick, steel and concrete grain elevator, rein.-con. flooring and concrete foundation, on Water St., to W. A. Smith & Son, 188 Cannon St. About $60,000. Noted Jan. 16.

★N. Y., East Buffalo—New York Central R. R., Grand Central Terminal, New York City, let contract building 1 story, 50 x 150 ft., brick and steel ice house, rein.-con. flooring, concrete foundation, to J. W. Cowper, Fidelity Bldg., Buffalo. About $55,000.

★N. Y., New York—M. Groh's Sons, 238 West 28th St., let contract building 10 story, 75 x 100 ft. brick and steel cold storage warehouse, rein.-con. flooring, concrete foundation, to Patterson Bros., 215 West 28th St., cost plus basis, about $250,000. Noted Dec. 26.

★N. Y., New York—Standard Concrete Steel Co., 105 West 40th St., will build 3 story, 100 x 175 ft., steel and brick factory, rein.-con. flooring, concrete foundation, on 61st St. and Amsterdam Ave. About $200,000. Work will be done by day labor.

★N. J., Bound Brook—A. A. Marlow & Sons will build sulphur dioxide and chemical plant. Work will be done by day labor. Noted Jan. 9.

★Pa., Pittsburgh—F. E. Koegler, 1320 Carson St., let contract building 2 story, 60 x 75 ft. garage on 14th and Carson Sts., to P. Auel, 93 South 24th St. About $30,000.

★Pa., Springdale—Penn Power Co., Benedum Trees Bldg., Pittsburgh, will build 1 story, 200 x 900 ft., steel, rein.-con. and brick power plant, rein.-con. flooring, concrete foundation here. About $5,000,000. Work will be done by day labor. Mine will also be developed.

★Md., Westminster—B. F. Shriver Co. let contract building 1 story, 36 x 42 ft. power plant and 1 story, 50 x 190 ft. factory, rein.-con. and brick, rein.-con., rock and concrete foundation, on Main St., to J. F. Roystone Eng. Co., Westminster. About $50,000.

★Va., Norfolk—Norfolk & Hampton Roads Dry Dock & Ship Repairing Co., Bank of Commerce Bldg., let contract building shipbuilding plant to consist of several 1 story, rein.-con., steel and brick buildings, rein.-con. flooring, concrete foundation, to J. Stewart & Co., 30 Church St., New York City. About $7,000,000.

O., Cleveland—Glass Coating Co., 1209 Rockefeller Bldg., let contract building 1 story 165 x 240 ft. factory, brick, steel and rein.-con., rein.-con. flooring, on St. Clair Ave., and New York, Chicago & St. Louis R. R., to H. Ferguson, 66 Beersford Rd. About $80,000.

★Ia., Sioux City—Marine Terminal Elevator Co., Grain Exch., let contract building 250,000 bu. rein.-con. and brick terminal elevator, rein.-con. flooring, concrete foundation; also 44 x 151 ft. work house and 15 storage tanks, 14 ft. diameter, 81 ft. high, to Younglove Constr. Co., 312 U. B. Bldg. About $150,000.

★Kan., Pratt—See "Buildings."

★Ore., Wilbridge—Pacific Coast Steel Co., North West Bank Bldg., Portland, let contract constructing open hearth building, cost, $41,000; mill building, $40,000 and steel mill, $1,000,000, to Grant Smith & Co., St. John St., Portland.

★Ont., Hamilton—Canadian Cotton Co., James St., N., let contract building 1 story addition to factory, to G. E. Mills, 614 King St., E. About $50,000. Noted Dec. 19.

★N. S., Sydney—Dominion Iron & Steel Co. let contract building rein.-con., brick and steel power station, rein.-con. flooring, concrete foundation capable of developing 1150 kw., to Foundation Co., Ltd., 224 St. James St., Montreal, Que.

Buildings

PROPOSED WORK

Mass., Cambridge—Fire House and Police Station—City soon receives bids remodeling and building brick, steel and concrete addition on Central Sq. About $85,000. C. H. Blackall, 20 Beacon St., Boston, archt.

Mass., Framingham — Dormitory — State Bd. Educ. applied to Legislature for appropriation of $161,000 to build dormitory for State Normal School here.

Mass., New Bedford—High School—City applied to State Legislature for authority to reconstruct old high school on Summer St. A. Ashley, mayor.

Mass., New Bedford—Hospital—A. Ashley, mayor, applied to State Legislature for authority to borrow $400,000 to build city hospital.

Mass., Springfield—School—Bd. Educ. having plans prepared by G. C. Gardner, archt., 33 Lyman St., building brick addition to school on Chestnut St. About $200,000.

Mass., Watertown—(Middlesex P. O.)—Office—Aetna Mills plans to build brick and concrete, rein.-con. flooring and concrete foundation. About $50,000.

R. I., Providence—Theater—J. Bartley, Seekonk, Mass., having plans prepared by W. R. Walker & Son, archts., 17 Custom House St., altering and building addition to Scenic Theater on Matthewson St., here.

R. I., Providence—Library—City plans to build addition to library on Fountain and Empire Sts. Clarke & Howe, 1304 Turks Head Bldg., archts.

Conn., Bridgeport—Bank—West Side Bank, 1418 State St., plans to build on State St. between Hancock and Butler Aves. About $50,000. W. P. Kirk, pres.

Conn., Bridgeport—Church and Parish—United Congregational Church, Broad and Gilbert Sts., plans to build brick, concrete and steel, rein.-con. flooring and concrete foundation, 210 ft. high, on Broad, John and Bank Sts. About $300,000. W. H. Day, pastor. C. Gilbert, 244 Madison Ave., New York City, archt.

Conn., Bridgeport—Club—I. O. O. F., 1089 Broad St., plans to build on Golden Hill, Harrison and Elm Sts. About $150,000.

Conn., Bridgeport—Police Station—Fire Comrs. plan to build on Caroline and Arctic Sts. About $75,000. J. C. Stanley, pres.

Conn., Waterbury—Hospital—Bd. Health plans to build isolation hospital. About $150,000.

Conn., Waterbury—Hotel—Hotel Elton, West Main and Prospect Sts., plans to alter and build addition. About $150,000. W. E. Hunt, 182 South Main St., Torrington, archt.

Conn., Wethersfield—Prison—State Institution, Hartford, plans to build brick, steel and rein.-con., rein.-con. flooring and concrete foundation here. About $1,500,000. L. W. Robinson, 42 Church St., New Haven, archt. Noted Jan. 2 under "Hartford."

N. Y., Brooklyn—Synagogue—Brooklyn Synagogue, 1093 Sterling Pl., plans to build 2 story, 80 x 100 ft., brick and steel, brick foundation. About $100,000.

N. Y., New York—School—Bd. Educ. soon receives bids building 5 story, 92 x 193 ft., limestone, steel, brick and terra cotta, Crotona Ave. and 151st St. (Bronx Boro.). About $450,000. C. B. J. Snyder, Municipal Bldg., archt. Noted Nov. 21.

Buildings (Continued)

N. Y., New York—School—Bd. Educ. soon receives bids building 5 story, 60 x 142 ft., brick and steel addition, concrete foundation, Tremont, Bryant and Vyse Aves. About $200,000. C. B. J. Snyder, Municipal Bldg., archt. Noted Nov. 21.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon receives bids building P. S. 57, 5 story, 118 x 192 ft., brick and steel, concrete foundation, Crotona Ave. and 181st St. (Bronx Boro.) About $543,474. C. B. J. Snyder, Municipal Bldg., archt. Noted Dec. 5.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon receives bids building P. S. 130, 5 story, 98 x 157 ft., brick and steel, concrete foundation, Baxter St. About $506,592. C. B. J. Snyder, Municipal Bldg., archt. Noted Dec. 5.

N. J., Jersey City—Hospital—Jersey City Hospital, 29 Duncan Ave., having plans prepared altering and building additions to hospital on Baldwin Ave. About $600,000. J. T. Rowland, 100 Sip Ave., archt.

Pa., Harrisburg—High School—Bd. Educ. having plans prepared by C. H. Lloyd, archt., Telegraph Bldg., for 2 story, 80 x 145 ft. brick. About $100,000.

Pa., Lock Haven—Temple—Masonic Lodge purchased site on Main and Grove Sts. and plans to build temple. About $100,000.

Pa., Newcastle—Y. M. C. A., West Washington St., plans to construct building. About $100,000.

Pa., Phila.—Store—Roman Auto Co., 203 North Broad St., purchased site and plans to build 12 story building for automobile and airplane salesrooms.

Va., Charlottesville—Bank and Office—Natl. Bank of Charlottesville plans to build R. T. Minor, Jr., vice pres.

La., New Orleans—Club—Southern Yacht Club, West End, plans to build new concrete club on site of present building. About $200,000. P. S. Benedict, commodore.

La., New Orleans—Theatre—Orpheum Circuit having plans prepared by J. Lansburg, archt., San Francisco, Cal., for 1 story, 150 x 200 ft., steel, brick foundation. About $400,000. Address M. Beck, 1564 Bway., New York City.

O., Cincinnati—Hotel—Havlin Hotel Co., Mine St. and Opera Pl., plans to remodel 60 x 150 ft. hotel. H. Hake, Telephone Bldg., archt.

O., Cleveland—Market—W. R. Powell, archt., 705 Rose Bldg., receives bids about Mar. 15, building 2- and 6-story, 78 x 381 ft. brick, steel and rein.-con. market house, rein.-con. flooring at 11826 Detroit Ave. for Lakewood Market House Co., c/o archt. About $200,000. Noted Jan. 2.

O., Columbus — Exposition — Columbus Exposition Bldg. Co. having plans rechecked by Richards, McCarty & Bulford and F. L. Packard, archts., Hartman Bldg., for constructing exposition building on Rich and Wall Sts. About $500,000. F. Lazarus, Jr., pres. Rechecking of plans made necessary by advanced cost of material and labor.

O., Oberlin—High School—Bd. Educ. having plans prepared by F. C. Warner, archt., 767 Hippodrome Annex, Cleveland, for 2-story, 75 x 180 ft. brick, rein.-con. and steel, rein.-con. flooring and concrete foundation. About $225,000.

O., Westerville—Science Hall—Otterbein University plans to build 3 story on campus of University. A Clippenger, pres.

O., West Unity—School—Bd. Educ. having plans prepared by Howard & Merriam, archts., 8 East Broad St., for 4 story, 76 x 115 ft. brick, rein.-con. flooring and concrete foundation. About $80,000.

Ind., South Bend—Theater—J. J. Handelsman, c/o Inland Steel Co., having plans prepared by C. W. and G. L. Rapp, archts., 69 West Washington St., Chicago, building 2 story, 140 x 160 ft. steel and rein.-con. moving picture theater, rein.-con. flooring and concrete foundation at 216 South Michigan St. About $300,000.

Mich., Detroit — Auditorium — F. L. Brooke, 82 Melbourne Ave., trustee for late W. W. Hannan, plans to build auditorium on Woodward Ave., to be known as Hannan Memorial Hall. Building will be bequeathed to city when completed. About $2,500,000.

Mich., Detroit—Hospital—Grace Hospital, Willis and John R. Sts., plans to build in vicinity of Fairview. About $150,000. W. L. Babcock, supt.

Ill., Bloomington—Exchange—Kinlock-Bloomington Telephone Co. plans to build 2 story, 45 x 120 ft. on Washington and Prairie Sts. Cost between $50,000 and $75,000. J. T. Lillard, pres.

Ill., East St. Louis—Community—Natl. Catholic War Council plans to build community center. About $200,000. D. McGlynn, 120 North Main St., chn. J. Ware, Wash., D. C., archt.

Ill., Moline—Store—J. N. Pierr, 1517 5th Ave., plans to rebuild brick on 15th St. and 5th Ave. About $80,000.

Wis., Milwaukee—Bank—Wisconsin Natl. Bank, East Water and Wisconsin Sts., having plans prepared by Marshall & Fox, archts., 721 North Michigan Ave., Chicago, for 3 story, steel, rein.-con. flooring, concrete foundation, on East Water and Wisconsin Sts. About $1,500,000. Noted Jan. 2.

Wis., Milwaukee—Hotel—O. Brachman and others plan to build 8 story on Juneau Ave. and Astor St. About $800,000.

Wis., Two Rivers—School—City receives bids in spring building addition to school and boiler house. About $65,000. Van Ryn & De Gelleke, Caswell Blk., Milwaukee, archts.

Minn., Brainerd—Depot—Northern Pacific R. R., Railroad Bldg., St. Paul, receives bids in February or March building 2 story, 40 x 160 ft., rein.-con. and brick. About $65,000. O. M. Rognan, Railroad Bldg., archt. Noted Oct. 24.

Minn., Duluth—Hospital—City plans to build 3 story, rein.-con., brick and steel, rein.-con. flooring. About $600,000.

Minn., Stillwater—School—Bd. Educ. receives bids in March building 2 story, 60 x 98 ft., rein.-con. and brick. About $50,000. W. L. Alban, 347 Endicott Bldg., St. Paul, archt.

Kan., McPherson—Hospital—McPherson Co. plans to build. Bond for $100,000 voted for project. A. J. Cedarholm, co. clk.

Neb., Hastings—College—Hastings College plans to build. Cost between $150,000 and $200,000. A. Crone, pres.

S. D., Sioux Falls—Schools—Bd. Educ. having preliminary estimates made building high and grade schools. About $500,000.

N. D., Jamestown—College—Jamestown College plans to build. About $500,000. B. H. Kroeze, pres.

Mo., Fulton — Hospital — Calloway Co. plans to build. About $75,000 appropriated for site and hospital.

Mo., Jefferson City — Theatre — W. H. Mueller plans to build 57 x 198 ft. brick on High St. About $60,000.

Mo., St. Louis — College — Washington University, Skinker and Lindell Sts., receives bids in March for 2 story, 150 x 200 ft. rein.-con., rein.-con. flooring and concrete foundation on campus. About $300,000. F. A. Hall, chancellor. J. F. Jamieson, Security Bldg., archt.

Mo., St. Louis—Court House—H. Kiel, mayor, submitted report to Bd. Estimate & Apportionment recommending that 2-story, rein.-con. addition be built to Municipal Courts, 13th and Market Sts. About $150,000. L. R. Bowen, City Hall, engr.

Mo., Valley Park—Bank, Hotel, etc.—See "Industrial Works."

Mo., Webster Groves—(St. Louis P. O.)—Club—Algonquin Golf Club, plans to rebuild clubhouse on Berry and Jackson Rds. About $100,000. R. A. Nickerson, secy.-treas.

Tex., Ft. Worth—Office—W. Capps receives bids in March building 3 story addition on 5th and Throckmorton Sts. Cost between $75,000 and $100,000. Noted Jan. 2.

Okla., Hooker—School—Bd. Educ. School Dept. No. 23, having plans prepared by Mann & Jerow, archts., Hutchinson, Kan., building 3 story, 54 x 74 ft. brick and rein.-con. About $50,000.

Wash., Bremerton—Club—Navy Y. M. C. A. having plans prepared by F. S. Baker, archt., Pacific Blk., Seattle, for 5 story, 56 x 90 ft., rein.-con., Front and Washington Sts. About $55,000.

Ore., Portland—Home, Business Headquarters, etc.—United Artisans, Beck Bldg., plans to build 2 story, 60 x 100 ft., frame home, and 38 x 58 ft. brick servants' quarters in Columbia Park, cost, $40,000; also 2 story rein.-con. building for business headquarters, 3rd and Columbia Sts., cost, $60,000. E. Schacht, Commonwealth Bldg., archt.

Cal., Bakersfield—School—City election Feb. 4, to vote on $125,000 bonds to build Lincoln School, addition to Fremont School and install heating system in Franklin School.

Cal., Sacramento—Memorial Hall—City election Apr. 30 to vote on $300,000 bonds to build memorial hall. F. C. Miller, city engr.

Cal., San Marino—Library—H. E. Huntington having plans prepared by M. Hunt, archt., 1017 Hibernian Bldg., Los Angeles, for 2 story, 160 x 200 ft., rein.-con. and brick with three wings, each 150 ft. long, rein.-con. flooring, concrete foundation, on Oak Knoll. About $100,000.

Cal., Ventura—Hospital—Ventura Co. plans election to vote on bond issue to build county hospital. About $200,000. A. C. Martin, archt., 430 Higgins Bldg., Los Angeles, preparing plans.

Que., Montreal—Central Y. W. C. A. lets contract in spring constructing building. About $150,000. A. T. Thomson, pres. Noted Sept. 26.

Man., Winnipeg — Orphanage — Jewish Children's Aid and Orphanage Society, of Western Canada, 1280 Main St., purchased site and plans to build. About $55,000.

Alta., Edmonton—Sanitariums—Provincial Government plans to build 2 tuberculosis sanitariums. About $200,000.

BIDS DESIRED

N. Y., Brooklyn—School—Until Feb. 15, by G. E. Steinback, archt., 15 East 40th St., New York City, for 2 story, 68 x 100 ft., steel and brick parochial school, concrete foundation, on Du Pont St. between Franklin St. and Manhattan Ave. for St. Cyryl Methodius congregation. About $90,000.

N. Y., Brooklyn—Theater—Until Feb. 14, by R. T. Short, archt., 370 Macon St., for 2 story, 80 x 180 ft., steel and brick, concrete foundation, on Flatbush and Rogers Aves., for Jewel Bldg. Co., 170 Bway., New York City. About $250,000. W. S. Baker, pres.

N. Y., New York—Hotel—Until Apr. 2, by Gronenberg & Leuchtag, archts, 303-5th Ave., for 10 story, 100 x 100 ft., brick and steel, concrete foundation, on 43rd St. near 8th Ave., for H. Claman, 243 West 43rd St. About $200,000.

N. J., Irvington—School—Until Feb. 1, by Bd. Educ., altering School No. 6, Madison Ave. About $60,000.

N. J., West New York—School—Until Jan. 29, by Bd. Educ., building addition to P. S. No. 6. About $50,000.

Pa., Phila.—Fire and Police Stations—Until Jan. 28, by W. Wilson, dir. dept. public safety, building and completing fire and police stations, boiler house and stable at east side of 24th St., between Ritner and Wolf Sts. P. H. Johnson, 728 Presser Bldg., 1713 Sansom St., archt.

O., Norwood—School—Until Feb. 24, by Bd. Educ. and H. Hake, archt., Telephone Bldg. Cincinnati, building 2 story, 80 x 139 ft. on Allison St. here. About $150,000.

Ind., Rockport—Court House—Until Mar. 3, by Comrs. Spencer Co. building 2 story, 105 x 112 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation. About $175,000. E. E. Dunlap, 910 State Life Bldg., Indianapolis, archt. Noted May 2.

Mich., Detroit—Mercantile—Until Jan. 24, by Smith, Hinchman & Grylls, archts., 710 Washington Arcade, altering 6 story brick, rein.-con. and steel, rein.-con. flooring on Woodward Ave., for Lewin-Neiman Co., 183-5 Woodward Ave. About $125,000.

Mich., Portland—High School—Until Feb. 5, by C. L. Crane, secy. Bd. Educ., building 2 story, 74 x 140 ft. brick and rein.-con., rein.-con. flooring and concrete foundation. About $100,000. T. E. White, 312 City Natl. Bank Bldg., Lansing, archt. Noted Nov. 28.

Minn., Duluth—School—Until Mar. 1, by Bd. Educ. building 3 story, rein.-con., brick and steel, rein.-con. flooring, concrete and rock foundation on 5th Ave., E. About $60,000. Croft & Boerner, 1201 Fidelity Bldg., archts.

Kan., Hillsboro—College—Until Jan. 27, by Tabor College building 3 story, 90 x 160 ft. brick and stone, rein.-con. foundation. About $100,000. W. Mampe, 559 Sheidley Bldg., Kansas City, Mo., archt. Noted Sept. 19.

Kan., Leavenworth—Community—Until Feb. 3, by Bd. Educ. building 2 story, 96 x 130 ft. brick. About $90,000. T. W. Williamson & Co., 418 Central Bank Bldg., Topeka, archts. Noted Oct. 24.

Buildings (Continued)

Wyo., Lusk—Court House—Until Feb. 11, by Comrs. Niobrara Co., building court house. Cost between $60,000 and $75,000. G. E. McDonald, Kimball Bldg., Casper, archt. Noted June 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Lowell**—Bank—Merrimac River Savings Bank, William and Central Sts., let contract for altering and building addition to 3 story, 100 x 150 ft. brick and steel, to Hoggson Bros., 485 5th Ave., New York City. About $50,000.

N. Y., Sonyea—Kitchen—F. L. Lang, pres. bd. mgrs., Craig Colony for Epileptics, received bids Jan. 14, building 1 story, 42 x 114 ft. and 42 x 80 ft., rein.-con., steel and brick, rein.-con. flooring, concrete foundation, from C. A. Foote, Mt. Morris, $48,100; A. E. Stephens Co., Springfield, Mass., $49,330; Curran Swartout & Co., Inc., Rochester, $51,000. Noted Jan. 9, under "Miscellaneous."

★**N. Y., Thiells**—Attendants' Home, etc. —L. F. Pilcher, state archt., Albany, let general contract completing 2-story, 38 x 39 ft. attendants' home, and 1-story, 64 x 83 ft., service building, steel frame with stone exterior, stone foundation, to P. Keeler Bldg. Co., 425 Orange St., $68,850; plumbing, to A. J. Eckert Co., 103 North Lake Ave., $16,990; both contractors of Albany.

N. J., Linden—School—Bd. Educ. received lowest bid building addition to P. S. No. 2, from A. N. Crone, 37 Sherman Pl., Jersey City, $54,897.

★**Pa., Hamburg** — Sanatorium — B. F. Royer, comr. of health, let contract building four 1 story buildings and two 2 story buildings concrete, at Hamburg Sanatorium for Tuberculosis, to E. Fay & Sons, 2 South Mole St., Phila. About $343,800.

★**Md., Baltimore**—Office and Store—Pub. Serv. Bldg. Co., Lexington St. Bldg., let contract building 21 story, steel and terra cotta, rein.-con. flooring, on Lexington and Liberty Sts., to Cogswell-Koether Co., 406 Park Ave. About $50,000.

★**Kan., Pratt**—School—Bd. Educ. let contract building 3 story, 86 x 200 ft. brick and rein.-con. school, to W. Foley, Dodge City, $157,087. Noted Jan. 9.

Ariz., Ajo—School—Trustees Arizona School Dist. No. 15 received lowest bid building 2 story hollow tile, rein.-con. flooring, from Edwards & Wildey Co., Black Bldg., Los Angeles, Cal., $129,000. Noted Jan. 16.

★**Cal., San Jose**—Store—A. Hart will build 5 story, 100 x 100 ft., rein.-con., rein.-con flooring, concrete foundation, on Santa Clara and Market Sts. Work will be done by day labor.

Federal Government Work

PROPOSED WORK

Mass., Chatham — Dredging — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging at Naval Air Sta.; Spec. 3774. About $40,000.

Mass., Hingham—Public Works Office—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3765. About $32,000.

R. I., Newport—Torpedo Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3767, About $250,000.

Conn., Greenwich—Harbor Improvements —Rivers & Harbors Comn., Wash., D. C., plans to improve harbor here. About $35,000. Plans include dredging and repairing breakwater, channel, etc.

N. Y., Montauk—Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to complete certain building at Naval Air Sta., Spec. 3768.

N. Y., Rockaway—Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to complete certain building at Naval Air Sta., Spec. 3768.

Pa., Phila.—Crane Runway—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build addition to crane runway at shipbuildings slips Nos. 2 and 3; Spec. 3769. About $125,000.

Pa., Phila.—Fence and Shelter Terminal Station—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans to build; Spec. 3771. Bids will be received at Navy Yard here.

D. C., Wash.—Reclamation—U. S. Government appropriated $100,000,000 to irrigate, drain and develop swamp, arid waste and undeveloped lands to provide employment and farms with improvements and equipment for honorably discharged soldiers, sailors and marines. Work will be in charge of Dept. of Interior.

Va., Norfolk—Galvanizing Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Navy Yard; Spec. 3772. About $110,000.

S. C., Charleston—Quay Wall—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3773. About $300,000.

Mo., Jefferson City — Bank Revetment, etc.—U. S. Eng. Office, Kansas City, plans to build 6000 lin. ft. concrete bank revetment and willow mattress. About $72,000. Work involves 80,000 cu. yd. dry earth excav. by hydraulic grader, 6000 cu. yd. gravel, 6000 bbl. Portland cement, 240,000 lin. ft. ⅜ in. galvanized strand, 3000 cords willow brush, etc. W. Young, engr.

Colo., Durango—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 9. Work will be readvertised. Noted Jan. 16.

Ore., Salem—Harbor and River Improvements—House Representatives, Wash., D. C., voted and adopted report of Harbor and River Impvts. Com. for work at Coos Bay, cost, $130,000; Yaquima Bay, $100,000; Coquille Harbor, $64,000; Clatskanie River, $2000; Columbia and Willamette Rivers below Portland and Vancouver, $454,000; Columbia River Bar, $130,000; Upper Willamette River, $27,000.

Cal., San Diego — Barracks — Bureau Yards & Docks, Navy Dept., Wash., D. C., receives bids in February, building 7 rein.-con. and hollow tile barracks, concrete flooring and foundation, consisting of barracks A, 2 story, 42 x 319 ft., with 1 story, 41 x 66 ft. dormitory wings, 1 story, 29 x 43 ft. kitchen wing, barrack C, 154 x 182 ft., ell shaped, with 41 x 82 ft. and 41 x 73 ft. dormitory wings, 14 ft. connecting arcade, etc. About $1,000,000. Noted Jan. 2.

Cal., Santa Rosa—Sewer and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install; Spec. 3770. About $16,000.

BIDS DESIRED

Pa., Phila—Emergency Hospital — Until Feb. 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building various 2 story tile block, stucco finished additions to emergency hospital at Grays Ferry Rd. About $500,000. Plans include 1 subsistence building including passage ways to typical wards Nos. 1 and 2, 1 nurses' quarters, 1 sick officers' quarters, 1 observation ward including passage way to Ward No. 2, 1 garage, stable and chauffeur's quarters, 1 greenhouse, removal of certain buildings and portions of buildings and altering buildings partially removed. Noted Nov. 28.

D. C., Wash.—Laboratory—Until Feb. 1 by U. S. Constr. Quartermaster, War College, Wash. Barracks, building brick laboratory.

Va., Norfolk—Dredging, etc.—Until Feb. 21, by U. S. Eng. Office, Norfolk, dredging anchorage and 40 ft. channel; also building bulkhead; advertised in this issue.

Fla., Crestview—Road—Until Jan. 30, by J. T. Bullen, dist. engr., bureau pub. rds., U. S. Dept. Agriculture, 917 Bell Bldg., Montgomery, Ala., clearing, grubbing, grading and surfacing with sand clay, also building timber bridges and culverts, on 27.92 mi. Crestview-Camp Walton Rd., Natl. Forest Rd. Project. Noted Nov. 28.

Tex., Ft. Worth—Elevator, etc.—Until Feb. 12, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing electric passenger elevator in post office and court house here; advertised in this issue.

Tex., Sabine Pass—Jetty Work—Until Feb. 25, by U. S. Eng. Office, Dallas, for jetty work here; advertised in this issue.

Colo., Denver—Portland Cement—Until Feb. 10, by U. S. Recl. Serv., Tramway Bldg., Denver, furnishing 50,000 bbl. Portland cement f.o.b. cars at works of bidder; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Southbridge—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 14, (1) limestone (2) sandstone, from L. Rockford & Son, Worcester, (1) $87,800 (2) $89,000; C. M. Leach, P. O. Box 2285, Boston, (1) $93,333; J. A. Munroe, 159 Washington St., North Attleboro, (1) $93,395 (2) $96,395. Noted Dec. 5.

Mass., Winchester—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 16, (1) limestone, (2) sandstone, from J. E. Nelson Co., Boston, (1) $69,942; M. I. O'Connor, Northampton, (1) $74,400, (2) $75,200; C. M. Leach, Boston, (1) $74,445. Noted Dec. 5.

R. I., Newport—Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 20, building 2 story double quarters for officers at U. S. Naval Training Sta. (work complete), from J. Meltzer, 31 Beach St., Boston, Mass., $21,798 (60 days); T. F. Keeher, Wights Wharf, $25,658 (128 days); H. S. Roberts & Co., 1123 Bway., New York City, $26,900 (60 days). Noted Jan. 16.

★**N. Y., Brooklyn**—Extension "A" to Power Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Franco-Amer. Constr. Co., 150 Nassau St., New York City, $88,881 (150 days). Noted Jan. 9.

N. Y., Buffalo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 17, from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $62,878; C. Weitz, 713 Mulberry St., Des Moines, Ia., $67,490; J. H. Weiss, City Natl. Bank Bldg., Omaha, Neb., $74,600.

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 17, (1) limestone (2) sandstone, from C. P. Boland, 30 4th St., Troy, (informal bid) $97,400; E. Diebitsch, 383 Madison Ave., New York City, (1) $99,721 (2) $101,000; A. Panzieri Co., 50 Beaver St., Albany, (1) $115,000 (2) $116,000. Noted Dec. 5.

N. Y., Long Island—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 15, (1) limestone (2) sandstone, from Connor Bros. Co., New York City, (1) $229,450 (2) $233,000; E. Diebitsch, 383 Madison Ave., New York City, (1) $233,000 (2) $234,000; T. H. McHale, Cahill Bldg., Syracuse, (1) $234,000 (2) $234,900. Noted Dec. 5.

N. Y., Oswego—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 20, (1) limestone, (2) sandstone, from A. E. Badgley, Stone Opera House Bldg., Binghamton, (1) $49,787, (2) $50,787; H. P. Van Ness, Oswego, (1) $56,872, (2) $56,872; Schaefer Constr. Co., Peoples Trust Bldg., Binghamton, (1) $57,370, (2) $57,796. Noted Dec. 5.

N. Y., Rockaway—Heating System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 20, installing heating systems in hangars C, D and E, consisting of complete heating systems, 1 story wood frame addition, concrete foundations and flooring, to each hangar (work complete), at Naval Air Sta., from Austin Heating Corp., 121 West 42nd St., New York City, $25,745 (time as specified); Amer. Fdry. & Furnace Co., 1008 Mutual Bldg., Richmond Va., $25,315 (90 days); Gillis & Gehagen, 537 West Bway, New York City, $25,936 ([illegible] days). Noted Jan. 9.

★**N. J., New Brunswick**—Barracks, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building barracks and sewage disposal plant here to H. S. Roberts & Co., 1122 Bway., New York City, $8441.

Pa., Franklin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 17, (1) limestone (2) sandstone, from W. J. Brent, 506 Bd. Trade Bldg., Norfolk, Va., (1) $96,373 (2) $94,972; Westchester Eng. Co., 116 Main St., White Plains, N. Y., & (1) $99,670 (2) $100,870; Willis Ludwick Co., 34 South 17th St., Phila., (1) $117,700 (2) $121,000. Noted Dec. 5.

Pa., McKees Rocks—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 14 (work complete) using limestone, from Inland Constr. Co., Detroit, Mich., $75,626; C. S. Smith, 5501 Center Ave., Pittsburgh, $77,800; Wills Ludwick, 34 South 17th St., Phila., $78,980. Noted Dec. 5.

Pa., Sunbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 20, (1) limestone, (2) sandstone, from A. E. Badgley, Stone Opera House, Binghamton, N. Y., (1) $85,367; Westchester Eng. Co., 116 Main St., White Plains, N. Y., (1) $90,444; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, Va., (1) $91,148, (2) $91,848. Noted Dec. 5.

Federal Government Work (Continued)

Md., Indianhead—Additional Buildings, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 20, for brick and steel press house, accumulator house Nos. 1 and 2, machine shop extension, etc., concrete foundation, at Naval Proving Ground, (1) price and time, work complete, (2) unit price per cu.yd. concrete, for foundations in addition to or less than amount shown in drawings; price shall include excavating, filling, backfilling and concrete work, from Levering & Garrigues Co., 552 West 23rd St., New York City, (1) $74,895 (175 days), (2) add $17 deduct $14; Austin Co., 1406 G St., Wash., D. C., (1) $97,495 (150 days), (2) $15 per cu. yd.; Boyle Robertson Constr. Co., 601 Evans Bldg., Wash., D. C., (1) $110,981 (170 days), (2) add $20 deduct $16.50. Noted Jan. 16.

★D. C., Wash.—Cranes—Bureau Yards & Docks, Navy Dept., let contract installing two 20 ton electric traveling cranes in tool shop and miscellaneous shop at Navy Yard, here, to Toledo Bridge & Crane Co., Dorr St. and Lake Shore R.R., Toledo, O., $24,000 (120 days). Noted Jan. 9.

D. C., Wash.—Hygienic Laboratory—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 14, building laboratory as follows; labor, from Boyle Robertson Constr. Co., Evans Bldg., $94,870; Natl. Contg. & Eng. Co., Wash., $96,422; J. L. Parsons, Jr., Southern Bldg., $114,234; sand and gravel, from Tidewater Portland Cement Co., Calvert Bldg., Baltimore, Md., $8673; Columbia Granite & Dredging Co., 3036 K St., N. W., sand, $1.14 per ton, broken stone, different sizes, $1.60, $2.25 and $3.40 per ton; roofing materials, from Ehret Roofing & Mfg. Co., 116 2nd St., N. W., pitch, $20 per ton and creosote oil, $.40 per gal.; Barrett Co., 36th St. and Grays Ferry Rd., Phila., coal tar pitch, $30 per ton, creosote oil, $.43½ per gal.; mill work, from Lafayette Mill & Lumber Co., Lafayette Ave. and Phila., Baltimore & Washington R.R., Baltimore, Md., $10,826; T. W. Smith Lumber Co., 1st and Indiana Sts., $10,965; Washington Wood Working Co., 200 12th St., N. W., $11,362; asphalt roofing materials, etc., from Warren Chemical & Mfg. Co., 17 Battery Pl., New York City, $46.16 per ton; Barber Asphalt Paving Co., 30th and Race Sts., Phila., $81.50 per ton for felt roofing, $46.58 for asphalt, $1.50 per square for 2 ply prepared roofing and $1.80 per square for 3 ply prepared roofing; brick, from Asher Fireproofing Co., Southern Bldg., $23,189. Noted Jan. 2.

D. C., Wash.—Sewers—Dist. Comrs., Dist. Bldg., received bids Jan. 14, building sewer involving 140 lin.ft. 7 x 7 ft. concrete sewer and 1065 lin.ft. 6 x 6 ft. concrete sewer (a) excav., (b) concrete masonry E, (c) sewer brick masonry, from G. Hyman, 2209 F St., N. W., (a) $4, (b) $12, (c) $20; Continental Contg. Co., 66 Knickerbocker Bldg., Baltimore, Md., (a) $5.25, (b) $16, (c) $32; Aiello Constr. Co., 2701 Clairmont St., Baltimore, Md., (a) $4.25, (b) $13, (c) $35. Noted Jan. 9.

★Va., Hampton Roads—Fence and Gates—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Training Sta., to Cyclone Fence Co., Woodward Bldg., Wash., D. C., $32,563 (90 days). Noted Dec. 5.

Va., Hampton Roads—Oil Storage and Reclaim Buildings, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan 20, building oil storage and reclaim building and photographic laboratory, wood frame, rein.-con. flooring and foundation, at Naval Air Sta. (work complete), from H. S. Roberts & Co., 1123 Bway., New York City, $21,900 (90 days); Newport Contg. & Eng. Co., Law Bldg., Newport News, $25,500 (90 days); Harwood & Moss, 307 Law Bldg., Newport News, $26,566 (90 days). Noted Jan. 9.

★Va., Norfolk—Radio Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing 2 radio buildings, to R. R. Richardson, Bank of Commerce Bldg., $48,950 (100 days).

Va., Portsmouth—Altering Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 15, from W. Grohne Co., Joliet, Ill., $2740 (90 days); W. MacDonald Constr. Co., St. Louis, Mo. $3294 (100 days); F. M. Weakly, Portsmouth, $3325 (60 days). Noted Dec. 26.

★Miss., Gulfport—Toilet and Laboratory—Local Navy Yard let contract building here, to Cherrelly & Fursden, Gulfport, $3500 (30 days). Noted Jan. 16.

★O., Columbus—Storage Buildings—Constr. Div., War Dept., Wash., D. C., let contract building 145 one story, 65 x 100 ft. storage buildings, rein.-con., steel and brick, to Hunkin Conkey Co., 601 Century Bldg., Cleveland. About $1,500,000.

O., Kenton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 15, (1) limestone (2) sandstone, from Pratt Unkefer Co., Minerva, (1) $85,800 (2) $86,600; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., (1) $92,200; Krahl Constr. Co., 350 North Clark St., Chicago, (1) $94,990 (2) $84,593. Noted Dec. 5.

Ind., Shelbyville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 20 (work complete using limestone), from Dunlap & Co., Columbus, $57,198; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $58,800; H. G. Mitchell, Scottsburg, $59,300. Noted Dec. 26.

Ill., Decatur—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 20 (work complete using limestone), from S. A. Plato, Marion, Ind., $55,370; A. Blair, 11 South Lawrence St., Montgomery, Ala., $55,750; **W. D. Lovell,** 1415 Southeast 8th St., Minneapolis, Minn., $58,188.

Ia., Cherokee—Post Office—J. A. Wetmore, superv. archt., treas. dept. Wash., D. C., received bids Jan. 14, (work complete) using limestone, from J. H. Wiese, City Natl. Bank Bldg., Omaha, Neb., $63,250; C. Weitz Sons, 713 Mulberry St., Des Moines, $67,727; E. A. Steininger Constr. Co., Victoria Bldg., St. Louis, Mo., $70,867. Noted Dec. 5.

Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids, Jan. 16, (limestone) from Northern Constr. Co., Milwaukee. Wis., $62,779; W. D. Lovell, 1415 South East 8th St., $66,800; Michie Constr. Co., Milwaukee, Wis., $66,890. Noted Dec. 5.

S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt., treas. dept. Wash., D. C., received bids Jan. 15, (1) limestone (2) sandstone, from C. E. Goodhand, Chadron, Neb., (1) $67,650; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., (1) $69,800 (2) $70,800; W. O'Neil & Son, Faribault, Minn., (1) $71,439. Noted Dec. 5.

Mo., Harrisonville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 20 (limestone), from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $62,800; C. Weitz, 713 Mulberry St., Des Moines, Ia., $69,921. Noted Dec. 5.

★Tex., Galveston—Shops and Industrial Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Air Sta., to Horton & Horton, McKing and Velasco Sts., Houston, $148,900 (180 days). Noted Jan. 9.

Okla., Shawnee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids, Jan. 16, (limestone), from C. E. Goodhand, Chadron, Neb., $112,750; Algernon Blair, 11 South Lawrence St., Montgomery, Ala., $122,956; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $125,685. Noted Dec. 5

Cal., Inglewood—Cottages and Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building 2 double cottages and one 4 room cottage; also sewer system to connect with Los Angeles city sewer, from Darrell-Condley Co., 520 March Strong Bldg., San Francisco, $19,795 (60 days) deduct $1475 if commercial plumbing fixtures are used; Walker-Slater Co., 2314 Santa Fe Ave., San Francisco, $24,500; Los Angeles Planing Mill, 1800 Industrial St., Los Angeles, $24,533 (50 days). Noted Jan. 9.

★Cal., Mare Island—(Vallejo P. O.)—Electric Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to K. E. Parker, 251 Kearney St., San Francisco, $110,363 (135 days). Noted Oct. 24.

Cal., San Diego—Additional Buildings—Local Navy Yard received bids Jan. 13 constructing 9 additional buildings at Naval Air Sta. (work complete), from Lange & Bergstrom, Sharon Bldg., $431,180 (180 days); Clinton Constr. Co., 357 Pine St., $448,490 (200 days); Kier Constr. Co., $474,653 (230 days); all contractors of San Francisco. These bids lower than those opened at same time at Wash., D. C. See issue of Jan. 16.

Miscellaneous

PROPOSED WORK

Bank Protection—Arlington, Mass.—(Middlesex P. O.)—A. Bitzer, representative, applied to State Legislature for appropriation of $25,000 to protect banks of Mystic Lake between Arlington, Winchester and Medford Twps. Metropolitan Park Comn. favors appropriation.

Bulkhead—Boston, Mass.—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $137,000 to build bulkhead from East Boston to Governors Island, Boston Harbor.

Pier—Boston, Mass.—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $260,000 to complete Pier 1 at East Boston.

River and Harbor Improvements—Boston, Mass.—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $750,000 to develop, improve and protect rivers, harbors, tidewaters, etc. in state.

Tunnel—Boston, Mass.—Comn. Waterways & Pub. Lands applied to State Legislature for appropriation of $50,000 to make surveys and prepare plans estimating cost of building tunnel from South to East Boston under Boston Harbor.

Wharf—Boston, Mass.—Comn. Waterways & Pub. Lands applied to State Legislature for $420,000 appropriation to build wharf along bulkhead at East Boston.

Tunnel—New Britain, Conn.—City plans to build 4750 lin.ft. tunnel, involving 300 lin.ft. earth excav. and 4450 lin.ft. rock excav., for purpose of diverting about 4 sq.mi. of water of Burlington Brook into Whigville Brook above Whigville Reservoir. About $350,000. W. H. Hall, city engr.

Sand, etc.—New York, N. Y.—Dept. of Highways rejected all bids received Jan. 16, furnishing and delivering 40,000 gal. gasoline and 10,000 cu.yd. asphalt wearing surface sand, grade "B." Noted Jan. 9.

Sand—New York, N. Y.—H. Bruckner, pres. Bronx Boro., received no bids Jan. 16, furnishing and delivering 5000 cu.yd. asphalt wearing surface sand. Noted Jan. 9.

Structural Steel—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., rejected all bids received Jan. 7, supplying and erecting structural steel for Sect. 6, Route 8 of 14th St.-Eastern Dist. Rapid Transit R. R. Work will be readvertised. Noted Jan. 16.

Eliminating Grade Crossings—Syracuse, N. Y.—New York Central R.R., Grand Central Terminal, New York City, had surveys made and plans prepared for eliminating grade crossings on lines of West Shore R.R. and New York Central R. R. as they pass through city, by use of Old Erie and Oswego Canal beds. Route will be from eastern part of city to North Salina St. thence to west. G W. Kittredge, New York City, ch. engr.

Canal—Trenton, N. J.—W. E. Edge, governor, will ask Legislature to appropriate $1,000,000 for right of way for proposed ship canal from Bordentown to Perth Amboy. When right of way is assured Government will obtain congressional appropriation for waterway to complete inland route between Phila. and New York.

Pier—Baltimore, Md.—Standard Oil Co., Pier No. 2, Pratt and Commerce Sts., plans to rebuild and improve piers, 150 ft. long, concrete pile construction, 3rd and O'Donnell Sts. About $100,000.

Lagoons — Riverside, O. — North End Impvt. Assn plans to reclaim 30 acres adjoining Riverside Park now covered with water and build system of lagoons; also dredge bay to allow entrance of boats with 10 ft. draft. This is preliminary work in connection with improvement of Riverside Park. W. Hall, pres.

Electric Lighting Equipment—Kinde, Mich.—Village voted $10,000 bonds to purchase and install electric lighting equipment.

Lighting Systems—Lansing, Mich.—City authorized $25,000 bonds for purchasing and installing extensions to present boulevard lighting systems. J. A. Parsons, city clk.

Recreation Center, etc.—Chicago, Ill.—Comr. Pub. Wks., 406 City Hall, receives bids in spring building recreation center and bathing beach on 75th St. Project includes 1 and 2 story rein.-con. social center building to contain gymnasium, winter pool, etc. About $650,000. C. W. Kallal, City Hall, archt.

Miscellaneous (Continued)

Pipe Line—Woodriver, Ill.—See "Industrial Works."

Grand Stand—West Allis, Wis.—Wisconsin Dept. Agriculture, Madison, plans to build rein.-con. addition to grand stand at State Fair Park. About $100,000. C. P. Norgord, Madison, comr.

Pipe Line—Dallas. Tex.—Lone Star Gas Co. plans to build pipe line from west Texas gas fields to point between Dallas and Ft. Worth. About $4,000,000.

Penstock, etc.—Helper, Utah—City plans to rebuild penstock and intake works for hydroelectric plant recently destroyed by flood. About $10,000.

Wharf, etc.—Seattle, Wash.—See "Industrial Works."

Dry Dock—Portland, Ore.—Dock Comn. appointed H. Burgard and F. C. Knapp to arrange for site to build 12,000 ton timber dry dock on property of St. John's Municipal Terminal. About $900,000 will be expended for project. J. B. Hegardt, care of Dock Com., engr.

Transmission Line—El Centro, Cal.—Southern Sierras Power Co., Riverside, soon receives bids building 30 mi. line between here and Calexico. About $35,000. A. B. West, Riverside, genl. mgr.

Power Development, etc.—Los Angeles, Cal.—Southern California Edison Co., 301 South Bway., plans to expend $20,000,000 to develop 150,000 additional horse power in hydro-electric plants, building transmission and distribution lines throughout southern California. W. Dennis, ch. engr.

Subway, etc.—Los Angeles, Cal.—Historical Society of Southwest, Ave. 46 and Marmion Way, having plans prepared by Hunt & Burns, archts., 701 Laughlin Bldg., for 100 ft. concrete subway, 75 ft. concrete elevator shaft and elevator at Southwest Museum. About $30,000.

Garbage Incinerator—Sacramento. Cal.—City election Apr. 30, to vote on $143,000 bonds to build garbage incinerator. F. C. Miller, city engr.

Wharf and Warehouse—Sacramento, Cal.—City election Apr. 30, to vote on $160,000 bonds to build rein.-con. wharf and warehouse. F. C. Miller, city engr.

BIDS DESIRED

Additional Window Guards—Bedford Hills, N. Y.—Until Feb. 14, by W. G. Barrett, pres. bd. mgrs., New York State Reformatory for Women, Bedford Hills, building additional window guards for 2 cottages of farm group; advertised in this issue.

Boilers and Piping, etc.—Utica, N. Y.—Until Feb. 11, by State Hospital Comn., Albany, installing in power plant at Utica State Hospital. About $75,000. Noted Jan. 16.

Pier—Phila., Pa.—Until Feb. 14, by G. Webster, dir. dept. wharves, docks & ferries, 550 Bourse Bldg., for building with appurtenant work, Kenilworth St. Pier, No. 30 South Delaware. Advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Garbage Incinerator—Bridgeport, Conn.—C. C. Fischer & Co., Asylum St., will rebuild garbage plant recently destroyed by fire. Work will be done by day labor. About $35,000. Noted Jan. 9.

Cement, Sand, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro., received bids Jan. 16, furnishing and delivering 750 tons asphaltic cement, from Warner Quinlan Asphalt Co., 79 Wall St., $16,853; Standard Oil Co., 26 Bway., $23,250; Texas Co., 17 Battery Pl., $29,933; 25 tons of paving pitch, from Barrett Co., 17 Battery Pl., $500; 800 tons limestone dust or other suitable inorganic dust, from R. M. Soper, 39 Cortland St., $7760; New York Trap Rock Corp., 101 Park Ave., $7800; 9500 cu.yd. sand grits, from Amer. Bldg. Material Co., Kingsbridge ,$13,704; Willard Sand & Gravel Co., 110 East 23rd St., $16,625; 2000 bags binder stone, from New York Trap Rock Corp., 101 Park Ave., $5200; C. Tompkins, 30 Church St., $4700; 2000 bags Portland cement, from J. A. McCarthy & Bros., 551 Exterior St., $1750; J. P. Duffy Co., 207 East 138th St., $1780; G. B. Raymond, 293 Borden Ave., Long Island City, $1790; 4500 cu.yd. 1½ in. broken trap rock stone and 2000 cu.yd. broken trap rock stone screenings, from New York Trap Rock Corp., 101 Park Ave., $17,420; New Haven Trap Rock Corp., 17 Battery Pl., $19,475; Lanigan Bros. Inc., Bronx River and 165th St., $21,125; 10,000 gal. bituminous road surfacing material, from Barrett Co., 17 Battery Pl., $2000; 150,000 gal. tar road oil, from B arrett Co., 17 Battery Pl., $19,500; 250,000 gal. asphalt road oil, from Atlantic Refinery Co., 3144 Passyunk St., Phila., Pa., $18,500; Warner Quinlan Co., 79 Wall St., $19,800; Standard Oil Co., 26 Bway., $26,625. Noted Jan. 9.

★Portland Cement, Asphalt, etc.—New York, N. Y.—Dept. of Highways let contract furnishing and delivering 200,000 gal. refined asphalt to Warner Quinlan Co., 79 Wall St., $14,640; 10,000 bags Portland cement, to J. A. McCarthy, 651 Exterior St., $8500; 1500 tons limestone dust and 2500 cu.yd. binder stone, to New York Trap Rock Co., 101 Park Ave., $10,650 and $4750 respectively; 300,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $14,391. Noted Jan. 9.

Heating, Plumbing, etc.—Sonyea, N. Y.—P. L. Lang, pres. bd. mgrs., Craig-Colony for Epileptics, received bids Jan. 14, installing heating system in dining room and kitchen buildings, from E. Towe, 32 Oak St., Rochester, $7200; Austin Heating Co., New York City, $8875; Murtaugh & Reddington, 26 Pleasant St., Rochester, $8987; sanitary work, from Howe & Bassett, 23 Stillson St., Rochester, $13,590; G. E. Eng. Co., 417 Canal St., New York City, $13,628; J. J. Kenney Co., 236 West 20th St., New York City, $14,000. Noted Jan. 9.

Sand, etc.—Jersey City, N. J.—Dept. Parks & Pub. Impvts. received bids furnishing and delivering sand, lime, cement, etc., from F. Hall Co., Henderson St., Washburn Bros., foot Jersey Ave., and Eng. Supply & Erection Co., 22 Hudson St. Noted Dec. 26.

Electrical Appliances—Portland, Ore.—Dock Comn. received bids, Dec. 30, installing at Pier No. 1, St. John's Terminal, from Natl. Electric Co., Ry. Exch. Bldg., $17,422; Jaggar-Sroufe Co., 103 West Park St., $20,190; Ne Page-McKenny & Co., 388 Burnside St., $20,612.

★Dam—Montreal, Que.—Quebec Streams Comn., 50 Notre Dame St. E., let contract building storage dam, to Laurentian Power Co., Beaupre. About $50,000. Noted May 2.

BARGE CANAL WORK—ALBANY, N. Y.

CONTRACT 197

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Jan. 14th, for drilling holes in sill of dam and toe of river wall of lock near Rotterdam, and making necessary repairs, Erie, Oswego and Champlain Canals, from (A) J. W. Holler, Ft. Edward; (B) Stewart Bros., 143 Bruce St., Schenectady; (C) American Pipe & Constr. Co., 112 North Broad St., Phila., Pa.; (D) Troy Public Works, Utica, $37,731. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
200 lin. ft. drilling 3-in. exploratory holes	$6.25	$7.00	$7.10
110 linft. drilling 8-in. filling holes shown on plans	12.00	14.00	14.50
Diverting dams (lump sum)	5,250.00	4,200.00	12,500.00
Contingent Items			
500 lin.ft. drilling 3-in. holes	4.00	4.50	4.50
300 lin.ft. drilling 8-in. filling holes not shown on plans	10.00	11.50	12.00
600 cu.yd. gravel	1.50	1.70	1.60
600 cu.yd. sand	2.75	3.20	2.60
2,600 bbl. Portland cement	3.40	3.20	3.20
600 cu.yd. mixing and placing concrete	2.75	3.20	3.00
400 cu.yd. mixing and placing grout	4.80	5.80	5.75
Extended totals	$27,780.00	$28,340.00	$36,305.00

CONTRACT 102

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Jan. 14th, for furnishing and installing two 3 ton electric semiportal revolving jib cranes on Pier 6, East River, New York City, from (A) E. F. Terry Mfg. Co., Grand Central Terminal, New York City (awarded contract).; (B) Lord Electric Co., 105 West 40th St., New York City; (C) Morrison & Davis, Salem, Mass.; (D) Wellman, Seaver, Morgan Co., Cleveland, Ohio, $55,762; (E) Heyl & Peterson, Inc., 51 Water St., Pittsburgh, Pa., $68,431. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
84,000 lb. structural steel	$0.09	$0.12	$0.12
61,000 lb. machinery	.29	.33	.35
690 sq.ft. galvanized steel plate	.70	.65	.60
0.3 M.ft.b.m. sawed lumber	100.00	110.00	100.00
330 sq.ft. asbestos lumber	.50	.65	.60
5 cu.yd. concrete	25.00	28.00	25.00
157 sq.ft. solid metal windows	1.00	1.05	1.00
67 sq.ft. steel doors	3.00	4.25	4.00
400 sq.ft. ceiling board	.30	.32	.30
2,600 lb. metal duct	.25	.32	.30
2 electrical equipments	6,700.00	8,350.00	9,000.00
2 miscellaneous accessories	200.00	255.00	235.00
2 acceptance tests	50.00	50.00	50.00
Extended totals	$41,081.00	$49,766.00	$52,092.00

CONTRACT T

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Jan. 14th, for extending core wall and other work at north end of Dam No. 2, Seneca Falls, Cayuga and Seneca Canals, from (A) Kennedy & Scullen Constr. Co., Cohoes; (B) Mohawk Dock & Dredge Co., Inc., Herkimer; (C) Charles Kiehm, 26 Gardner Bldg., Utica; (D) Bronk & Kimmey, Hudson Falls, $25,915; (E) J. A. Laporte, Box 28A, Albany, $27,317; (F) Scott Bros., Rome, $28,000; (G) Acker Drilling Co., Scranton, Pa., $32,514. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
870 cu.yd. excavation	$2.25	$2.00	$2.25
740 cu.yd. backfill	.50	.50	.40
21.4 M.ft.b.m. sheeting and bracing	95.00	50.00	95.00
120 cu.yd. 2nd-class concrete	14.50	15.00	14.40
Contingent Items			
900 cu.yd. excavation	2.00	2.00	2.00
760 cu.yd. backfill	.50	.50	.40
26 M.ft.b.m. sheeting and bracing	95.00	50.00	95.00
150 cu.yd. 2nd-class concrete	14.50	15.00	14.40
1 Furnishing, installing and removing plant for drilling and grouting (lump sum)	1,200.00	2,000.00	1,200.00
1,900 lin.ft. drilling holes	3.00	3.60	3.60
500 bbl. Portland cement for grout	4.25	4.50	3.50
150 cu.yd. sand for grout	1.00	1.50	1.20
200 cu.yd. mixing and placing grout	1.00	1.50	1.20
Extended totals	$22,301.00	$72,325.00	$22,959.00

SEARCHLIGHT SECTION

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

Bids: Feb. 18 & 19.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, February 18, 1919, at which place and hour they will be publicly opened and read, for the improvement of the State canals as authorized by Chapter 147 of the Laws of 1903 and amendatory laws, and Chapter 391 of the Laws of 1909; and for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, as follows:

TERMINAL CONTRACT NO. 57

For constructing certain parts of an approach from Court Street and South Avenue to the Barge canal terminal at Rochester.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 69

For protecting the shore of Erie Basin between Lake Street and Slip No. 1, at Buffalo.

Contract plans, sheets 1 and 2.

TERMINAL CONTRACT NO. 107

For installing electric wiring, lighting, power and battery charging equipment for the canal terminal at Erie Basin, Buffalo.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 223

For constructing a Barge canal terminal freight-shed at Greenpoint, Brooklyn, New York City.

Contract plans, sheets 1 to 11 inclusive.

And until twelve o'clock noon of Wednesday, February 19, 1919, for the following pieces of work:

CONTRACT NO. 200
Erie Canal—Sections 9 and 10

For driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

CONTRACT NO. 201
Erie Canal—Section 9

For completing the concrete prism lining at Cartersville and constructing a stream entrance near Knapp's bridge.

Sheets 1 to 3 inclusive.

CONTRACT Q

Cayuga and Seneca Canal—Section 1

For constructing pile dolphins for aids to navigation on Cayuga and Seneca lakes.

Sheets 1 to 5 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at the office of the State Engineer and Surveyor.

PROPOSALS

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20%) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

PROPOSALS

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

January 15, 1919.

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

Water-works **(Continued)**

Minn., St. Paul—City plans to build water main from Cayuga and Mississippi Sts. to Bway. and Grove St. About $65,000. H. W. Austin, purch. agt. O. Claussen, city engr.

Kan., Topeka—City plans election in fall to vote on from $150,000 to $200,000 bonds to build city well north of river with pipe line across brick yard bridge and to city water plant, as an emergency measure until permanent improvements are completed.

Wyo., Casper—City plans election in fall to vote on $1,500,000 bond issue to build new water-works system, to include reservoir and distribution system. M. B. Wheeler, city engr.

Mont., Hardin—City plans to extend water works system to Highland Park addition. About $30,000. E. C. Flickinger, city engr.

Mont., Whitefish—City having plans prepared by W. K. Trippett, Whitefish, for storage reservoir with 400,000 gal. capacity. Bonds for $22,000 voted for project. Noted Jan. 2.

Mo., Kansas City—Fire & Water Bd. purchased 8½ acre site on 75th and Holmes Sts., and plans to build 10,000,000 gal. reservoir.

Mo., Macon—City plans to improve waterworks and electric lighting systems. About $45,000.

Ark., Ft. Smith—City plans to extend and improve waterworks system to include building weir in Poteau River and reservoir on Crowe Hill.

Tex., Cisco—City plans to improve water works system. About $50,000.

Tex., Houston—E. E. Sands, city engr., soon receives bids improving water-works system. Plans include 7 deep wells, pumps, motor and electric generators. About $160,000. Former bids rejected. Noted Dec. 26.

Tex., Vernon—City having plans prepared for increasing water supply and has instructed A. J. Robinson, city engr. to get estimates for concrete tank to increase capacity of water supply to 400,000 gal.

Tex., Waxahachie—See "Streets and Roads."

Okla., Carnegie—City election Feb. 5, to vote on $12,000 bonds to improve and extend waterworks.

Utah, Salt Lake City—City plans to build rein.-con. conduit and additional feeder mains from Parleys Canyon to north eastern section of city. About $500,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—City plans to develope water supply in Big Cottonwood Canyon to secure more water, also additional water rights. About $250,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—City plans to build additional reservoir in City Creek Canyon. About $100,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—See "Streets and Roads."

Ariz., Florence—City plans election to vote on $80,000 bonds for water supply system and electric light and power plant. Noted Dec. 19.

Cal., San Diego—City plans to build pipe line from Lower Otay reservoir, cost, $350,000; also repair conduit system. G. Cromwell, city engr.

Cal., San Leandro—City retained Olmstead & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, to prepare plans for complete water-works system.

Cal., Watts—Bd. Trustees considering plans to establish water-works system. J. C. Power, Watts, engr.

Ont., Brampton—Town plans to install filtration and sterilization plant. A. E. Davis, clk.

Ont., Sarnia—City voted $55,900 bonds to build water-works intake and $15,000 for water mains.

BIDS DESIRED

N. Y., Poughkeepsie—Until Feb. 11, by State Hospital Comn., Capitol, Albany, building intake crib in Hudson River thence to filters, installing new filter, changing water main and reservoir at Hudson River State Hospital here. About $40,000. Work involves 450 ft. 10 in. c.i. pipe and 450 ft. 1½ in. wrought iron pipe, etc. L. F. Pilcher, Albany, state archt.

N. J., Jersey City—Until Feb. 18 by City, building water mains under Hackensack and Passaic Rivers. About $250,000; advertised in this issue. Noted Dec. 19.

W. Va., Clarksburg—Until Feb. 28, by Water Bd., building addition of 3 m.g.d. capacity to existing mechanical filtration plant. S. G. Highland, sec'y and gen'l. mgr.; advertised in this issue.

Ind., East Chicago—Until Feb. 25, by C. L. Kirk, vice-pres., East Chicago & Indiana Harbor Water Co., c/o Indianapolis Water, 113 Monument Circle, Indianapolis, building water purification plant, consisting of chemical house, filter house, boiler house and pumping plant addition, sedimentation basins and filtered water reservoir, involving 16,000 cu.yd. excav. 6600 cu.yd. concrete, 2300 cu.yd. loam, furnished, 140 tons reinforcing steel, setting 218 tons c. i. pipe and 72 ton gate valves and sluice gates; advertised in this issue.

Mont., Cascade—Until Feb. 3, by city, building rein.-con. well, 14 x 14 ft. at top, 10 x 10 ft. bottom and 36 to 38 ft. deep, also 14 x 14 pumphouse. About $6000. H. P. Walters, Minot Bldg., Great Falls, engr.

Okla., Kingfisher—Until Feb. 3, by city for improving water-works. Bonds for $30,000 have been sold for project. Black & Veatch, 507 Interstate Bldg., Kansas City, Mo., engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★R. I., Newport—City let contract building reservoir, to Deverall, Spencer Co., Barrett Bldg., Baltimore, Md., $59,830.

★N. Y., Cohoes—City let contract building addition to pumping plant, to Alpha Electric Constr. Co., 102 Hamilton St., Albany. About $8000. Noted Dec. 19.

★La. Baton Rouge—Illinois Central R.R. Central Sta., Chicago, Ill., let contract building 1 story, 25 x 40 ft. filtration plant here with capacity of 25,000 gal. per hour, to Graver Tank Wks., 4809 Todd Ave., Chicago. About $18,000.

★Mo., Kansas City—See "Excavation & Dredging."

★Ont., Barriefield (Kingston P. O.)—Dominion Government, Ottawa, Ont., let contract for water supply and drainage system for temporary barracks, to Elliott Bros., 77 Princess St., Kingston. About $8980.

Sewers

PROPOSED WORK

Mass., Brockton—A. Bartlett, representative, petitioned State Legislature to authorize city to borrow $40,000 to extend surface drainage system.

N. Y., Central Islip—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $100,000 to build underground sewers, etc., $50,000 for changes in sewage disposal plant, at Central Islip State Hospital.

N. Y., Kings Park—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $14,000 to extend sewage disposal plant at Kings Park State Hospital.

N. Y., Ray Brook—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $25,000 to install new Imhoff system for sewage disposal at New York State Hospital for treatment of incipient tuberculosis.

N. Y., Rochester—City plans to build sewage disposal plant in 23rd ward near Rome, Watertown & Ogdensburg R.R. bridge, will also make surveys for one in Maplewood Dist. A. C. Poole, city engr.

N. Y., Thiells—Bd. Dirs. Letchworth Village applied to State Legislature, Albany, for appropriation of $20,000 to build addition to sewage disposal plant. F. Vanderlip, 7 Wall St., New York City, pres.

N. J., Elizabeth—City had plans prepared building syphon under river to carry sewage. About $25,000. T. E. Collins, city engr.

N. J., Phillipsburg—City plans to build sewerage purification plant. About $500,000. C. E. Tilton, city engr.

Pa., Pittsburgh—Dept. Pub. Wks. plans to expend $250,000 to build sewers during 1919. N. S. Sprague, ch. engr.

Ala., Sheffield—City receives bids about Mar. 15 building from 1½ to 2 mi. of 12-42 in. concrete or vitr. pipe storm sewers in various streets. R. A. Chapman, city engr. Noted Jan. 16.

O., Cleveland—City receives bids in spring building 30 mi. brick and concrete sewers in 50 streets. R. Hoffman, city engr.

O., St. Bernard—City plans to build vitr. pipe storm sewers. About $10,000. H. Nunlist, 1113 Taction Bldg., Cincinnati, engr.

Mich., Detroit—C. W. Hubbell, city engr., soon receives bids building 11,000 ft. trunk line sewer in Joy Rd.; 14,600 ft. Linwood Ave., 8000 ft. Dexter Blvd.; 3000 ft. Irwin Ave.; 3600 ft. Raymond Ave. and 5000 ft. Alter Rd., brick or concrete. Noted Jan. 2.

Ia., Cedar Rapids—City plans to build storm sewers in various streets. About $190,000. T. F. McCanley, engr.

N. D., Fargo—City having plans prepared building several miles of sewers. W. Stevenson, city engr.

Tex., Waxahachie—See "Streets and Roads."

Utah, Salt Lake City—City plans to build sanitary sewers in various sections of city; cost, $100,000; also storm sewers to cost $225,000. S. Q. Cannon, city engr.

Ariz., Flagstaff—City having plans prepared by Olmstead & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, Cal., for sewerage system here. Cost $100,000. Bonds for $30,000 have been sold and election will be held soon to vote on $70,000 additional bonds.

Cal., Watts—Bd. Trustees plans election soon to vote on bond issue to build complete sewerage system. J. C. Power, Watts, engr.

Ont., Dundas—Town voted $59,000 bonds to build trunk sewers. J. S. Fry, clk.

Ont., Ottawa—City plans to build south sewer extension. About $50,000. L. McLaren Hunter, engr.

BIDS DESIRED

N. Y., Syracuse—Until Feb. 6, by Syracuse Intercepting Sewer Bd., 104 City Hall, building Div. 3, 4 and 5 of Onondaga Creek impvt. and main intercepting sewer. Plans include 2 mi. creek improvement and 1.3 mi. intercepting sewer and involves 111,500 cu.yd. excav. and 18,000 cu.yd. concrete. H. J. Hamlin, secy.; advertised in this issue.

Mich., Ford (Wyandotte P. O.)—Until Feb. 6 by G. K. Molino, village clk., trenching, laying pipe and backfilling complete sewerage system involving 2022 ft. 24-33 in. concrete pipe, 49,663 ft. 8-22 in. vitr. pipe and 400 ft. 12 in. concrete outlet pipe to replace present outlet. About $150,000. M. L. Brown & Son, 824 Chamber of Commerce Bldg., Detroit, engrs. Noted Jan. 9.

Mo., St. Louis—Until Feb. 25, by Bd. Pub. Serv., building sewers and appurtenances in Oakland Ave. Sewer Dist. No. 2, involving 5715 lin.ft. 8-30 in. c.i., wrought iron, common brick pipe, 53,000 brick, 4830 cu.yd. earth trenching, 50 cu.yd. rock trenching, 28 manholes, 28 catch basins. About $17,000. W. W. Horner, city engr.

Mo., St. Louis—Until Feb. 25, by Bd. Pub. Serv. building sewer in Arloe Sewer Dist. No. 1, involving 14,895 lin.ft. 8-33 in. c.i., wrought iron, common brick pipe sewer, 126,000 bricks, 14,360 cu.yd. earth trenching, 250 cu.yd. rock trenching, 50 manholes and 47 catch basins, cost, $52,000; Arloe Sewer Dist. No. 2, involving 6055 lin.ft. 10-24 in. c.i., wrought iron common brick pipe sewer, 36,000 bricks 3400 cu.yd. earth trenching and 40 cu.yd. rock trenching, $17,000. W. W. Horner, city engr. Noted Aug. 1.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Que., Covefield (Quebec P. O.)—Dominion Government, Ottawa, Ont., let contract building sewerage and waterworks systems for temporary barracks here, to M. Lonergan, 1254 St. Valier St., Quebec. About $24,500.

Bridges

PROPOSED WORK

Mass., Boston—A. Kidder, representative, petitioned State Legislature to build memorial bridge over Charles River, from here to Cambridge.

R. I., Pawtucket—City had plans prepared by Haven & Doty, archts., 220 Devonshire St., Boston, Mass., for 3 span concrete arch bridge, 180 ft. long, 60 ft. wide, over Blackstone River on Exchange St., to replace iron bridge. About $100,000.

Conn., New Haven—City having plans prepared for 300 ft. bridge 25-30 ft. wide at Belle Dock on Forbes Ave., to replace old Tomlinson bridge. About $500,000. F. L. Ford, city engr.

Bridges (Continued)

N. Y., Waterport—Carlton Twp. plans election to vote on $30,000 bonds to build single span bridge over Oak Orchard Creek at site of dam of Western New York Utility Co. who will appropriate like amount.

N. J., Trenton—City plans to build 5 new stationary bridges over Delaware and Raritan canal, at Hermitage Ave., Prospect, Calhoun, Passaic and West Hanover Sts. About $200,000. A. Swan, city engr.

Pa., Pittsburgh—Dept. Pub. Wks. plans to expend $100,000 for building bridges during 1919. N. S. Sprague, ch. engr.

O., Sharonville — See "Miscellaneous," Cincinnati, O.

Wis., Black River Falls—Comrs. Jackson Co. having plans prepared by W. C. Buetow, div. engr., La Crosse, building 180 ft. concrete culvert, Irving Twp. Work involves 238 yd. concrete and 14 tons steel.

Wis., Ladysmith—See "Streets & Roads."

Wis., Manitowoc—City had plans prepared by L. K. Pitz city engr., for bascule bridge on 10th St., 21 ft. wide. About $95,000.

Wis., Milwaukee—City having plans prepared for bascule bridge on State St. About $250,000. D. McKeith, supt. dept. bridges and buildings.

Kan., Topeka—City receives bids in February building 190 ft. rein.-con., open spandrel, solid slab arch bridge over Shunganunga River on 8th St., 20 ft. roadway, 5 ft. sidewalks. W. E. Baldry, city engr.

Mont., Bigtimber—See "Streets & Roads."

Mo., Marshall—See "Streets and Roads."

Mo., St. Louis—Bd. Pub. Serv. soon receives bids building rein-con. bridge on Southwest Ave. About $33,000. Former bids rejected. L. R. Bowen, city engr. Noted Oct. 3.

Mo., St. Louis—City having plans prepared building bridge on 14th St. About $300,000. L. R. Bowen, city engr.

Utah, Salt Lake City—City plans to build 3 bridges over Jordan River and Surplus Canal. About $40,000. S. Q. Cannon, city engr.

Ont., Ottawa—Bd. Control having preliminary plans prepared for 450 ft. rein.-con. bridge 50 ft. wide, over Rideau River at foot of Rideau St. to replace Cummings bridge. A. F. McCallum, City Hall, engr.

Ont., Ottawa—Bd. Control receives bids in spring building, 400 ft. rein.-con. bridge, 55 ft. wide, consisting of 4 spans, over Rideau River on St. Patrick St. About $190,000. A. F. McCallum, City Hall, engr.

Sask., Outlook—Bd. Trade plans to build traffic bridge. About $500,000. H. O. Redden, pres.

B. C., Victoria—Provincial Government, Ottawa, Ont., plans to build bridge on Johnson St., here. About $200,000.

BIDS DESIRED

Ga., Oglethorpe—Until Feb. 11, by Comrs. Macon Co., building concrete and steel bridge over Flint River, between Oglethorpe and Montezuma Twps.

Kan., Oswego—Until Feb. 3, by Comrs. La Bette Co. building rein.con. highway bridges, involving 1792 lin.ft. 15 in., 606 lin.ft. 18 in., 498 lin.ft 24 in., and 48 lin.ft. 30 in. concrete pipe, 927.6 cu.yd. rein.-con. and 7.74 ton steel. About $40,000. W. J. King, co. engr.

Cal., Sacramento—See "Streets & Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Mass., Braintree—Comrs. Norfolk Co. (Dedham) let steel contract building Scherzer double leaf draw for highway over Monaticquot Creek, branch of Fore River, 64 ft. long, 50 ft. wide, to Boston Bridge Co., East Cambridge. About $53,000. Work involves 1850 cu. yd. rein.-con., 130 tons steel, 6600 ft. earth approach and fill, etc. Noted Apr. 11.

★Pa., Tionesta—State Comn., Harrisburg, let contract building concrete bridge across Tionesta Creek here, to Whittaker & Diehl, Union Trust Bldg., Harrisburg. About $64,965.

★Minn., Warren—Marshall Co. let contract building 5 steel bridges, 1 rein.-con. culvert and 15 wooden bridges, to Minneapolis Bridge Co., 1035 Metropolitan Life Bldg., Minneapolis.

★Mont., Bozeman—Comrs. Gallatin Co. let contract building Red Bridge, one 85 ft. steel span, 16 ft. wide, 2 concrete abutments; also Axtell Bridge, one 140 ft. steel span, 16 ft. wide, 1 concrete abutment, to Clifton Applegate Toole Co., 2 North Cedar St., Anaconda, $15,724.

★Tex., Van Horn—See "Streets and Roads."

★Idaho, Cataldo—State Highway Comn., Boise, let contract building bridge, to Security Bridge Co., 502 North 32nd St., Billings, Mont., $29,875.

Structural Steel

PROPOSED WORK

O., Cincinnati—See "Miscellaneous."

Wis., Black River Falls—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Cleveland—See "Industrial Works."

Reinforced Concrete

PROPOSED WORK

N. Y., Buffalo—See "Industrial Works."

Pa., Johnstown—See "Miscellaneous."

Fla., Miami—See "Industrial Works."

O., Cincinnati—See "Miscellaneous."

Wis., Baraboo—See "Streets & Roads."

Wis., Black River Falls—See "Bridges."

Wis., Elkhorn—See "Miscellaneous."

Cal., Modesto—See "Miscellaneous."

Ont., Ottawa—See "Bridges."

BIDS DESIRED

Mont., Cascade—See "Water-Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Tionesta—See "Bridges."

★Tex., Van Horn—See "Streets & Roads."

Streets and Roads

PROPOSED WORK

Massachusetts — State Legislature petitioned State Highway Comn., Boston, to improve highway between Goshen and Ashfield Twps., cost over $10,000; between Belchertown and Amherst Twps., $40,000; build and improve highway from center of Plymouth Twp. to center of Bourne Twp., $20,000, one half of cost to be borne by state and other half by Plymouth and Barnstable Twps.; highway from Milford Center to Urbridge Center, $17,000.

Massachusetts — State Legislature petitioned State Highway Comn., Boston, to build highway around steep hill in Leicester Twp. to form detour in Boston-New York auto route, cost to exceed $10,000; highway from junction of Walnut and Cedar Sts., Lynn Twp. through Sangus and Wakefield Twps.

Mass., Melrose (Boston P. O.)—H. C. Woodill petitioned State Legislature to direct Metropolitan Park Comn., 18 Tremont St., to build and maintain boulevard as part of park system from Bellevue Ave. toward Lynn woods. About $50,000.

Mass., Newton (Boston P. O.)—A. Childs, mayor, petitioned State Legislature to direct Metropolitan Park Comn., 18 Tremont St., Boston, to build parkway or boulevard from Maple and Jefferson Sts., east along bank of Charles River to connect with parkway. Cost to exceed $10,000.

Mass., Quincy (Boston P. O.)—A. Whiton, mayor, petitioned State Legislature to direct Metropolitan Park Comn., 18 Tremont St., Boston, to build boulevard from Adams to Hancock Sts. About $50,000.

Mass., Stoneham (Boston P. O.)—A. Newhall, representative, petitioned State Legislature to direct Metropolitan Park Comn., 18 Tremont St., Boston, to acquire land and build parkway or boulevard from Main St., Stoneham Twp. to Crystal Lake, Wakefield Twp. and from lake to Quannapowitt Parkway, Wakefield Twp. About $20,000.

Mass., Wakefield—A. Baxter, representative, applied to State Legislature for appropriation of $30,000 to build Water St., from here to Sangus Twp.

Mass., Winchester—City plans to build Woburn Parkway from present terminus to Wildwood Twp., bituminous macadam. Cost to exceed $25,000. J. R. Rablin, c/o Metropolitan Park Comn., 18 Tremont St., Boston, engr.

Mass., Winthrop (Boston P. O.)—C. D. Bradbury petitioned State Legislature to direct Metropolitan Park Comn., 18 Tremont St., to take over and improve Beacon St. About $20,000.

N. Y., Buffalo—City had plans prepared paving 25 streets, involving 225,000 sq.yd. asphalt pavement. About $900,000. G. H. Norton, city engr.

N. Y., Buffalo—City having plans prepared for paving 20 streets involving 200,000 sq.yd. pavement. About $1,000,000. G. H. Norton, city engr.

N. J., Morristown—Bd. Freeholders Morris Co., plans to improve and widen Pine Brook Ave. over the Meadows.

N. J., Paterson—Bd. Freeholders plans to improve Ringwood Ave., Pompton Lakes Twp., from old borough line to Paterson Hamburg Turnpike, and Black Oak Ridge Rd., between Paterson and Newark Turnpike. G. Ferguson, engr.

Pa., Pittsburgh—City plans to submit $12,000,000 bond issue at next general election to be used as follows: Street improvements, $7,000,000; street repaving, $1,000,000; sewer construction, $1,400,000; park improvements, $500,000; bridges, $500,000; also other municipal work. N. S. Sprague, ch. engr. dept. pub. wks.

Pa., Pittsburgh—Dept. Pub. Wks. plans to expend $1,500,000 for street improvements during 1919. N. S. Sprague, ch. engr.

Maryland—State plans to expend about $174,000 from Federal Aid fund, $3,000,000 from State Rd. fund (from bond issue) and $1,800,000 from State Aid fund for new construction during year; also $1,400,000 for maintenance. J. N. Mackall, ch. engr.

Virginia—State Highway Dept., Richmond, has following amounts available for construction and maintenance of roads during year; $900,000 from Federal Aid, $1,600,000 from state appropriations for state highway system (these 2 amounts to be expended on about 30 projects); $1,000,000 of joint state and county funds to be expended on county highway systems and about $750,000 for maintenance of state highway system. G. P. Coleman, comr.

S. C., Spartanburg—Comrs. Spartanburg Co. soon receive bids building 2 hard surfaced roads leading from Spartanburg: 1 on Appalachian Highway toward Landrum and other on Glenn Springs Rd. About $142,000 available for project.

Fla., Ft. Lauderdale—City plans election to vote on $10,000 bonds for improving streets. H. C. Davis, city engr.

Ala., Sheffield—City receives bids about Mar. 15 paving 100,000 sq.yd. streets, asphalt, bithulithic, brick or concrete. R. A. Chapman, city engr. Noted Jan. 16.

La., Colfax—City plans to pave 1 mi. sidewalk.

La., Shreveport—Caddo Parish plans to build 7 mi. roads.

La. Vidalia—Concordia Co. plans election to vote on $150,000 bonds to gravel main roads. Federal Government will be asked to appropriate like amount.

O., Cincinnati—Comrs. Hamilton Co plan to surface Harrison, Springfield, Reading and Glendale-Milford Rds. About $800,000. State will appropriate $400,000 toward cost. W. Boeh, co. surv.

O., Cleveland—Comrs. Cuyahoga Co. receive bids in summer grading, paving and draining 4.75 mi. Som Centre Rd. from North Woodland Rd. to North Miles Rd., brick, 16 ft. wide, cost, $300 000; 3.08 mi. Highland Rd., brick or concrete, 15 ft. wide, $150,000; also draining and paving 2.67 mi. Walling Rd. from Broadview Rd. to Breckville Twp., concrete, 16 ft. wide, $140,000. W. A. Stinchcomb, co. engr.

O., Cleveland—Comrs. Cuyahoga Co. receive bids in spring repaving 5.13 mi. Dover Center Rd. from Butternut Ridge to West Lake Rd., in Bay Village, Dover and North Olmstead Twps., 15-20 ft. wide, cost, $300,000; 3 mi. Pleasant Valley Rd., Middleburgh Twp., 25 ft. wide, $150,000. W. A. Stinchcomb, co. engr.

O., Cleveland—Comrs. Cuyahoga Co. plan to pave, grade and drain 1 mi. Brook Park Rd., Brooklyn Heights Twp., brick or macadam, 25 ft. wide, cost $55,000; 6.75 mi. Royalton, Prospect and Bright Rds., in Strongville Twp., macadam, 10-20 ft. wide, $300,000. W. A. Stinchcomb co. engr.

O., Cleveland—City sold $490,000 bonds to pave, curb, grade and drain 100 streets, total length 200 mi., 20-60 ft. wide. R. Hoffman, city engr.

Streets and Roads (Continued)

O., Cleveland—City plans to issue $1,000,000 bonds to pave, repave, surface and improve 300 streets, total length 200 mi., 20-100 ft. wide. R. Hoffman, city engr.

O., Cleveland—City receives bids in spring opening, widening, extending and improving Carnegie Ave. from East 89th to East 107th Sts., total length 2 mi., 100 ft. wide. About $150,000. R. Hoffman, city engr.

O., Columbus—City adopted ordinance appropriating $100,000 for widening High St. between Spruce St. and 5th Ave. H. Maetzel, city engr.

O., St. Bernard—City plans to curb and gutter Ross Ave., concrete, cost $7500; also resurface several other streets with macadam and Tarvia to replace old macadam; cost $25,000. H. Nunlist, 1113 Traction Bldg., Cincinnati, engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphalt on 6 in. concrete foundation, Berea or Medina curbing.

Tuxedo Ave. from 12th St. to lots 44-45 Robert Oakman subdivision, 1 roadway 26 ft. and 2 roadways 20 ft. wide, cost, $17,514;

Iosco Ave. from Mackinaw to Grand River Ave., 26 ft. wide, $12,013;

Philadelphia Ave., 26 ft. wide, $19,404;

Richton Ave. from Oakman Ave. to 12th St., 24 ft. wide, $8336;

St. Aubin Ave. from Newton to Euclid Aves., 28 ft. wide, $21,691;

Begole Ave. from Beechwood to Tireman Aves., 26 ft. wide, $31,152;

Medbury Ave. from Frontenac to Baldwin Aves., 26 ft. wide, $17,770;

Medbury Ave. from Van Dyke to Fisher Aves., 26 ft. wide, $28,210.

Mich., Detroit—H. H. Esselstyn, comr. pub. wks., soon lets contract paving, grading and curbing, Corbin Ave. from Herman to 12th Sts., 24 ft. wide, involving 3431 sq.yd. asphalt, 6 in. concrete base, 2439 lin.ft. Berea or Medina curbing, 1609 cu.yd. earth excav., 70 cu.yd. concrete, under and behind curb, 192 lin.ft. retaining stone;

Army St. from Beard to Green Sts., 26 ft. wide, involving 2059 sq.yd. asphalt 6 in. concrete base, 1454 lin.ft. Berea or Medina curbing, 924 cu.yd. earth excav., 40 cu.yd. concrete under and behind curb, 26 lin.ft. retaining stone;

St. Hedwig Ave. from Lockwood St. to Junction Ave., 26 ft. wide, involving 1755 sq.yd. asphalt, 6 in. concrete base, 1064 lin.ft. Berea or Medina curbing, 910 cu.yd. earth excav., 33 cu.yd. concrete under and behind curb, 180 lin.ft. retaining stone:

Putnam Ave. from Lawton to Maybury Aves., 26 ft. wide, involving 1233 sq.yd. asphalt, 6 in. concrete base, 866 lin.ft. Berea or Medina curbing, 690 cu.yd. earth excav., 25 cu.yd. concrete under and behind curbs, 70 lin.ft. retaining stone;

Greusel Ave. from Otis to Kulic Sts., 26 ft wide, involving 1843 sq.yd. asphalt, 6 in. concrete base, 1172 lin.ft. Berea or Medina curbing, 995 cu.yd. earth excav., 34 cu.yd. concrete under and behind curb, 104 lin.ft. retaining stone;

Wendall Ave. from Ferndale to Woodmere Aves., 26 ft. wide, involving 4834 sq.yd. asphalt, 6 in. concrete base, 3183 lin.ft. Berea or Medina curbing, 2007 cu.yd. earth excav., 91 cu.yd. concrete under and behind curb, 227 lin.ft. retaining stone;

Rathborne St. from Springwells to Lawndale Sts., 26 ft. wide, involving 4919 sq.yd. asphalt, 6 in. concrete base, 3323 lin.ft. Berea or Medina curbing, 2443 cu.yd. earth excav., 92 cu.yd. concrete under and behind curb, 124 lin.ft. retaining stone. C. W. Hubbell, city engr.

Ill., Rockford—City plans to pave 7th St. from Railroad to 23rd Aves., cost $89,000; 11th Ave. from 14th to 18th Aves., brick, $23,000; 23rd Ave. from Kishawaukee to 11th Sts., cement, $41,000; Summit St. from Crosby to Rural Sts., macadam, $10,400; also pave 6 blocks of alleys, 4 off 7th St. and 2 on south side, concrete, $12,000. S. B. Hand, city engr.

Ill., Rock Island—City plans to pave 18th Ave., between 45th and 46th Sts., 10 ft. wide with 16 ft. roadway on each side, asphaltic concrete, cost $13,363. W. Treichler, city engr.

Wis., Balsam Lake—Comrs. Polk Co. plan to grade and gravel surface 13 mi. Barron-St. Croix Falls Rd. About $54,000. Federal Government will appropriate toward cost. S. P. Hall, Spooner, engr.

Wis., Baraboo—Town Bd. soon lets contract building Warner Rd. from here to Devils Lake, concrete. Work involves 21-355 cu.yd. excav., 2.7 acres clearing and grubbing, 30,683 sq.yd. concrete pavement, 160 cu.yd. concrete culverts. W. Cahoon, chn.

Wis., East End — Comrs. Douglas Co. (East End) and Washburn Co. (Shell Lake) plan to grade and gravel surface, 7½ mi. Gordon-Minong Rd. About $63,000. Federal Government will appropriate toward cost. S. P. Hall, Spooner, engr.

Wis., Hayward—Comrs. Sawyer Co. plan to grade 5 mi. Radisson-Coudery Rd. Project includes building bridges. S. P. Hall, Spooner, engr. About $27,000. Federal Government will appropriate toward cost.

Wis., Kenosha — City receives bids in March paving 65,000 sq.yd. road, brick, asphalt and concrete. P. J. Hurtgen, city engr.

Wis., Ladysmith—Comrs. Rusk Co. plan to grade 7 mi. Prentice-Ladysmith Rd. Project includes building bridges. About $24,000. Federal Government will appropriate toward cost. S. P. Hall, Spooner, engr.

Wis., Shell Lake—Comrs. Washburn Co. plan to grade and surface with clay-gravel 5 mi. Spooner-Rice Lake Rd. About $25,500 Federal Government will appropriate toward cost. S. P. Hall, Spooner, engr.

Wis., Stoughton — City plans to pave North Monroe and Hamilton Sts. also East Main St. from end of existing paving to city limits, concrete.

Wis., West Allis—City plans to pave National Ave. from Allis Chalmers belt line to 75th Ave.; 26th and 57th Aves. from National to Greenfield Aves.; 68th Ave. from National Ave. to south and north city limits; Woodlawn Ave. from Greenfield to Lincoln Aves.; 50th Ave. from Grant to Pershing Aves. and 66th and 67th Aves. from National to Greenfield Aves. C. G. Arbert, city engr.

Ia., Davenport—City plans to pave 9 alleys, 5600 ft. long, 20 ft. wide. About $11,100. R. E. Sawistowsky, city engr.

Minn., Hastings—Comrs. Dakota Co. plan to build 5 mi. road to connect with city limits of St. Paul. R. W. Downs, co. aud.

Minn., Red Wing—City plans to pave Main St. from B'way to Franklin St. S. T. Irvine, city clk.

Kan., Great Bend—Barton Co. rejected bids received Jan. 3, building Federal Aid Project No. 3, on Sante Fe Trail as follows: (1) Sect. A, B, C and D, improving 144,396 ft. roadway from Sta. 0 to Sta. 1611, 20 ft. wide, (2) Sect. A, building 30,857 ft. road from Sta. 0 to Sta. 308, (3) Sect. B, building 35,714 ft. from Sta. 308 to Sta. 667, (4) Sect. C, 50,027 ft. from Sta. 775 to Sta. 1276; (5) Sect. D, 27 798 ft. from Sta. 1332 to Sta. 1611; (6) part of Sect. A, B, C and D, 29,414 ft. from Sta. 0 to Sta. 61 and from Sta. 556 to Sta. 667, monolithic brick with 5 ft. earth shoulders. Noted Dec. 19.

Neb., Grand Island—City plans to pave 7568 ft. Koenig, Lincoln and Cleburn Sts., 36 ft. wide, sheet asphalt or 3 in. fibre brick. About $100,000. Work involves 31,500 sq.yd. vertical fibre brick or asphalt, on concrete base, and 15,000 lin.ft. concrete curbing and guttering. I. R. Morearty, Grand Island, engr.

N. D., Fargo—City having plans prepared paving several miles of streets. W. Stevenson, city engr.

Montana—State Legislature, Helena, petitioned to submit $15,000,000 bond issue at next general election to be used for road work; funds to be spent through State Highway Dept.

Mont., Bigtimber—Comrs. Sweet Grass Co. will hold election Mar. 17, to vote on $100,000 bonds to improve roads and bridges.

Mo., Boonville—Cooper Co. voted $100,000 bonds to build hard surface roads. State and Federal Government will appropriate like amount.

Mo., Caruthersville—City plans to pave West 7th and 8th Sts., East 3rd, 5th, 7th, 9th and 12th Sts., also Beckwith, Cotton, Highland, Walker, Bushey and Eastwood Aves., concrete. F. C. Dwiggins, city engr.

Mo., Marshall—Saline Co. organizing Blackwater Rd. Dist. and plans to construct 10 mi. road, 16 ft. wide. About $160,000. E. Crutcher, Marshall, engr.

Mo., Marshall—Comrs. Marshall Special Rd. Dist. plan to build 8 mi. rock asphalt road, 16 ft. wide and one 125 ft. span concrete bridge. About $150,000. E. Crutcher, Marshall, engr.

Mo., Marshall—City plans to hard surface 9 mi. Marshall-Sedalia Rd. between southern city limits and Pettis Co. line.

Mo., St. Louis—Bd. Pub. Serv. soon receives bids paving 4.84 mi. streets, asphalt, brick and bituminous macadam. C. L. Talbert, City Hall, dir. streets and sewers.

Mo., St. Louis—Bd. Pub. Serv. plans to pave Whittier St. from Labadie to Ashland Sts., Natural Bridge St. from Salisbury to Farrar Sts., Natural Bridge St. from Farrar to Grand Sts., 7th St. from Cass to Howard Sts. and Morgan Ford St. from Chippewa to Fyler Sts. W. W. Horner, city engr.

Mo., St. Louis—Bd. Pub. Serv. soon receives bids paving 300 ft. Bellerive Park Bridge with wood blocks, 60 ft. wide. About $15,000. L. R. Bowen, city engr.

Mo., St. Louis—City receives bids in spring building and improving Kingshighway from Easton Ave. to Penrose Park and Kingshighway Northeast from Penrose Park to West Florissant Ave. About $30,000. W. W. Horner, city engr.

Mo., Sedalia—City plans to pave 7 streets involving 35,000 sq.yd. brick and 4100 sq.yd. concrete pavement. About $95,877. F. T. Leaming, city engr.

Tex. Cisco—City Comrs. plan to improve streets. About $50,000.

Tex., Dallas—City plans to pave Jefferson Ave. from Lancaster to Polk Sts., bitulithic. G. D. Fairtrace, city engr.

Tex., Dallas—City plans to widen and pave South Lamar St., also pave Austin St. from Commerce to Young Sts. G. D. Fairtrace, city engr.

Tex. Del Rio—Comrs. Valverdie Co. plan to pave 7 mi. Del Rio-Canadian Highway, tarvia. About $45,000.

Tex., Ft. Worth—Comrs. Tarrant Co. plan to build 6 mi. Ft. Worth-Dallas Pike, 4 mi. Denton Rd., 14½ mi. Meridan Highway, 10 mi. Azle-Springtown Rd., 7 mi. Weatherford Rd., 14 mi. Granbury Rd. and 6½ mi. Lake Worth Dam Rd.

Tex. Port Lavaca—Comrs. Calhoun Co. plan to build 10 mi. Mudshell Highway. About $120,000.

Tex. Sonora—Comrs. Sutton Co. plan to rebuild San Angelo-Sonora Highway.

Tex., Waxahachie—City election Feb. 11, to vote on $60,000 bonds to pave streets and extend water and sewer mains.

Colorado—State Highway Comn., Denver, plans election to vote on $20,000,000 bonds to build highways.

Colorado—State Highway Comn., Denver, soon lets contract completing 10 mi. Fall River Rd. in Rocky Mountain Natl. Park, Larimer and Grand counties. About $60,000 available. J. E. Maloney, state highway engr.

Idaho, Bonners Ferry—S. E. Henry, mayor, soon lets contract paving 12 blocks. About $30,000.

Utah, Salt Lake City—See "Miscellaneous."

Utah, Salt Lake City — City plans to pave 15 mi. of streets and lower water mains, cost, $450,000; curb, gutter and grade city streets and widen and lower water mains, $300,000; improve sidewalks with concrete, $60,000. S. Q. Cannon, city engr.

Washington — State Highway Comn., Olympia, has about $12,000,000 available for road work during year which will be expended as follows: Natl. Forest Rds., $500,000, Federal Aid; Federal Aid post roads and state highways, $2,000,000, State Highway Dept.; permanent highways and other main county highways, district roads and bond roads, $5,500,000, county administrations; maintaining 2500 mi. primary state highways, $750,000; 1250 mi. permanent county highways, $250,000; 40,000 mi. tributary (local) district roads, $3,000,000. Work of maintenance to be done under county administrations. G. F. Cotterill, ch. engr.

Oregon—State Highway Comn., Salem, has following sums available for construction and maintenance of roads during year; $4,833,000 from state funds and $1,298,050 from Federal funds. Counties will spend approximately $5,000,000 of which $1,000,000 will be expended under direction of State Highway Comn. About one-half of county funds will be used for new construction and balance for maintenance. H. Nunn, engr.

Streets and Roads (Continued)

California—State Highway Comn., Forum Bldg., Sacramento, had surveys made for improving, grading, draining, paving and building bridges on 50 mi. state highway across mountains through Coalinga. Cost will be borne by State and Fresno, Tulare, Kings and Monterey Counties. A. B. Fletcher, engr.

Cal., El Centro—City plans to pave ½ mi. East Main St., bituminous wearing surface on concrete base. About $25,000.

Cal., Fresno—Bd. Supervs Fresno Co. appropriated $25,000 to grade, gravel and improve 7 mi. road from Tranquility to San Joaquin. C. Jensen, co. surv.

Cal., Los Angeles—Bd. Pub. Wks. receives bids in February paving, grading, curbing, guttering and draining Washington St. from Arlington St. to Vineyard Ave., 5 in. concrete base with broken stone and asphalt cement binding course, asphalt wearing surface, cement curbs, vitr. and granite block gutters and vitr. pipe sanitary sewers. About $60,000. A. C. Hansen, city engr.

Cal., Sacramento—City Comn. receives bids in March paving alleys in 12th and 13th Sts. between H and I Sts. and between J and K Sts., 11th and 12th Sts. between J and K Sts., involving 2489 sq.yd. 5 in. asphaltic macadam; in 13th St. between R and X Sts., 16th St. between X and Y Sts., and 14th St. between X and Y Sts., 1½ in. asphalt on 4 in. concrete base, involving 38,816 sq.yd. asphalt, 180 sq.yd. granite block and 3080 cu.yd. grading. F. C. Miller, city engr.

Cal., San Diego—City having plans prepared paving Imperial Ave. from 30th St. through Encanto, Lemon Grove and LeMesa Sts., 40 ft. wide, 5 in. asphalt macadam. G. Cromwell, city engr.

Cal., San Diego—Bd. Supervs. San Diego Co. plans to pave roads leading to Tijuana, Escondido, Julian and Riverside Twps., cost, $108,582; also oil and grade same, $148,779. Funds will become available about July 1.

Ont., Ottawa—City plans to pave Elgin St., cost $135,000; also plans to expend $200,000 for paving various other streets and $60,000 for building sidewalks. L. McLaren Hunter, engr.

Ont., Sarnia—City voted $11,000 bonds to pave various streets.

BIDS DESIRED

W. Va., Middlebourne—Until Feb. 24, by Comrs. Tyler Co. building 1 mi. Middlebourne-Salem Rd., Federal Aid Project No. 18, 14 ft. wide. E. J. Smith, clk.; advertised in this issue.

Ga., Atlanta—Until Feb. 1, by city, paving Lee St., cost, $200,000, South Pryor St., $150,000 and Pace's Ferry Rd., $200,000. C M. Holland, supt. pub. wks.

Miss., Clarksdale—Until Feb. 3, by Bd. Supervs. Coahoma Co., furnishing 90,800 tons gravel, f.o.b. pits. T. S. Aberholdt, pres.

Kan., Oswego—Until Feb. 14, by Comrs. La Bette Co., grading and graveling 32nd St., Federal Aid Project No. 2, in Federal Rd. Dist. No. 5, Labette Twp., 53,640 ft. long, 26 ft. wide, involving 95,360 cu.yd. gravel, 41,328 cu.yd. earth excav. and 1716 ft. 15-30 in. concrete pipe culverts. About $200,000. W. J. King, Oswego, engr.

Tex. San Antonio—Until Feb. 3, by City Comrs., grading and surfacing 5500 ft. New Braunfels Ave. from Van Ness to Commerce Sts., 30 ft. wide, 2 in. bituminous, trap rock, rock asphalt or bithulithic. Work involves 20,000 sq.yd. pavement. H. Helland, city engr.

Okla., Tulsa—Until Feb. 17, by Comrs. Tulsa Co., building state roads Miles 1 to 6, inclusive of Sect. "Y" and Miles 1 to 2 inclusive Sect. "I." L. Cline, clk.; advertised in this issue.

Idaho—Until Feb. 10, by State Highway Comn., Boise, grading and graveling 4 mi. road in Albion Twp., Cassia Co. About $25,000. A. H. Weatherbee, highway engr.

Oregon—Until Feb. 4, by State Highway Comn., Yeon Bldg., Portland, for (a) paving from Multnomah Co. line at Bertha to Hillsboro and Beverton; (b) from Josephine Co. line to Grants Pass; (c) from Polk Co. line to Corvallis; (d) grading and graveling Columbia River Highway across Morrow Co., (e) grading from Stage Coach Pass, north, near Glendale, in Douglas Co., (f) from Yoncolla to Drain; (g) overhead crossing on Douglas Lane Co. lines at Divide; (h) at Comstock, at Pass Creek Canyon. Highway Comn. will pave 7.7 mi. road from Albany to Jefferson in Linn Co., and 10½ mi. in Benton Co. from Corvallis to Polk Co. line if counties will do grading. Noted Jan. 23.

California—Until Feb. 17, by State Highway Comn., Forum Bldg., Sacramento, grading 15.2 mi. and paving 11.4 mi. road 12 ft. wide on 4 in. base, between Tecade Divide and easterly boundary of San Diego Co. Work involves 66,000 cu.yd. excav., 11,140 cu yd. concrete pavement, 390 cu.yd. concrete culvert, 2949 ft. 18-30 in. corrugated pipe, etc. A. B. Fletcher, engr. Noted Jan. 9.

California—Until Feb. 17, by State Highway Comn., Forum Bldg., Sacramento, building concrete road through Rockland Twp., Placer Co. and gaps in pavement near Penryn, involving 2970 cu.yd. concrete pavement, 15 ft. wide on 4 in. base, 32,000 cu.yd. excav., etc. About $32,200. A. B. Fletcher, engr. Noted Jan. 23.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Secaucus—Comrs. Hudson Co. (Jersey City), let contract grading and improving County Ave. from Paterson Plank Rd. to County Ave., to Clinton Contg. Co., 306 Charles St., West Hoboken, cost plus percentage. Noted Jan. 16.

★Md., Baltimore—City having plans prepared by G. F. Wieghardt, city highway engr., repairing 2 mi. road from city to Curtis Bay, using crushed stone, gravel, macadam and concrete; also 6 mi. North Point Rd. to Sparrows Point, using concrete and probably some oyster shell. Cost between $15,000 and $20,000. Work will be done by day labor.

Wis., Baraboo—Sauk Co. received bids building concrete road from T. E. Wesley, La Crosse, $87,679; J. McDonnell, Duluth, Minn., $90,619; A. Judvine, Baraboo, $99,235.

★Minn., Madison Lake—Waseca Co. let contract grading 6 mi. road, to J. Brown, Madison Lake.

Kan., Topeka—Shawnee Co. received only bid building 9.85 mi. Topeka Lawrence Co. Rd. on Fort to Fort Highway, 18 ft. roadway, including 2 course concrete, 6 in. base on 2 in. top course, from J. O. Patterson Co., Kansas City, cost, $39,000 per mile. Noted Jan. 2.

★Tex., San Antonio—Comrs. Bexar Co. plan to expend $300,000 during year to grade repair and build various roads. About $20,000 to $25,000 will be expended each month. Work will be done by day labor.

★Tex., San Antonio—City let contract resurfacing 2220 ft. East Commerce St. from Alamo to Chestnut Sts., 23.4 ft. wide to Uvalde Rock Asphalt Co., Swearingen Bldg., $13,546. Work involves 5560 sq.yd. asphalt pavement.

★Tex., Van Horn—Tulberson Co. let contract grading, graveling and bridging 43 mi. road on State Highway No. 1, to W. E. Hamilton, Monahaus, $68,000.

★Tex., Victoria—City let contract paving 19 blocks of streets including East Santa Rosa, Moody, Forrest and Vine Sts., and Goodwin and Stayton Aves., to Uvalde Rock Asphalt Co., Swearingen Bldg., San Antonio, $36,513.

★Wash., Seattle—King Co. let contract grading and graveling 3252 ft. Boddy-Hindle Rd., 20 ft. wide, also building trestle and wharf, to C. C. Snyder Co., Pacific Blk., $15,850. Work involves 5000 cu.yd. earth excav., 173,000 ft. b. m. lumber, etc. Noted Jan. 23.

Railways

PROPOSED WORK

California—See "Miscellaneous."

Excavation and Dredging

PROPOSED WORK

Mass., Newton (Boston P. O.)—Dredging—State Legislature petitioned to authorize Metropolitan Park Comn., 18 Tremont St., Boston, to expend $50,000 to dredge, fill, grade and improve lands of Metropolitan Park Dist. and water of Charles River, between Moody St. dam in Waltham and Newton Lower Falls, to protect public health in river in Newton, Waltham, Weston and Wellesley.

Wis., Baraboo—Excavation—See "Streets and Roads."

Wis., Racine—Drainage—Comrs. Racine Co. plan to build 15 mi. Hoods Creek D. D., Pleasant Twp. P. J. Myers, 1st Natl. Bank Bldg., atty.

Ia., Montezuma—Ditch—Comrs. Poweshiek Co. receive bids in April building 11.72 mi. Bear Creek Ditch. Work involves 230,000 yd. excav. and 3 laterals, 2.3 mi. long involving 65,000 yds. excav. T. L. Blank, Oskaloosa, engr.

Mo., St. Louis—Excavation—See "Miscellaneous."

Wash., Yakima—Drainage—Yakima Co. D. D. plans to complete project across Naches River involving 1 mi. ditch, cost, $25,000; digging 4 mi. ditch in Granger Dist., $17,000; 2 mi. canal east of Sunnyside, $13,000. J. O. Greenway, engr.

Cal., Modesto—Irrigation—See "Miscellaneous."

BIDS DESIRED

N. Y., Syracuse — Excavation — See "Sewers."

Ind., South Bend—Channel—Until Feb. 15, by J. F. Wagner, 531 Leland Ave., widening channel in St. Joseph's River; advertised in this issue.

Ill., Lewistown—Levee—Until Feb. 3, by Comrs. Thompson Drainage and Levee Dist., Fulton Co., for following work.

Sect. 1—One cement-stucco pump station, expanded metal construction, steel frame and roof trusses, steel rein.-con. foundation and sump, equipped with 3 low lift double suction centrifugal pumps with intake and discharge pipes, 3 electric motors, 1 motor exhauster, switchboards, meters, electric lighting stove, etc., complete in place.

Sect. 2—125 acres heavy clearing and 40 acres light clearing.

Sect. 3—544,732 cu.yd. Main Levee, 8 ft. crown, dragline work, 261 stations, muck ditch, 2 ft. base, 3 ft. top, 3 ft. deep.

Sect. 4—1,078,305 cu.yd. Main Levee, 8 ft. crown, 46,000 cu.yd. auxiliary levee, 8 ft. crown, floating dredgework 379 stations muck ditch, 2 ft. base, 3 ft. top, 3 ft. deep

Sect. 5—363,719 cu.yd. Ditch No. 1, 19,959 cu.yd. Ditch No. 2, 21,284 cu.yd. Ditch No. 3, 16,359 cu.yd. Ditch No. 4, 15,468 cu.yd. Ditch No. 5, 77,740 cu.yd. Ditch No. 6, 13,090 cu.yd. Ditch No. 7, 11,594 cu.yd. Ditch No. 8, 245,410 cu.yd. Ditch No. 9, 21,994 cu.yd. Ditch No. 10, 18,632 cu.yd. Ditch No. 11, floating dredgework.

Sect. 6—15,377 cu.yd. Cooper's Branch Diversion Channel, dragline work.

Minn., St. James—Ditch—Until Feb. 10, by A. G. Countryman, co. aud., building 27,000 ft. 6 to 18 in. tile ditches, Judicial Ditch No. 26. About $10,000. J. A. Krall, engr. Noted Dec. 19.

Cal., Sacramento — Excavation — See "Streets & Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★N. Y., Albany—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., let contract excavating canal channel in Genesee River, near Elmwood Ave. bridge, Contr. No. 191, to Empire Eng. Co., 6 Church St., New York City, $176,170. Noted Jan. 16.

★N. Y., Seneca Falls—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., capitol, Albany, let contract extending core wall and other work at north end of Dam No. 2, here, Contr. T, to Kennedy & Scullen Constr. Co., Cohoes, $22,300. Noted Jan. 23.

★Mo., Kansas City—Excavation—Fire & Water Bd. let contract excavating 80,000 cu.yd. at St. John and Wabash Aves., North Terrace Park for proposed 17,000,000 gal. rein.-con. reservoir, to E. H. Bradbury, Kansas City. About $51,200.

★ Tex., Brownsville — Canal — Comrs. Poplar Creek, Big Muddy Creek and Kail Creek, D. D., let contract building Poplar Creek Canal involving 145,670 cu.yd. excav. to N. C. McGimica & Co., Memphis, Tenn.; Big Muddy Creek Canal involving 279,760 cu.yd. excav., to F. M. Horton, 140 South Dearborn St., Chicago, Ill.; Kail Creek Canal involving 119,790 cu.yd. excav. to Indiana Dredging Co., Royal Center, Ind.

Cal., Los Angeles—Reclamation—Harbor Comn. received bids Jan. 15, building loose rock bulkhead, 60 ft. wide at base, 22 ft. high, for reclaiming tide lands at San Pedro, about 40,000 tons rock required, (1) furnishing and placing stone, (2) furnishing stone only, from Russell-Greene-Foell Co., 2644 Compton Ave., (1) $2.34 per ton; Bly Bros. & McGilliard Stone Co., 7th and Utah Sts., (2) $1.35.

Industrial Works

PROPOSED WORK

R. I., Providence—See "Buildings."

Conn., Bridgeport—Bd. Health & Charities asked city to appropriate $50,000 to build brick and rein.-con. garage, rein.-con. flooring and concrete foundation on Washington Ave.

Conn., Bristol—New Departure Mfg. Co., 269 North Main St., having plans prepared for 1 story, 90 x 302 ft. brick hardening shop, rein.-con. flooring and concrete foundation on North Main St. About $60,000.

Conn., Hartford—Libby, McNeil & Libby, 252 Asylum St., plan to build 3 story, 50 x 112 ft. rein.-con. cold storage plant, rein.-con. flooring and concrete foundation, on Edwards St. About $60,000. P. Larmon, c/o Swift & Co., Union Stock Yards, Chicago, engr.

N.Y., Albion—Bd. Dirs. State Home of Refuge for Women, applied to State Legislature, Albany, for appropriation of $30,000 to build cold storage and ice making plant.

N. Y., Brooklyn—Lurwall Realty Co., 49 Graham Ave., had plans prepared by Shampan & Shampan, archts., 772 Bway., for 1-story, 90 x 200 ft., steel and brick garage, rein.-con. flooring, brick foundation, North 1st St. near Bedford Ave. About $55,000.

N. Y., Brooklyn—Pennsylvania Textile Co., Madison Ave. and 25th St., New York City, had plans prepared building 1 story, 60 x 60 ft., steel and brick textile mill, rein.-con. flooring, concrete foundation, in Greenpoint. About $35,000. R. G. Cory, 39 Cortlandt St., New York City, archt.

N. Y., Buffalo—Mayer Clarkson Co., 453 Ellicott Sq., plans to build 1 story, 100 x 250 ft. rein.-con. and steel factory on Delaware Ave. and Erie R. R.

N. Y., Central Islip—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $80,000 for addition to storehouse and refrigerating plant at Central Islip State Hospital.

N. Y., Coney Island (Brooklyn P. O.)—M. E. Finnigan, 44 Court St., Brooklyn, having plans prepared by P. J. Gallager, archt., 75 Oriental Bldg., for 1 story, 50 x 200 ft., steel and brick garage, Coney Island and Greenwood Aves. About $35,000.

N. Y., Creedmore—State Hospital Comn., Albany, applied to State Legislature for appropriation of $65,000 for laundry and equipment and $65,000 for bakery, at Brooklyn State Hospital, here.

N. Y., Hudson—Cottage—Bd. Dirs. New York State Training School for Girls, applied to State Legislature, Albany, for appropriation of $52,000 to build cottage containing kitchen, linen-rooms, etc.

N. Y., Malone—Kirk-Maher Co., West Main St., plans to build 3-story, 41 x 56 ft., steel and concrete factory. About $40,000.

N. Y., Newark—Bd. Dirs. New York State Custodial Asylum for Women applied to State Legislature, Albany, for appropriation of $70,000 for laundry and equipment and $50,000 for storehouse, cold storage and equipment.

N. Y., New York—A. C. Merkle Inc., 233 Bway., having plans prepared by A. B. Lucius, archt., 38 Park Row, for altering and building 4 story addition to brick and steel factory, rein.-con. flooring, concrete foundation, West and Horatio Sts. About $145,000.

N. Y., New York—C. Muller, Rockaway Park, had plans prepared by J. T. Powers, archt., 220 Larken St., Rockaway Park, for 4 story, 100 x 200 ft., rein.-con., steel and brick garage, rein.-con. flooring, concrete foundation, on Dykman St., near Sherman Ave., here. About $100,000.

N. Y., Rochester—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $72,000 to build addition to power plant at Rochester State Hospital.

N. Y., Thiells—See "Buildings."

N. Y., Watertown—See "Miscellaneous."

N. J., Newark—F. Grad, archt., 245 Springfield Ave., receives bids about Mar. 1, building 3 story, 40 x 100 ft., concrete and brick warehouse and store, rein.-con. flooring, concrete foundation, at 157 Ferry St., for Lion Furniture Co. About $25,000. Noted Jan. 16.

Pa., Carbondale—T. J. Mulholland having plans prepared for brick ice cream plant. About $60,000.

S. C., Charleston—Eitwan Fertilizer Co. plans to rebuild 2 story acid chambers on Cooper River recently destroyed by fire. About $125,000. F. Burludge, pres.

Fla., Miami—J. J. Hamilton, ch. archt. for Armour & Co., 208 South La Salle St., Chicago, soon lets contract building rein.-con. refrigerating plant and storage building on 6th St. and Ave. B here. About $100,000. Noted Oct. 3.

Miss., Pascagoula—See "Miscellaneous."

O., Cincinnati—Goodyear Tire & Rubber Co., Akron, purchased site on Gilbert Ave. and Elsinore Pl. and plans to build 6 story factory and warehouse.

O., Cincinnati—Teasdale Co., 625 Walnut St., purchased 32,000 sq.ft. site on Reading Rd. and McMillan St., and plans to build 2 story dry cleaning plant.

O., Cleveland—Clover Meadow Creamery Co., Crawford Rd. and Hough Ave., having plans prepared by W. G. Caldwell, archt., 1206 Williamson Bldg., building 2 story brick, steel and rein.-con. creamery plant, rein.-con. flooring, at 1827 East 55th St. About $60,000.

O., Cleveland—Electric Steel & Forge Co., East 61st St., plans to build 1 story 60 x 160 ft. brick, steel and rein.-con. machine shop and warehouse, rein.-con. flooring and concrete foundation, on Grant Ave. About $200,000. A. M. Allen Co., 1900 Euclid Ave., archts.

O., Cleveland—Sparks Withington Co., 622 Swetland Bldg., plans to build brick, steel and rein.-con. factory, rein.-con. flooring, on East 152nd St. near St. Clair Ave. About $100,000.

O., Washington C. H.—Sunlight Creameries Co. plans to build 5 story cold storage plant and sales pavilion on 12 acre site.

Ind., Sullivan—Mutual Truck Co. plans to purchase 30 acre site near here and build 100 x 300 ft. brick and steel factory. R. E. Petrie, pres.

Ill., Woodriver—Standard Oil Co. of Indiana, 910 South Michigan Ave., Chicago, plans to build 25 workmen's homes and addition to refinery here. C. B. Manbeck, Woodriver, genl. mgr.

Wis., Appleton—Graef Wire Mfg. Co., Neenah, soon lets contract building four 2 story, brick buildings here. About $350,000. E. Wettengel, 901 Washington St., archt. Noted Dec. 5.

Wis., La Crosse—Tri-State Ice Cream Co. receives bids in March building 2 story, 60 x 60 ft. factory. About $30,000. Bentley & Merman, 210 Linker Bldg., archts.

Wis., Milwaukee—Globe Seamless Steel Tube Co., Burnham St., having plans prepared by Worden-Allen Eng. Co., engrs., 208 South La Salle St., Chicago, building 1 story, 242 x 300 ft., brick and steel factory, brick foundation.

Wis., Milwaukee—Janke Shoe Mfg. Co. plans to build 3 story, 34 x 120 ft. addition to factory at 762 32nd St. E. C. Janke, pres.

Wis., Onalaska—Onalaska Pickle & Canning Co. having plans prepared by W. E. Bennett, archt., Batavian Bank Bldg., La Crosse, building 3 story, 24 x 44 ft., concrete and steel factory, here. E. Johnson, mgr.

Ia., Cherokee—Beuttler & Arnold, archts., 610 Security Bldg., Sioux City, receives bids in February building 2 story, 32 x 80 ft. rein.-con. and brick storage building, rein.-con. flooring, concrete and brick foundation, for Sache & Bunn Co., 322 3rd St. About $30,000.

Ia., Manley—Chicago, Rock Island & Pacific Ry., La Salle St., Chicago, had plans prepared building 1 story, 32 x 64 ft. icing station and storage plant here. About $25,000. C. A. Morse, ch. engr.

N. D., Marmarth—Chicago, Milwaukee & St. Paul R. R. plans to build shops and roundhouse here. C. F. Loweth, Chicago, ch. engr.

Mont., Great Falls—State voted $250,000 bonds to build grain elevator here.

Mo., Armstrong—Liberty Farmers Club plans to build grain elevator. About $50,000. Address J. E. Walkup, c/o owner.

Mo., Kansas City—H. D. Lee Mercantile Co., 20th and Wyandotte Sts., having plans prepared for addition to 9 story building. About $500,000.

Mo., St. Louis—J. M. Hirshstein, archt., 5777 De Giverville Ave., receives bids in March building 10 story, 125 x 158 ft. factory on northeast corner Jefferson and Locust Sts., for S. Haas Hat Co., 23rd and Locust Sts. About $250,000.

Tex., Houston—Industrial Transportation Co., Carter Bldg., having plans prepared by F. J. Woerner, archt., Sumpter Bldg., Dallas, building plant here. About $1,000,000.

Colo., Denver—City soon receives bids building 1 story, 73 x 265 ft. rein.-con. garage and warehouse, Larimer and 13th Sts., for Dept. Parks & Impvts. Cost between $700,000 and $800,000. J. B. Hunter, city engr.

Wash., Spokane—Centennial Mill Co., North 817 Howard St., having preliminary sketches prepared for flour mill and grain elevator. About $800,000.

Wash., Spokane—Try-Blu Biscuit Co., Rivision and Railroad Sts., having plans prepared by L. L. Rand, archt., Realty Bldg., for 2 story, 70 x 70 ft., brick addition to factory.

Cal., Bakersfield—Southern California Edison Co., 301 South Bway., Los Angeles, having surveys made by E. F. Prouse, asst. engr., for large hydroelectric plant in Kern River Valley. Plans include construction of large dam. About $10,000,000. W. Dennis, Los Angeles, ch. engr.

N. S. Antigonishe—Town plans to rebuild electric light plant. About $40,000.

N. S., Halifax—D. C. Woods, Sackville and Market Sts., soon lets contract building 2 story garage. About $38,000. W. P. Leger, Cragg Bldg., archt.

N. B., Marysville—Nashwaak Pulp & Paper Co. plans to build pulp mill. About $400,000. N. M. Jones, genl. mgr.

Ont., Ft. William—Canadian Iron Corp. having plans prepared for remodeling foundry. About $125,000. P. J. Peake, engr.

Man., Portage la Prairie—Portage Milling & Transfer Co. plans to rebuild elevator recently destroyed by fire. Loss, $110 000. C. G. Earhart, mgr.

Sask., Gravelbourg—S. Chevrier plans to build electric light plant. About $40,000.

Sask., Melfort—Saskatchewan Coöperative Creameries having plans prepared for creamery and cold storage plant. About $60,000. J. Rutledge, mgr.

BIDS DESIRED

N. Y., Brooklyn—Until Feb. 10, by H. J. Nurick, archt., 957 Bway., building 2 story 120 x 160 ft., brick and steel warehouse, garage and workhouse, rein.-con. flooring, on Varick Ave., Meserole and Montrose Sts., for J. H. Werbelovskys Sons, 83 Meserole St. About $50,000.

N. Y., New York—Until Feb. 3, by R. McNiell, archt., 139 East 42nd St., building 5-story, 50 x 300 ft., steel and brick factory, rein.-con. flooring, concrete foundation, on 52nd St. and 12th Ave., for Kohler & Campbell, Inc., 11th Ave. and 50th St. About $40,000.

N. Y., New York—Until Feb. 25, by A. L. Kehoe & Co., archts., 1 Beekman St., building 3 story, 100 x 111 ft., rein.-con. and brick laundry, rein.-con. flooring, concrete foundation 99th St. between 1st and 2nd Aves., for Rapid Laundry Co. About $60,000.

Wis., Milwaukee—Prest-O-Lite Co., 30 East 42nd St., New York City, is receiving bids for 1 story, 60 x 100 ft., brick filling station, 619 Trowbridge Ave., here. About $55,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Worcester—E. T. Chapin, archt., 340 Main St., received lowest bid building 1 story, 160 x 210 ft. brick, steel and rein.-con. garage, rein.-con. flooring and concrete foundation, on Mechanic St. for A. H. Wheeler Co. Inc., from Federal Eng. Co., 518 Main St. About $60,000. Noted Jan. 16.

★**N. Y., Brooklyn**—Seabring Warehouse Co., 32 Court St., will build 1 story, 133 x 151 ft., steel and brick garage, brick foundation, on Hamilton Ave. and 14th St. About $40,000. Work will be done by day labor.

★**N. Y., New York**—S. Stein, 120 East 13th St., will build 4-story, 35 x 100 ft., steel and brick garage, rein.-con. flooring, brick foundation. About $30,000. Work will be done by day labor.

★**N. Y., West Albany**—New York Central R. R., Union Depot, Albany, let contract building 1 story, 80 x 376 ft., steel and brick roundhouse, concrete foundation, here, to M. Kantrowitz, 20½ Market St., Albany. About $70,000.

Industrial Works (Continued)

★Md., Highlandtown (Baltimore P. O.)—Pompeian Co., Coca Cola Bldg., Baltimore, let contract building 1 and 3 story, 160 x 260 ft., concrete and brick factory, storage and office building, concrete foundation, 11th St., to C. B. Pierce, Phila. Rd. and 11th St., Baltimore. About $50,000.

★Va., Money Point (Gilmerton P. O.)—Hubbard Fertilizer Co., 802 Keyser Bldg., Baltimore, Md., let contract building 1 and 2 story, 150 x 192 ft., concrete and timber fertilizer plant, concrete foundation, here, to W. J. Gregory, 501 Law Bldg. About $50,000.

★Ala., Calvert—Natl. Reduction Corp., Boston, Mass., let contract building plant here to consist of 1 and 2 story, steel and concrete buildings, to A. D. Little Co., 30 Charles River Rd., Boston, Mass. About $200,000.

★O., Cleveland—Globe Machine & Stamping Co., 1250 West 76th St., let contract building 2 story, 60 x 135 ft. brick and concrete factory addition, rein.-con. flooring, to Craig-Curtis Co., 1013 Guardian Bldg. About $40,000.

★O., Cleveland—McKinney Steel Co., 4001 Dille Ave., let contract building 1 story, 152 x 164 ft. steel furnace addition on St. Clair Ave. and New York, Chicago and St. Louis R.R., to Amer. Bridge Co., 327 Guardian Bldg. About $75,000.

★Mich., Detroit—F. Stearns & Co., Jefferson Ave., let contract building 8 story, 100 x 110 ft. steel and rein.-con. drug plant, rein.-con. flooring and concrete foundation, on Jefferson Ave. and Bellevue St., to Bryant & Detwiler Co., 2336-9 Dime Bank Bldg. About $130,000. Noted Jan. 2.

★Wis., Appleton—Simons Cheese Co., Pacific and Morrison Sts., let contract building 80 x 160 ft. brick and mill construction warehouse, to C. R. Meyers & Sons Co., Oshkosh.

★Ia., Des Moines — Advance-Rumely Thresher Co., Vine and West 9th Sts., let contract building 3 story, 100 x 132 ft. factory and warehouse, to A. H. Neumann & Co., 7th and Walnut Sts. About $125,000. Noted Dec. 12.

★N. S., Halifax—Dominion Government, Ottawa, Ont., let contract building power house and laundry for military hospital on Camp Hill here, to Rhodes Curry Co., Ltd., Amherst, $210,565.

★Que., Montreal—P. Butler, Phillips Sq., let contract building garage, to Anglins, Ltd., 65 Victoria St. About $25,000.

★B. C., Vancouver—L'Air Liquide Societe, 1 Ernest St., Montreal, Que., let contract building 2 story, 75 x 85 ft., brick, steel and rein.-con. factory, on 5th and Yukon Sts., to S. J. Newitt, 954 17th St., W., Vancouver. ,About $25,000.

Buildings

PROPOSED WORK

N. H. Laconia—High School—Bd. Educ. having plans prepared by A. H. Dow, 101 Tremont St., Boston, building 2 story, 80 x 178 ft. brick and concrete, concrete foundation. About $15 000.

Mass., New Bedford—School—Bd. Educ. soon receives bids building 2 story, 117 x 155 ft. brick, steel and rein.-con., rein-con. flooring and concrete foundation, on Emery St. About $185 000. F. C. Brown, Chapman Bldg., archt. Noted Apr. 4.

Mass., Waltham (Boston P. O.)—Hospital—Comrs. Middlesex Co., (Cambridge), receive bids in spring, building 2 story, 400 x 400 ft. brick, rein.-con. and steel, rock foundation here. About $200,000. O. W. Cutter, 683 Atlantic Ave., Boston, archt.

R. I., Providence—School—Page & Page, archts. 87 Weybosset St., soon receive bids building 3 story, 42 x 60 ft. brick, timber and steel, concrete foundation, on Orms St., for Sons of Zion Society, 89 Orms St.

Conn., Bridgeport—Laboratory—Bridgeport Hospital, Grant St., plans to build pathological laboratory on Mill Hill Ave. About $50 000.

Conn. Bridgeport—Schools—Bd. Educ. plans to build additions to schools on Grand and McKinley Sts. About $575,000. E. H. Haven, pres.

Conn., New Britain—School—State plans to build 2 story, 64 x 110 ft. brick, timber, concrete and steel, rein.-con. flooring and concrete foundation, on Camp St. About $100,000. C. D. Hine, Hartford, state supt. Davis & Brooks, Lewis and Gold Sts., Hartford archts.

Conn., Waturbury—Theatre—S. Z. Poli, 24 Church St., New Haven, plans to build 1 story brick and steel, rein.-con. flooring and concrete foundation, here. About $500,000. T. W. Lamb, 644 8th Ave., New York City, archt.

Conn., Waterville (Waterbury P. O.)—Church—St. Paul Episcopal congregation, 201 Boyden St., receives bids in spring building brick, timber, steel and concrete, concrete flooring and foundation, on Manville St. and Thomaston Ave. About $85 - 000. H. C. Senior, chn. W. E. Griggs Estate, 51 West Main St., engr. Noted Aug. 29 under Waterbury.

Conn., Willimantic — Dormitory — State plans to build 3 story, 46 x 114 ft. and 30 x 46 ft. brick, timber, steel and concrete, rein.-con. flooring and concrete foundation, on Valley St., About $150,000. C. D. Hine, Hartford, state supt. Davis & Brooks, Lewis and Gold Sts., Hartford, archts.

N. Y., Albany—State Office—Trustees Pub. Bldgs. applied to State Legislature for appropriation of $2,500,000 to construct state office buildings.

N. Y., Bath—Barracks—Bd. Dirs. New York State Soldiers' and Sailors' Home applied to State Legislature, Albany, for appropriation of $100,550 to rebuild barracks H and I.

N. Y., Binghamton—Hospital—State Hospital Comn., Albany, applied to State Legislature for appropriation of $150,000 to construct building for acute patients and $350,000 for building for chronic patients.

N. Y., Brooklyn—Hospital—Williamsburg Hospital, 342 Bedford Ave., having plans prepared by Helmle & Corbett, archts., 190 Montague St., for 7 story, 126 x 150 ft., steel and brick, brick foundation on South 9th St. and Driggs Ave. About $350,000.

..**N. Y., Central Islip**—Chronic Group, Kitchen, etc.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $700,000 to build chronic group, $125,000 for kitchen and dining-room building and $200,000 for buildings for acute patients, at Central Islip State Hospital.

N. Y., Cornell—School, Laboratory, etc.—Trustees Cornell University, applied to State Legislature, Albany, for appropriation of $150,000 to build school, laboratory, etc., here.

N. Y., Creedmore—Nurses' Home—State Hospital Comn., Albany, applied to State Legislature for appropriation of $200,000 to build nurses' home at Brooklyn State Hospital, here.

N. Y., Gowanda—Hospital—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $175,000 to build reception hospital at Gowanda State Hospital.

N. Y., Hudson—Bd. Dirs. New York Training School for Girls, applied to State Legislature, Albany, for appropriation of $48,000 to build 2 story, 38 x 82 ft. storehouse and refrigerating plant here.

N. Y., Huntington Park (Huntington P. O.)—Museum—A. Heckscher, 56 East 42nd St., New York City, having revised plans prepared by Maynicke & Franke, archts., 25 East 26th St., New York City, for 1-story, 44 x 113 ft. limestone and marble. About $100,000.

N. Y., Kings Park—Hospital, etc.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $75,000 to construct building for tuberculosis patients; $50,000 for physicians' building; $50,000 for assembly hall; $75,000 for administration building and $200,000 for reception hospital; at Kings Park State Hospital.

N. Y., Middletown—Hospital, etc.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $100,000 to construct building for convalescent patients and $100,000 for employees' home, at Middletown State Hospital.

N. Y., New York—Office and Loft—Baker, Carver & Morrell, 39 Water St., purchased site and plans to build 9 story, 28 x 83 ft. at 37 Water St.

N. Y., Poughkeepsie—Cottages—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $50,000 for 2 cottages at Hudson River State Hospital here.

N. Y., Rochester—Hospitals—State Hospital Comn., Albany, applied to State Legislature for appropriation to construct buildings at Rochester State Hospital, one for housing 250 patients to cost, $250,000; 200 patients $160,000; 100 patients, $120,000; also for 12 cottages, $70,000.

N. Y., Rome—Industrial, Employees School, etc.—Bd. Dirs. New York State Custodial Asylum, applied to State Legislature, Albany, for appropriation of $50,000 for industrial building, $50,000 for employees building, $275,000 for school group consisting of dormitories, kitchen, dining room, etc., and $50,000 for nursery building.

N. Y., Syracuse—Horticultural—Bd. Dirs. State Fair, Syracuse, applied to State Legislature, Albany, for appropriation of $250,000 to construct horticultural building.

N. Y., Thiells—School, Assembly Hall, etc.—Bd. Dirs. Letchworth Village, applied to State Legislature, Albany, for appropriation of $40,000 for school; $60,000 for assembly hall and industrial building; $360,000 for 8 cottages; $70,000 for attendants' home; $90,000 for service building and $140,000 for girls group consisting of assembly hall and industrial building. F Vanderlip, 7 Wall St., New York City, pres.

N. Y., Utica—Hospital—State Hospital Comn., Albany, applied to State Legislature for appropriation of $50,000 to construct industrial building at Utica State Hospital.

N. J., Newark—Fire and Police Stations—City will sell $200,000 bonds Feb. 6, to build fire and police stations. M. R. Sherrard, city engr.

N. J., Newark—School—Bd. Educ. receives bids about Apr. 1, building 4-story, 200 x 200 ft. rein.-con. and brick, rein-con. flooring, concrete foundation, Sussex Ave. and 1st St., consisting of laboratories and power plant, etc. About $500,000. J. H. and W. C. Ely, Firemans Bldg., archts.

N. J., Newark — Store — See "Industrial Works."

Pa., Wilkes-Barre—Theater—Comerford-De Graff Theatrical Co. Scranton, plans to build theater on Public Sq. here. About $150,000. F. W. Herman, mgr.

Md., Baltimore—Laboratory or Library—Trustees John Hopkins University, Homewood, plan to build either chemical laboratory or library building on ground here. About $200,000 has been bequeathed by E. O. Mergenthaler for this purpose. Address F. J. Goodnow, Gilman Hall, pres. of college.

Md., Baltimore—School—S. Lasch, city councilman, introduced ordinance to appropriate $200,000 bonds for public school on Orleans, Baltimore, Asquith and Eden Sts.

Ga., Milledgeville — Home — Trustees Georgia State Sanitorium plan to build 3 story, brick home for nurses. About $100,000.

La., Lake Charles—Schools—City voted $200,000 bonds to build and repair schools damaged by storm. Noted Dec. 12.

O., Bellaire—Temple—F. F. Faris, archt., Schmulback Bldg., Wheeling, W. Va., receives bids in February, building 4 story 82 x 120 ft. brick for United Mine Workers of Sub Dist. No. 5 of Ohio. About $100,000. Noted July 25.

O., Cincinnati—School—Bd. Educ., 511 West Court St., having plans prepared by Tieting & Lee, archts., 4th Natl. Bank Bldg., for Harriet Beecher Stowe School. 3 story, brick home for nurses. About $100,000.

O., Cincinnati—School—Bd. Educ., 511 West Court St., plans to build Sherman school on 8th and 9th Sts., brick. About $250,000. Garber & Woodward, Union Century Bldg., archts.

O., Dayton—Church—Schenck & Williams, Mutual Home Bldg., soon lets contract building brick, stone and rein.-con., rein.-con. flooring brick foundation, on Salem Ave., for Grace Methodist Episcopal congregation, 4th and Ludlow Sts. About $200,000. Noted May 2.

O., London—Prison—Ohio Prison Bldg. Comn., Columbus, plans to submit estimate to A. Cox, governor, for new prison near here. State Legislature will be asked to appropriate $350,000, which together with unexpended balance will make total of $700,000.

Mich., Ironwood—Sanitarium—Gogebic Co. having plans prepared by C. J. Anderson, archt., Ironwood, for sanitarium. About $75,000.

Ill., Alton—Home—Catholic Orphanage plans to build addition. About $80,000. J. J. Ryan, Alton, bishop.

Buildings (Continued)

Wis., Eau Claire—Church—Norwegian Lutheran congregation plans to build 1 story. About $60,000. R.R. Syidal, pastor.

Wis., Janesville—School—Bd. Educ. plans to build. About $250,000.

Wis., Madison—School—Bd. Educ. soon lets contract building 2 story, 61 x 110 ft. About $80,000. F. L. Kronenberg, 18 North. Carroll St., arch.

Wis., Sheboygan — Exchange — Citizens Telephone Exch., 706 North 8th St., receives bids in February, building 4 story, rein.-con. and brick. About $70,000. W. C. Weeks, 720 Ontario St. archt. Noted June 6.

Wis., West Bend—Memorial Hall—City plans to build here. About $80,000. A. C. Clas, Colby-Abbot Bldg., Milwaukee, archt.

Ia., Council Bluffs—Chapel—Christian Home having plans prepared by J. C. Jensen, archt., 305 West Bway., building 2 story, brick and stone. About $50,000.

Ia., Waterloo—School—Bd. Educ. soon lets contract building 3 story, 55 x 125 ft. About $80,000. J. E. Dempater, secy. Noted Jan. 2.

Ia., Waverly—Dormitory—Wartberg Seminary having plans prepared by G. L. Lockhart, archt., 391 Endicott Bldg., St. Paul, for 2 story, rein.-con. and brick.

Minn., Aurora—High School—Bd. Educ. receives bids in spring building here. C. L. Pillsbury Co., 805 Metropolitan Life Bldg., Minneapolis, engrs. Noted Dec. 5.

Minn., Duluth — Church — Protestant Church Trustees, Morgan Park, having plans prepared by German & Jenssen, archts., Exch. Bldg., for 2-story, rein.-con., brick and steel, rein.-con. flooring, concrete and rock foundation, on Commonwealth Ave. About $100,000.

Minn., Duluth—Hospital—St. Lukes Hospital plans to build 4 story addition on 1st St and 10th Ave., E., rein. con. and brick, rein. con. flooring, concrete and rock foundation. About $100,000.

Minn. St. Paul—Hotel—Minor Hotel Co. receives bids in March building 15 story, 100 x 100 ft., rein.-con. and brick, 4th and Robert Sts. About $500,000. M. Fitzpatrick, 17 West 9th St., archt. Noted May 2.

Minn., Trommald—School—City plans to build. About $75,000.

Minn., Victoria—School—Bd. Educ. had plans prepared by Magney & Rusler, archts. and engrs., 450 Builders Exch., Minneapolis, building 2 story, here.

Minn., Waubun—School—City election in spring to vote on $60,000 bonds to build 2 story, 65 x 130 ft., rein.-con. and brick. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt.

Minn., Winnebago—School—Bd. Educ. receives bids in spring building 2 story, 74 x 112 ft., rein.-con. and brick. About $50,000. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt.

Kan., Assaria—High School—Bd. Educ. approved preliminary plans for 2 story, 58 x 100 ft. brick and rein.-con., with 16 x 60 ft. extension in rear. About $50,000. W. E. Hulse & Co., Hutchinson, archts.

Mo., Jefferson City—Dormitory—State Legislature asked to appropriate $200,000 to build dormitory here. Address C. E. Edwards, Jefferson City, representative.

Mo., Marshall—Hospital—Trustees J. Fitzgibbon Estate purchased site and plan to build memorial hospital. About $50,000. J. R. Hall, chn.

Mo., St. Louis—Court House—City plans to issue $2,000,000 bonds to build on Bway and Chestnut St. L. R. Bowen, city engr.

Mo., St. Louis—Fire House—Bd. Pub. Serv. soon receives bids building 2 story, 36 x 76 ft. and 28 x 65 ft. brick and timber firehouses Nos. 3 and 32. About $56,000. L. R. Bowen, city engr. Noted Dec. 12.

Mo., St. Louis.—Theater, etc.—M Loew, 1493 Bway, New York City, having plans prepared by T. W. Lamb, archt., 644-8th Ave., New York City for theater and business lofts, on 8th and Washington Sts here. About $500,000.

Tex., Dallas—Church — First Methodist congregation plans to build on Ross and Harwood Sts. About $500,000. A. V. Lane chn.

Utah, Salt Lake City—Bathhouse—City plans to build at Warm Springs. About $150,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—Memorial—City plans to build soldiers' and sailors' memorial building on University Campus. About $300,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—Zoo—City plans to build at Liberty Park. About $65,000; also $35,000 will be expended for improvements to existing building. S. Q. Cannon, city engr.

Wash., Walla Walla—Temple—Knights of Pythias plan to build 2 story, 60 x 130 ft., on East Poplar St. About $50,000.

Cal., Long Beach — School — Bd. Educ. having plans prepared by Austin & Austin, archts., 1125 Baker-Detwiler Bldg., Los Angeles, for school on American Ave. About $100,000.

Cal., Long Beach—Y. M. C. A. plans campaign to raise funds to construct building; 6th and American Aves. About $200,000. R. H. Gossom, secy.

Que., Laval des Rapides—Club House—Laval Sur Lac Golf Club having plans prepared by G. A. Monette, archt., 83 Craig St. W., Montreal, for club. About $50,000.

Ont., Brantford—School—City voted $75,000 bonds to build school. A. K. Bunnell, City Hall, secy. treas. Noted Oct. 17.

Ont., London — Seminary — St. Peter's Cathedral plans to build on Waterloo St., N. About $300,000 available. M. F. Fallon, bishop.

Ont., Ottawa—Theater—J. J. Allen Co., Richmond and Victoria Sts., Toronto, plans to build on Bank St. here. About $250,000.

Ont., Toronto—Schools—Bd. Educ. plans to build Glen Gove and Glenholme Ave. schools. About $160,000.

Ont., Welland—Fire Hall—City voted $60,000 bonds to build fire hall. C. M. Stapf, clk. Noted Nov. 28.

BIDS DESIRED

N. Y., Brooklyn—Theater—Until Feb. 19, by Cohn Bros., archts., 361 Stone Ave., building 1-story, 80 x 190 ft., steel and brick, brick foundation, Cleveland St. and Pitkin Ave., for Cleveland Amusement Co., 645 Georgia St.

N. Y., New York—Hospital—Until Feb. 10, by L. Abramson, archt., 220 5th Ave., building four 4 story, steel and brick hospital buildings, Fulton Ave. and East 169th St., for Bronx Hospital. About $50,000.

N. Y., New York—School and Chapel—Until Feb. 6, by B. S. Coler, comr., dept. pub. charities, Municipal Bldg., for school and chapel on Randalls Island.

D. C., Wash.—Office and Loft—Until Feb. 5, by M. Heister & Co., archts., Union Savings Bank Bldg., for 5 story, 68 x 100 ft., steel and brick, concrete foundation, 9th St. and Mt. Vernon Pl., for International Assn. of Amer. Machinists, 9th St. and Massachusetts Ave. Noted Aug. 29.

O., Cincinnati—School—Until Feb. 24, by Bd. Educ., 511 West Court St. building Hoffman School, 3-story brick, Bloody Run Blvd. About $250,000. Hannaford & Son, Hulbert Blk. archts.

O., Phillipsburg—School—Until Feb. 21, by R. Davenport, clk., bd. educ., building 2 story, rein.-con. and brick, rein.-con. flooring, concrete foundation. About $50,000. Noted Sept. 12.

Minn., Cloquet—High School—Until Mar. 1, by bd. educ. building 3 story, 65 x 190 ft., rein.-con., brick and steel, rein.-con. flooring, concrete and rock foundation, on Main St. About $140,000. Croft & Boerner, Lonsdale Bldg., Duluth, archts.

Minn., Mountain Iron—School—Until Mar. 1, by H. E. Mitchell, secy. bd. educ., building 3 story, 134 x 156 ft., rein.-con. and brick, rein.-con. flooring, concrete, brick and rock foundation in Leonides Twp. About $175,000. W. T. Bray, Fidelity Bldg., Duluth, archt.

Minn., Mountain Iron — School — Until Mar. 1, by H. E. Mitchell, secy. bd. educ., building 3 story, 145 x 173 ft., rein. con., brick and steel, rein. con. flooring, concrete brick and rock foundation on Main St. About $200,000. W. T. Bray, Fidelity Bldg., Duluth, archt.

Waiting for Prices To Fall

It has been stated by many that the unprecedented power of the labor unions will maintain the present labor schedules. This will mean that profits must be cut if spring construction is not to be dangerously small. Hence, though production costs are not lowered, many manufacturers are reducing prices. These executives are farsighted enough to realize that the only way by which prosperity may be attained this year is to make the price attractive. They prefer to make a smaller unit profit on a large volume of sales rather than allow the business of the country to stagnate.

In the work of readjustment there are, happily, several optimistic features. Certain commodities that were distinctly war necessities and therefore unquotable for general use, are again on the market. For example, not since August, 1918, has asphaltum been on the open market in New York. The Government required not only the product, but the tankers as well. This product is again available for general use at $35 a ton in barrels and $30 in bulk. Road oils are again obtainable by contractors. The present prices are by no means staple. Within a month a drop is expected. It is conceivable that soon the price of asphalt products will be about what it was just prior to the war. This is hopeful, and anything that is hopeful in the price situation has a stabilizing effect.

Another cause for optimism is the recent drop in the price of cement to contractors. On Jan. 18 it declined 55c. per barrel—from $4 at dock in New York, in cargo lots to contractors, to $3.45. This decrease is not due to lowered production cost, but to a desire to stimulate construction. Enlightened men are sacrificing excessive profits, because they know that a slack 1919 may cause a ruinous 1920.

Buildings (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Watertown** (Middlesex P. O.)—Office—Aetna Mills let contract building 2 story, 42 x 100 ft. brick and rein.-con., rein-con. flooring and concrete foundation, to H. Wales Lines Co., 134 State St., Meriden, Conn. About $75,000. Noted Jan. 23.

★**N. Y., Brooklyn**—School—Coney Island Talmud Torah, Inc., 2861 West 32nd St., Coney Island, will build 3 story, 56 x 100 ft.. steel and brick, brick foundation, on 31st St. between Mermaid and Neptune Aves., Coney Island. About $50,000. Work will be done by day labor. Noted Jan. 16.

★**N. Y., Brooklyn**—Theatre—J. Speelberg, 308 Sheffield Ave., will build 2 story, 75 x 200 ft., steel and brick, rein.-con. flooring, concrete foundation, at 381 Stone Ave. About $75,000. Work will be done by day labor.

★**N. Y., Rochester** — Store — Oppenheim Collins, 35 West 34th St., New York City, let contract building 8 story, steel and brick addition here, concrete foundation, to C. A. Cowan, 30 East 42nd St., New York City; cost plus percentage.

Wis., Kenosha—Schools—Bd. Educ. received only bid building two 2 story, 147 x 182 ft., rein.-con. and brick, from Madsen & Peterson, 802 Plymouth Bldg. Minneapolis, Minn. About $165,000.

★**Colo., Windsor**—High School—Bd. Educ. let contract, to A. Olson, Denver, $70,885.

Cal., Los Angeles—School—Bd. Educ., 730 Security Bldg., received bids Jan. 15, building 2 story, 125 x 160 ft., hollow tile, concrete foundation, on Soto St., from C. Karseboom, 1445 Dana St., $52,600; Pozzo Constr. Co., 427 Macy St., $53,057; K. R. Bradley, 527 East Jefferson St., $54,600.

★**Ont., Ottawa**—Office—Dominion Government let contract extending office building of Dept. of Soldiers' Civil Re-Establishment, to Taylor & Lackey, Ottawa. About $55,000.

Federal Government Work

PROPOSED WORK

N. Y., Rockaway—Addition to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3780. About $20,000.

Pa., Ft. Mifflin—Fire Protection System—Bureau Yards & Docks, Navy Dept. Wash., D. C., plans; Spec. 3779. About $20,000.

Pa., Phila.—Addition to Shipbuilding Slip—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build addition to shipbuilding slip 283; Spec. 3781. About $325,000.

Pa., Phila.—Bridge Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install two 15 ton E. T. bridge cranes; Spec. 3777. About $70,000.

Pa., Phila.—Temporary Steel Storage—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3775. About $150,000. Bids will be received at local yard.

Md., Baltimore—Harbor Improvement—U. S. Bd. Army Engrs. receives bids about Feb. 1, improving harbor channels, including 35-ft. channel in Patapaco River and 30-ft. channels in Curtis Bay and Spring Gardens branches. Work involves 152,000 cu.yd. maintenance dredging in Ft. McHenry Sect., 171,000 cu.yd. in Ft. McHenry, Brewington angle, 312,000 cu.yd. in cut-off section, 226,000 cu.yd. from Brewington channel, 108,000 cu.yd. from Brewington cut-off angle, 150,000 cu.yd. from cut-off Craighill angle, 120,000 cu.yd. from York Spit Sect., 1,124,000 cu.yd. from Curtis Bay Sect. and 2,800,000 cu.yd. from 35 ft. sect. of branch channel in southwestern part of Baltimore harbor. About $675,432. W. M. Black, engr.

Va., Yorktown—Wood Pier and Approach—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Dec. 23, building at Navy Mine Depot; Spec. 3491. Noted Jan. 2.

N. C., Monroe—Radio Buildings, Garage, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Dec. 30, building radio buildings, garage, barracks and 3 officers' quarters at Southern Radio Sta.; Spec. 3683. Work will be readvertised. Noted Jan. 9.

S. C., Paris Island—Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3783. About $41,000

Minn., Duluth—Customhouse—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., plans to build steel, rein.-con. and brick customhouse, brick, rock and concrete foundation, on 1st St. and 5th Ave., W. About $1,000,000.

Mo., St. Louis—Developing Waterways—Natl. Rivers & Harbors Comn. applied to Congress Wash., D. C., for appropriation of $400,000,000 to develop navigable waterways. Plans include improving Mississippi River and tributaries as follows, 12 ft. channel from St. Louis to New Orleans, 9 ft. channel from St. Louis to St. Paul, 9 ft. channel for Ohio and Illinois Rivers and 6 ft. channel for Missouri River, to cost about $160,000,000.

Tex., North Ft. Worth—Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Jan. 6, building 2 wells and installing pumps at Argon production plant; Spec. 3577. Work will be readvertised. Noted Jan. 9.

Tex., San Antonio—Refrigerating Plants—Constr. Div., War. Dept., Wash., D. C., authorized enlargement of refrigerating plants at Camp Travis and Ft. Sam Houston base hospitals. About $10,000. Work will be done under supervision of Major F. G. Chamberlain, Constr. Quartermaster.

Cal., San Francisco—Extension to Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build extension to Long Wharf, here; Spec. 3782. About $19,000.

BIDS DESIRED

N. H., Portsmouth—Piping and Circulating System—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3416. About $40,000.

Mass., Boston—Steel Stock and Storage Shed—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3736. About $80,000. Noted Jan. 2

N. Y., Fire Island—Barracks—Until Mar. 3, by Bureau Yards & Docks, Navy Dept., Wash., building barracks at U. S. naval radio sta., here; Spec. 3728. Noted Jan. 16

N. Y., New York—Chimney for Boiler Plant—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3606. About $15,000. Noted Oct. 31.

N. Y., New York—Coal and Ash Handling Equipment—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3607. About $80,000. Noted Oct. 31.

N. Y., Ward's Island—Laundry Equipment—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3665. About $8500. Noted Nov. 21.

N. Y., Wards Island—Refrigerating Plant Equipment—Until Feb. 10, installing; Spec. 3749. About $30,000. Noted Jan. 9.

Pa., Ft. Mifflin—Railroad Extension—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building; Spec. 3727. About $20,000; $10 deposit required for plans and spec. Noted Dec. 19.

Pa., Ft. Mifflin—Tank and Tower—Until Feb. 5, by U. S. Engineer Office, Phila., building steel water tank and tower, here.

Md., Indianhead—Small Boat Basin and Bulkhead—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3776. About $42,000.

Va., Hampton Roads—Coal and Ash Handling Equipment — Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing, here; Spec. 3300. About $60,000.

Va., Hampton Roads—Equipment, etc.—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing machinery equipment and piping in power plant; Spec. 3328. About $125,000; $10 deposit required for plans and spec.

Va., Quantico—Tanks—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 2 rein.-con. tanks in marine corps barracks; Spec. 3628. About $4800. Noted Nov. 14.

Mo., St. Louis—Surgical Dressing Room—Until Feb. 20, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building surgical dressing room in U. S. Marine Hospital here.

Tex., Galveston—Hangars, Pavement and Beach—Until Feb. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 3 hangars, etc.; Spec. 3432. About $485,000. **Former bids rejected.** Noted Jan. 9.

Cal., Mare Island (Vallejo P. O.)—Fu Oil Storage Plant—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash D. C.; Spec. 3631. About $400,000; $5 deposit required for plans and spec. Noted Nov. 7.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Chatam**—Service Connections—Bureau Yards & Docks, Navy Dept., Wash D. C., let contract building service connections to buildings, to Hixon Electric Co 246 Summer St., Boston, $12,835, (60 days)

★**Conn., New London**—High Pressure Air System—Bureau Yards & Docks, Wash., D. C., let contract building at Submarine Base, to Carroll Electric Co., 714 12th St., Wash., D. C., $13,560, (125 days). Noted Dec. 19.

★**N. Y., New York**—Altering Post Office Lobby—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to B. Knopp 431 West 41st St., $5094. Noted Jan. 16.

D. C., Wash.—Bridge—Dist. Comrs., Dist. Bldg., received bids building bridge on Concord Ave., between 3rd and 4th Sts., (1) excav.; (2) masonry, from Continental Contg. Co., Inc., 66 Knickerbocker Bldg., Baltimore, Md. (1) $3.15; (2) $21.25; C. H. Tompkins, 1883 3rd St., (1) $4; (2) $18.50. Former bids rejected. Noted Jan. 16.

★**D. C., Wash.** — Fuel Yard — Bureau Mines, Interior Dept., let general contract building 2 story, frame and concrete fuel yard, to International Contg. Co., 50 East 42nd St., New York City. About $200,000, concrete foundation, to W. F. Bernizer Co., 101 New York Ave., N. E.

Va., Hampton Roads—Extending Pneumatic Tube System, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 27 building pneumatic tube extension at naval operating base, (1) net price and time for work, complete, in accordance with drawings and specification; (2) net price and time for work complete with such modifications and departures from drawings and specifications as bidder may desire to propose, which, however, shall be clearly and completely described in his proposal under a special heading "Exceptions," from Lamson Co., 100 Boyleston St., Boston, Mass.. (1) $32,991 (90 days). Standard Carrier Co., 51 East 42nd St., New York City, (1) $29,637 (100 days), (2) $27,241. Noted Jan. 16.

★**Va., Portsmouth**—Altering Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract to W. Grohne, Joliet Ill., $2740. Noted Jan. 23.

Va., Salem—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 23, work complete using limestone, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $52,000; R. K. Stewart, Farmville, Va., $55,000; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $56,335. Noted Jan. 2.

Ark., Russellville — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 23, work complete using limestone, from W. D. Lovell 1415 Southeast 8th St., Minneapolis, Minn., $54,700; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $56,200; W. MacDonald Constr. Co., St. Louis, Mo., $59,870. Noted Jan. 2.

Tex., North Ft. Worth—Gas Holders, Removal System, Etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 27, for 5 gas holders and Co2 removal system: (1) net price and time for work complete in accordance with drawings and specification, (1a) net price and time for work complete in accordance with drawings and specifications, but substituting single lift out, telescopic tanks for double lift out, telescopic tanks specified. (2) amount deducted from net price and time for work complete, as required in (1) by omitting excavation and concrete work and housing or sheds, steps and runway as called for in paragraphs 28-34 inclusive, 32-45 inclusive, 62-72 inclusive, respectively. Special attention is called to paragraphs 36, 47, and 76, (2a) alternate proposal, from Pittsburgh Des Moines Steel Co., 859 Munsey Bldg., Wash., D. C., (1a) $106,000 (150 days), (2a) $15,000 (150 days). Omaha Structural Steel Wks., 48th and Leavenworth St., Omaha, Neb., (1) $121,000 (150 days), (2) $16,300 (150 days). Camden Iron Wks., Hadden Ave. and Lime St., Camden, N. J., (2) $101,200 (240 days) for 2 single light gas holders instead of 2 as required by the specification. Noted Jan. 16.

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand* Current	Sand* One Yr. Ago
New York	$2.00	$2.00	$2.00	$2.10	$1.25	$1.[illegible]5
Denver	1.55	1.65	1.55	1.45	1.10	1.00
Chicago	2.00	1.50		1.50	1.10	1.[illegible]0
Kansas City	2.50	2.15	3.00	2.60	1.00†	.60
St. Louis*	1.76	1.11	1.82	1.11	1.68	1.11
Seattle	1.25	.80	1.25	.80	1.25	1.00
Dallas	2.00	1.50	2.00	1.50	1.50	1.25
St. Paul	1.25	1.00	1.[illegible]5	1.40	.60	.50
San Francisco	1.20	1.00	1.20	1.00	1.20	1.00
Boston	2.75	1.50	2.75	1.60	1.25	.90
New Orleans	2.82				1.88	1.95
Cincinnati	1.35	1.65	1.35‡	1.65	1.35‡	1.65
Los Angeles	*1.1[illegible]*	....	*1.1[illegible]*	....	*.70*	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	*$1.65*–1.75	$1.55	*$1.65*–1.85	$1.7[illegible]
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.25	1.35	1.25	1.35
Dallas	2.25	1.39	2.25	1.46
San Francisco	1.20	1.09	1.20	1.00
Boston	1.7[illegible]*	1.50	1.75*	1.60
St. Paul	1.15	1.00	1.25	1.10
Denver		1.50	1.55	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle	1.50	1.10	1.50	1.10
Cincinnati	1.50	1.75		1.75
Los Angeles	*1.20*	....	*1.20*	

*Per ton.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	22.80	20.80	2.35*	2.20
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	16.00		1.75
Boston	22.20	18.20	3.65	3.35
Dallas	16.50	....	....	
San Francisco	20.00	....		2.40
St. Paul	25.00	19.50	1.97*	1.93*
Denver	26.20	....	....	2.50*
Cincinnati	14.20	[illegible].70		....
Seattle	30.00	....	2.80*	11.95‡
Los Angeles	....	....	3.00*	*2.30*†

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., including bags:

Cincinnati (Utica)	$1.80
St. Paul (Austin)	1.93
Boston (Rosendale)	1.65
Kansas City (Ft. Scott)	1.75
New Orleans	3.52

Return of from 9c. to 15c. allowed per bag.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Current	One Month Ago	One Year Ago
New York	*$3.45*	$4.00	$2.25
Jersey City	3.62	3.62	2.16
Boston	3.67	3.67	2.37
Chicago	3.05	3.05	2.21
Pittsburgh	3.15	3.15	2.31
Cleveland	3.32	3.32	2.44
Detroit	3.28	3.28	2.40
Indianapolis	3.22	3.22	2.38
Toledo	3.22	3.22	2.40
Milwaukee	3.16	3.16	2.33
Duluth	3.20	3.20	2.51
Peoria	3.16	3.16	2.33
Cedar Rapids	3.28	3.28	2.48
Davenport	3.24	3.24	2.40
St. Louis	3.30	3.30	2.45
San Francisco	*3.03*	3.48	2.30
New Orleans	3.77	3.77	3.00
St. Paul	3.40	3.40	2.80
Denver	3.67	3.67	3.20
Kansas City	3.30	3.30	2.44
Seattle	3.33	3.33	3.25
Dallas	2.93	2.93	2.60
Los Angeles	*3.58*	3.68	....
Cincinnati	2.80	2.80	2.92

NOTE—Bag Refund is generally 25c. each; exceptions: Cincinnati, 9c.; Dallas, 10c.; San Francisco, 15c.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$1.09	$1.02	$1.03	$1.13	*$21.36*
049	0.049	1.22	1.40	1.30	1.32	1.43	*1.72*
068	0.068	1.52	1.73	1.62	1.64	1.79	*2.15*
093	0.093	1.96	2.23	2.09	2.11	2.41	*2.77*
126	0.126	2.48	2.82	2.63	2.67	2.92	*3.50*
153	0.153	2.96	3.38	3.15	3.19	3.48	*4.18*
180	0.180	3.39	3.85	3.60	3.66	3.99	....
245	0.245	4.48	5.10	4.75	4.83	5.27	....
287	0.287	5.18	5.90	5.50	5.58	6.10	*7.31*
336	0.336	6.00	6.83	6.37	6.47	7.06	....
395	0.395	6.96	7.89	7.40	7.50	8.19	....
PAVING							
036	0.036	$0.74	$0.84	$0.81	$0.80	$0.80	....
053	0.053	1.04	1.25	1.25	1.12	1.12	....
072	0.072	1.35	1.58	1.53	1.[illegible]	1.46	....
097	0.097	1.74	1.98	1.98	1.8[illegible]	1.88	....
049	0.049	1.04	1.25	1.25	1.12	1.12	....
067	0.067	1.35	1.53	1.53	1.4[illegible]	1.46	....
089	0.089	1.80	1.98	1.98	1.88	1.88	....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$31.00	$31.00	$34.00	$38.00	$33.33
26	250	35.23	32.05	32.00	35.00	40.00	34.33
25	300	36.51	33.15	33.25	......	42.50	35.33
24	340	37.73	34.25	34.50	37.00	......	37.50
22	450	40.48	36.45	......	......	......	......

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Month Ago	Chicago	St. Louis	Dallas	San Francisco
¾ and larger	$2.90	$4.12	$4.12	*$3.97*	*$4.04*	$ 90	$5.15
⅝	2.95	4.18	4.18	*4.02*	*4.09*	4.95	5.20
½	3.00	4.23	4.23	*4.07*	*4.14*	5.00	5.25
⅜	3.15	4.38	4.38	*4.22*	*4.29*	5.15	5.40
¼	3.40	4.62	4.62	*4.67*	*4.42*	6.15	5.65

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas
¾ in. and larger	*$2.97*	*$2.80*	$4.90
⅝	*3.02*	*2.85*	4.95
½	*3.07*	*2.90*	5.00
⅜	*$3.22*	*$3.05*	$5.15
¼	*3.47*	...	6.1

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$14.00	$10.00	No Quotations	
Chicago	12.00	11.00	8.00	$31.00	$33.00
St. Louis, selected	18.00	18.00	11.00	28.00	...
St. Louis, salmon	12.00*	12.00	9.50	.....	...
Denver	12.00†	12.00	8.50	.....	...
Dallas	16.07	16.07	10.50	26.50	...
San Francisco	12.00	12.00	10.00	.....	...
Boston (on job)	18.00	16.75	13.25	30.00‡	...
New Orleans	15.98	15.98	11.00	.....	...
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	13.00	11.00	35.00	...
Seattle	15.00	15.00	10.00	40.00	...
Cincinnati	16.75	16.75	13.50	.....	...
Los Angeles	*12.00*	14.00	.....	.....	...

* Hard brick, $16. † Salmon is $10. ‡ Water-struck; sand-struck is $21.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy; N. J.
4x12x12	$0.11925	.....	$0.07	$0.08	$0.1125	$0.1005	.....
6x12x12	.159	.....	.095	.105	.15	.106	$0.1512
8x12x12	.....	.....	.12	.15	.....	.201	.1944
10x12x12	.....	.....	.14	.173	.....	.300	.2263
12x12x12	.....	.....	.195	.208		.325	.2916

	4x12x12	8x12x12	12x12x12
Boston	$0.10½	$0.20	$0.29
St. Paul	.056	.11	.162
Cincinnati	.086	.165	.218
Kansas City	.0786	.15	.205
Seattle	.09	.17½	.30
Los Angeles*	*.07½*	*.139*	.245
New Orleans	.16	.22	.32

* F.o.b. factory, 4, 8 and 10 inch.

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	*$2.80*	*$4.07*	$4.19½	*$4.14*	*$4.07*	$5.25	$7.00
Channels, 3 to 15 in	*2.80*	*4.07*	4.19½	*4.14*	*4.07*	5.25	7.00
Angles, 3 to 6 in., ¼ in. thick	*2.80*	*4.07*	4.19½	*4.14*	*4.07*	5.25	7.00
Tees, 3 in. and larger	*2.80*	*4.12*	4.19½	*4.14*	*4.07*	5.25	7.00
Plates	*3.00*	*4.27*	4.44½	*4.14*	*4.27*	5.50	7.10

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	*$4.40*	$6.50	$7.00	$5.57	*$4.74*	$6.70	$7.00
CONE HEAD BOILER							
¾ in. and larger	*4.50*	6.60	7.10	5.67	*4.84*	8.80	7.10
⅝ and 11/16	*4.65*	6.75	7.25	5.82	*4.99*	6.95	7.25
½ and 9/16	*5.00*	7.10	7.60	6.17	*5.24*	7.30	7.60

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.cl.	2-Ply c.l.	2-Ply l.cl.	3-Ply c.l.	3-Ply l.cl.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $2.10 per roll in carload lots and $2.35 for smaller quantities.

Shingles, red and green slate finish, cost $5.50 per square in carloads, $5.75 in smaller quantities, in Philadelphia.

Buildings (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Watertown (Middlesex P. O.)—Office—Aetna Mills let contract building 2 story, 42 x 100 ft. brick and rein.-con., rein-con. flooring and concrete foundation, to H. Wales Lines Co., 134 State St., Meriden, Conn. About $75,000. Noted Jan. 23.

★N. Y., Brooklyn—School—Coney Island Talmud Torah, Inc., 2861 West 32nd St., Coney Island, will build 3 story, 56 x 100 ft., steel and brick, brick foundation, on 31st St. between Mermaid and Neptune Aves., Coney Island. About $50,000. Work will be done by day labor. Noted Jan. 16.

★N. Y., Brooklyn—Theatre—J. Speelberg, 308 Sheffield Ave., will build 2 story, 75 x 200 ft., steel and brick, rein.-con. flooring, concrete foundation, at 381 Stone Ave. About $75,000. Work will be done by day labor.

★N. Y., Rochester — Store — Oppenheim Collins, 35 West 34th St., New York City, let contract building 8 story, steel and brick addition here, concrete foundation, to C. A. Cowan, 30 East 42nd St., New York City; cost plus percentage.

Wis., Kenosha—Schools—Bd. Educ. received only bid building two 2 story, 147 x 182 ft., rein.-con. and brick, from Madsen & Peterson, 802 Plymouth Bldg. Minneapolis, Minn. About $165,000.

★Colo., Windsor—High School—Bd. Educ. let contract, to A. Olson, Denver, $70,885.

Cal., Los Angeles—School—Bd. Educ., 730 Security Bldg., received bids Jan. 15, building 2 story, 125 x 160 ft., hollow tile, concrete foundation, on Soto St., from C. Karseboom, 1445 Dana St., $52,600; Pozzo Constr. Co., 427 Macy St., $53,057; K. R. Bradley, 527 East Jefferson St., $54,600.

★Ont., Ottawa—Office—Dominion Government let contract extending office building of Dept. of Soldiers' Civil Re-Establishment, to Taylor & Lackey, Ottawa. About $55,000.

Federal Government Work

PROPOSED WORK

N. Y., Rockaway—Addition to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3780. About $20,000.

Pa., Ft. Mifflin—Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3779. About $20,000.

Pa., Phila.—Addition to Shipbuilding Slip—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build addition to shipbuilding slip 283; Spec. 3781. About $325,000.

Pa., Phila.—Bridge Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install two 15 ton E. T. bridge cranes; Spec. 3777. About $70,000.

Pa., Phila.—Temporary Steel Storage—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3775. About $150,000. Bids will be received at local yard.

Md., Baltimore—Harbor Improvement—U. S. Bd. Army Engrs. receives bids about Feb. 1, improving harbor channels, including 35-ft. channel in Patapaco River and 30-ft. channels in Curtis Bay and Spring Gardens branches. Work involves 152,000 cu.yd. maintenance dredging in Ft. McHenry Sect., 171,000 cu.yd. in Ft. McHenry, Brewington angle, 312,000 cu.yd. in cut-off section, 226,000 cu.yd. from Brewington channel, 108,000 cu.yd, from Brewington cut-off angle, 150,000 cu.yd. from cut-off Craighill angle, 120,000 cu.yd. from York Spit Sect., 1,124,000 cu.yd. from Curtis Bay Sect. and 2,800,000 cu.yd. from 35 ft. sect. of branch channel in southwestern part of Baltimore harbor. About $675,432. W. M. Black, engr.

Va., Yorktown—Wood Pier and Approach—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Dec. 23, building at Navy Mine Depot; Spec. 3491. Noted Jan. 2.

N. C., Monroe—Radio Buildings, Garage, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Dec. 30, building radio buildings, garage, barracks and 3 officers' quarters at Southern Radio Sta.; Spec. 3683. Work will be readvertised. Noted Jan. 9.

S. C., Paris Island—Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3783. About $41,000

Minn., Duluth—Customhouse—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., plans to build steel, rein.-con. and brick customhouse, brick, rock and concrete foundation, on 1st St. and 5th Ave., W. About $1,000,000.

Mo., St. Louis—Developing Waterways—Natl. Rivers & Harbors Comn. applied to Congress Wash., D. C., for appropriation of $400,000,000 to develop navigable waterways. Plans include improving Mississippi River and tributaries as follows, 12 ft. channel from St. Louis to New Orleans, 9 ft. channel from St. Louis to St. Paul, 9 ft. channel for Ohio and Illinois Rivers and 6 ft. channel for Missouri River, to cost about $160,000,000.

Tex., North Ft. Worth—Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Jan. 6, building 2 wells and installing pumps at Argon production plant; Spec. 3577. Work will be readvertised. Noted Jan. 9.

Tex., San Antonio—Refrigerating Plants—Constr. Div., War. Dept., Wash., D. C., authorized enlargement of refrigerating plants at Camp Travis and Ft. Sam Houston base hospitals. About $10,000. Work will be done under supervision of Major F. G. Chamberlain, Constr. Quartermaster.

Cal., San Francisco—Extension to Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build extension to Long Wharf, here; Spec. 3782. About $19,000.

BIDS DESIRED

N. H., Portsmouth—Piping and Circulating System—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3416. About $40,000.

Mass., Boston—Steel Stock and Storage Shed—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3736. About $80,000. Noted Jan. 2

N. Y., Fire Island—Barracks—Until Mar. 3, by Bureau Yards & Docks, Navy Dept., Wash., building barracks at U. S. naval radio sta., here; Spec. 3728. Noted Jan. 16

N. Y., New York—Chimney for Boiler Plant—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3606. About $15,000. Noted Oct. 31.

N. Y., New York—Coal and Ash Handling Equipment—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3607. About $80,000. Noted Oct. 31.

N. Y., Ward's Island—Laundry Equipment—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3665. About $8500. Noted Nov. 21.

N. Y., Wards Island—Refrigerating Plant Equipment—Until Feb. 10, installing; Spec. 3749. About $30,000. Noted Jan. 9.

Pa., Ft. Mifflin—Railroad Extension—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building; Spec. 3727. About $20,000; $10 deposit required for plans and spec. Noted Dec. 19.

Pa., Ft. Mifflin—Tank and Tower—Until Feb. 5, by U. S. Engineer Office, Phila., building steel water tank and tower, here.

Md., Indianhead—Small Boat Basin and Bulkhead—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3776. About $42,000.

Va., Hampton Roads—Coal and Ash Handling Equipment — Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing, here; Spec. 3300. About $60,000.

Va., Hampton Roads—Equipment, etc.—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing machinery equipment and piping in power plant; Spec. 3328. About $125,000; $10 deposit required for plans and spec.

Va., Quantico—Tanks—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 2 rein.-con. tanks in marine corps barracks; Spec. 3628. About $4800. Noted Nov. 14.

Mo., St. Louis—Surgical Dressing Room—Until Feb. 20, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building surgical dressing room in U. S. Marine Hospital here.

Tex., Galveston—Hangars, Pavement and Beach—Until Feb. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 3 hangars, etc.; Spec. 3432. About $485,000. **Former bids rejected.** Noted Jan. 9.

Cal., Mare Island (Vallejo P. O.)—Fuel Oil Storage Plant—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3631. About $400,000; $50 deposit required for plans and spec. Noted Nov. 7.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Chatam—Service Connections—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building service connections to buildings, to Hixon Electric Co., 246 Summer St., Boston, $12,835, (60 days)

★Conn., New London—High Pressure Air System—Bureau Yards & Docks, Wash., D. C., let contract building at Submarine Base, to Carroll Electric Co., 714 12th St., Wash., D. C., $13,560, (125 days). Noted Dec. 19.

★N. Y., New York—Altering Post Office Lobby—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to B. Knopp 431 West 41st St., $5094. Noted Jan. 16.

D. C., Wash.—Bridge—Dist. Comrs., Dist. Bldg., received bids building bridge on Concord Ave., between 3rd and 4th Sts., (1) excav.; (2) masonry, from Continental Contg. Co., Inc., 66 Knickerbocker Bldg., Baltimore, Md. (1) $3.15; (2) $21.25; C. H. Tompkins, 1883 3rd St., (1) $4; (2) $18.50. Former bids rejected. Noted Jan. 16.

★D. C., Wash. — Fuel Yard — Bureau Mines, Interior Dept., let general contract building 2 story, frame and concrete fuel yard, to International Contg. Co., 50 East 42nd St., New York City. About $200,000, concrete foundation, to W. F. Bernizer Co., 101 New York Ave., N. E.

Va., Hampton Roads—Extending Pneumatic Tube System, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 27 building pneumatic tube extension at naval operating base, (1) net price and time for work, complete, in accordance with drawings and specification; (2) net price and time for work complete with such modifications and departures from drawings and specifications as bidder may desire to propose, which, however, shall be clearly and completely described in his proposal under a special heading "Exceptions," from Lamson Co., 100 Boyleston St., Boston, Mass., (1) $32,991 (90 days). Standard Carrier Co., 51 East 42nd St., New York City, (1) $29,637 (100 days), (2) $27,241. Noted Jan. 16.

★Va., Portsmouth—Altering Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract to W. Grohne, Joliet Ill., $2740. Noted Jan. 23.

Va., Salem—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 23, work complete using limestone, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $52,000; R. K. Stewart, Farmville, Va., $55,000; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $56-335. Noted Jan. 2.

Ark., Russellville — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Jan. 23, work complete using limestone, from W. D. Lovell 1415 Southeast 8th St., Minneapolis, Minn., $54,700; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $56,200; W. MacDonald Constr. Co., St. Louis, Mo., $59,870. Noted Jan. 2.

Tex., North Ft. Worth—Gas Holders, Removal System, Etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 27, for 5 gas holders and Co2 removal system: (1) net price and time for work complete in accordance with drawings and specification, (1a) net price and time for work complete in accordance with drawings and specifications, but substituting single lift out, telescopic tanks for double lift out, telescopic tanks specified. (2) amount deducted from net price and time for work complete, as required in (1) by omitting excavation and concrete work and housing or sheds, steps and runway as called for in paragraphs 28-34 inclusive, 32-45 inclusive, 62-72 inclusive, respectively. Special attention is called to paragraphs 36, 47, and 76, (2a) alternate proposal, from Pittsburgh Des Moines Steel Co., 859 Munsey Bldg., Wash., D. C., (1a) $106,000 (150 days), (2a) $15,000 (150 days). Omaha Structural Steel Wks., 48th and Leavenworth St., Omaha, Neb., (1) $121,000 (150 days), (2) $16,300 (150 days). Camden Iron Wks., Hadden Ave. and Lime St., Camden, N. J., (2) $101,200 (240 days) **for 2 single light gas holders instead of 2 as required by the specification.** Noted Jan. 16.

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00	$2.00	$2.00	$2.10	$1.25	$1.[illegible]5
Denver	1.55	1.65	1.55	1.45	1.10	1.00
Chicago	2.00	1.50		1.50	1.10	1.[illegible]0
Kansas City	2.50	2.15	3.00	2.60	1.00†	.60
St. Louis*	1.76	1.11	1.82	1.11	1.68	1.11
Seattle	1.25	.80	1.25	.80	1.25	1.00
Dallas	2.00	1.50	2.00	1.50	1.50	1.35
St. Paul	1.25	1.00	1.[illegible]5	1.40	.60	.50
San Francisco	1.20	1.00	1.20	1.00	1.20	1.00
Boston	2.75	1.50	2.75	1.60	1.25	.90
New Orleans	2.82				1.88	1.95
Cincinnati	1.35	1.65	1.35‡	1.65	1.35‡	1.65
Los Angeles	*1.19*	....	*1.19*	....	*.70*	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	*$1.65*–1.75	$1.55	*$1.65*–1.85	$1.75
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.25	1.35	1.25	1.35
Dallas	2.25	1.39	2.25	1.46
San Francisco	1.20	1.09	1.20	1.00
Boston	1.75*	1.50	1.75*	1.60
St. Paul	1.15	1.00	1.25	1.10
Denver		1.50	1.55	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle	1.50	1.10	1.50	1.10
Cincinnati	1.50	1.75		1.75
Los Angeles	*1.20*	....	*1.20*	

*Per ton.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	22.80	20.80	2.35	2.20
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	16.00		1.75
Boston	22.20	18.20	3.65	3.35
Dallas	16.50	.....		
San Francisco	20.00	.....		2.40
St. Paul	25.00	19.50	1.97*	1.93*
Denver	26.20	.....	.....	2.50*
Cincinnati	14.20	[illegible]		.....
Seattle	30.00	.....	2.80*	11.95‡
Los Angeles	.....	.....	3.00*	*2.30*†

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., including bags:

Cincinnati (Utica)	$1.80
St. Paul (Austin)	1.93
Boston (Rosendale)	1.65
Kansas City (Ft. Scott)	1.75
New Orleans	3.52

Return of from 9c. to 15c. allowed per bag.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Current	One Month Ago	One Year Ago
New York	*$3.45*	$4.00	$2.25
Jersey City	3.62	3.62	2.16
Boston	3.67	3.67	2.37
Chicago	3.05	3.05	2.21
Pittsburgh	3.15	3.15	2.31
Cleveland	3.32	3.32	2.44
Detroit	3.28	3.28	2.40
Indianapolis	3.22	3.22	2.38
Toledo	3.22	3.22	2.40
Milwaukee	3.16	3.16	2.33
Duluth	3.20	3.20	2.51
Peoria	3.16	3.16	2.33
Cedar Rapids	3.28	3.28	2.48
Davenport	3.24	3.24	2.40
St. Louis	3.30	3.30	2.45
San Francisco	*3.03*	3.48	2.30
New Orleans	3.77	3.77	3.00
St. Paul	3.40	3.40	2.80
Denver	3.67	3.67	3.20
Kansas City	3.30	3.30	2.44
Seattle	3.33	3.33	3.25
Dallas	2.93	2.93	2.60
Los Angeles	*3.58*	3.68	....
Cincinnati	2.80	2.80	2.92

NOTE—Bag Refund is generally 25c. each; exceptions: Cincinnati, 9c.; Dallas, 10c.; San Francisco, 15c.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$1.09	$1.02	$1.03	$1.13	*$1.36*
049	0.049	1.22	1.40	1.30	1.32	1.43	*1.72*
068	0.068	1.52	1.73	1.62	1.64	1.79	*2.15*
093	0.093	1.96	2.23	2.09	2.11	2.41	*2.77*
126	0.126	2.48	2.82	2.63	2.67	2.92	*3.50*
153	0.153	2.96	3.38	3.15	3.19	3.48	*4.18*
180	0.180	3.39	3.85	3.60	3.66	3.99	.....
245	0.245	4.48	5.10	4.75	4.83	5.27	.....
287	0.287	5.18	5.90	5.50	5.58	6.10	*7.31*
336	0.336	6.00	6.83	6.37	6.47	7.06	.....
395	0.395	6.96	7.89	7.40	7.50	8.19	.....
PAVING							
036	0.036	$0.74	$0.84	$0.81	$0.80	$0.80	
053	0.053	1.04	1.25	1.25	1.12	1.12	
072	0.072	1.35	1.58	1.53	[illegible]	1.46	
097	0.097	1.74	1.98	1.98	1.88	1.88	
049	0.049	1.04	1.25	1.25	1.12	1.12	
067	0.067	1.35	1.53	1.53	1.46	1.46	
089	0.089	1.80	1.98	1.98	1.88	1.88	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$31.00	$31.00	$34.00	$38.00	$33.33
26	250	35.23	32.05	32.00	35.00	40.00	34.33
25	300	36.51	33.15	33.25	......	42.50	35.33
24	340	37.73	34.25	34.50	37.00	......	37.50
22	450	40.48	36.45	......	......	......	......

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Month Ago	Chicago	St. Louis	Dallas	San Francisco
¾ and larger	$2.90	$4.12	$4.12	*$3.97*	*$4.04*	$4.90	$5.15
⅝	2.95	4.18	4.18	*4.02*	*4.09*	4.95	5.20
½	3.00	4.23	4.23	*4.07*	*4.14*	5.00	5.25
⅜	3.15	4.38	4.38	*4.22*	*4.29*	5.15	5.40
¼	3.40	4.62	4.62	*4.67*	*4.42*	6.15	5.65

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas		Chicago	St. Louis	Dallas
¾ in. and larger	*$2.97*	*$2.80*	$4.90	⅜	*$3.22*	*$3.05*	$5.15
⅝	*3.02*	*2.85*	4.95	¼	*3.47*	...	6.15
½	*3.07*	*2.90*	5.00				

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$14.00	$10.00	No Quotations	
Chicago	12.00	11.00	8.00	$31.00	$33.00
St. Louis, selected	18.00	18.00	11.00	28.00	...
St. Louis, salmon	12.00*	12.00	9.50	.....	...
Denver	12.00†	12.00	8.50	.....	...
Dallas	16.07	16.07	10.50	26.50	...
San Francisco	12.00	12.00	10.00	.....	...
Boston (on job)	18.00	16.75	13.25	30.00‡	...
New Orleans	15.98	15.98	11.00		
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	13.00	11.00	35.00	...
Seattle	15.00	15.00	10.00	40.00	...
Cincinnati	16.75	16.75	13.50	.....	...
Los Angeles	*12.00*	14.00	.....	.....	...

* Hard brick, $16. † Salmon is $10. ‡ Water-struck; sand-struck is $21.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$0.11925	.....	$0.07	$0.08	$0.1125	$0.1005	.....
6x12x12	.159	.....	.095	.105	.15	.106	$0.1512
8x12x12	.....	.....	.12	.15		.201	.1944
10x12x12	.....	.....	.14	.173		.300	.2263
12x12x12	.....	.....	.195	.208		.325	.2916

	4x12x12	8x12x12	12x12x12
Boston	$0.10½	$0.20	$0.29
St. Paul	.056	.11	.162
Cincinnati	.086	.165	.218
Kansas City	.0786	.15	.205
Seattle	.09	.17½	.30
Los Angeles*	*.07½*	*.139*	.245
New Orleans	.16	.22	.32

* F.o.b. factory, 4, 8 and 10 inch.

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	*$2.80*	*$4.07*	$4.19½	*$4.14*	*$4.07*	$5.25	$7.00
Channels, 3 to 15 in	*2.80*	*4.07*	4.19½	*4.14*	*4.07*	5.25	7.00
Angles, 3 to 6 in., ¼ in. thick	*2.80*	*4.07*	4.19½	*4.14*	*4.07*	5.25	7.00
Tees, 3 in. and larger	*2.80*	*4.12*	4.19½	*4.14*	*4.07*	5.25	7.00
Plates	*3.00*	*4.27*	4.44½	*4.14*	*4.27*	5.50	7.10

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	*$4.40*	$6.50	$7.00	$5.57	*$4.74*	$6.70	$7.00
CONE HEAD BOILER							
¾ in. and larger	*4.50*	6.60	7.10	5.67	*4.84*	8.80	7.10
⅝ and 11/16	*4.65*	6.75	7.25	5.82	*4.99*	6.95	7.25
½ and 9/16	*5.00*	7.10	7.60	6.17	*5.24*	7.30	7.60

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $2.10 per roll in carload lots and $2.35 for smaller quantities.

Shingles, red and green slate finish, cost $5.50 per square in carloads, $5.75 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots		Less Than Carload Lots	
	N. Y.	Chicago	N. Y.	Chicago
Tar felt (14 lb. per square of 100 sq. ft.)	$64.00	$57.00	$65.00	$58.00
Tar pitch (in 400-lb. bbl.)	21.00	18.00	22.00	19.00
Asphalt pitch (in barrels)	36.00	36.00	41.50	41.50
Asphalt felt	67.50	67.50	72.00	72.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

Blue Annealed	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	—New York— Current	One Yr. Ago
No. 10	3.90	*5.04*	*5.17*	6.55	*5.17*	5.44½
No. 12	3.95	*5.09*	*5.22*	6.60	*5.22*	5.49½
No. 14	4.00	*5.14*	*5.27*	6.70	*5.27*	5.54½
Black						
Nos. 18 and 20	4.50	*5.84*	*6.02*	7.30	*6.02*	6.24½
Nos. 22 and 24	4.55	*5.89*	*6.07*	7.35	*6.07*	6.29½
No. 26	4.60	*5.94*	*6.12*	7.40	*6.12*	6.43½
No. 28	4.70	*6.04*	*6.22*	7.50	*6.27*	6.53½
Galvanized						
No. 10	5.05	*6.39*	*6.57*	....	*6.57*	6.69½
No. 12	5.15	*6.39*	*6.67*	7.85	*6.62*	6.79½
No. 14	5.15	*6.39*	*6.67*	8.00	*6.67*	6.79½
Nos. 18 and 20	5.45	*6.59*	*6.97*	8.15	*6.97*	7.09½
Nos. 22 and 24	5.60	*6.44*	*7.12*	8.30	*7.12*	7.24½
No. 26	5.75	*6.74*	*7.27*	8.45	*7.27*	7.39½
No. 28	6.05	*7.19*	*7.57*	8.75	*7.57*	7.69½

LINSEED OIL—These prices are per gallon:

	—New York— Current	One Year Ago	—Cleveland— Current	One Year Ago	—Chicago— Current	One Year Ago
Raw in barrel	*$1.49*	$1.31	*$1.65*	$1.35	*$1.66*	$1.32
5-gal. cans	*1.74*	1.41	*1.80*	1.50	*1.86*	1.45

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	—Red— Current		1 Year Ago		—White— Current	1 Yr. Ago
	Dry	In Oil	Dry	In Oil	Dry and In Oil	Dry and In Oil
100-lb. keg	*13.00*	14.50	12.25	12.50	*13.00*	12.50
25 and 50-lb. kegs	*13.25*	14.75	12.50	12.75	*13.25*	12.25
12½-lb. keg	*13.50*	15.00	12.75	13.00	*13.50*	12.50
5-lb. cans	.....	......	14.25	14.00	*15.00*	14.50
1-lb. cans	.....	......	14.25	14.50	*16.00*	14.50

LUMBER

San Francisco—Prices of rough Douglas fir, No. 1 common, in more than carload lots:

Lumber Prices in Yards at San Francisco

	6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	22 and 24 Ft.	25 to 32 Ft.
3x3 and 4	$26.00	$26.50	$27.50	$29.50
3x6 and 8	27.00	27.50	28.50	30.50
4x4-6 and 8	28.50	29.50	30.50	32.50
3x10 and 12	27.50	28.50	29.50	31.50
3x14	28.00	29.00	30.00	32.00
4x10 and 12	28.50	29.50	30.50	32.50
4x14	29.50	30.50	31.50	33.50

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	$28.50	$30.50	$31.50
6x14	30.00	32.00	33.00
8x10	31.50	33.50	34.50
8x14	33.00	35.00	36.00

Chicago and St. Louis—Yellow Pine:

	—Chicago— 20 Ft. and Under	22-24 Ft.	—St. Louis— 20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$39.00	$41.00	$35.00	$37.00
3x10 to 10x10	42.00	43.50	38.50	40.00
3x12 to 12x12	44.00	45.50	40.00	41.50
3x14 to 14x14	48.50	50.00	45.00	47.00
3x16 to 16x16	52.00	53.50	48.00	50.00
3x18 to 18x18	56.00	57.00	52.00	53.50
4x20 to 20x20	62.00	63.00	.....	.....

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities

	—8 x 8-In. x 20-Ft. and Under— Y.P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under Y.P.	Fir
Boston	$45.00	$45.00	$45.00	$42.00	$46.00	$46.00
Cincinnati	*37.00*	.....	*36.00*	...	41.00	40.00
Kansas City	39.00	40.50	40.50	38.50	45.60	42.50
Seattle	*17.50*	*17.50*	*17.50*	*17.50*	*17.50*	*17.50*
New Orleans	48.00	...	...	......	50.00	.....
St. Paul	.....	52.00	48.00	48.00	.....	48.50
Denver	43.00	33.50	.....	.....	48.00	39.00
Los Angeles	Base price Douglas fir is *$29*					

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	Fir	Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. Y.P.	Fir
Boston	$50.00	.....	$45.00	$50.00	$45.00
Cincinnati	43.00	.	39.00	42.00	*38.00*
Kansas City	46.00	$54.75	54.75	53.50	60.00
Seattle	*17.50*	*17.50*	*17.50*	*17.50*	*17.50*
New Orleans	54.00	...	...	60.00	...
St. Paul	62.50	48.00	43.00	.....	48.50
Denver	43.25	32.50	32.50	35.00	31.00
Los Angeles	Base price hemlock is *$28*				

Dallas—Yellow Pine:

2x4 to 2x12—12, 14 and 16	$38.40
2x4 to 2x12—10, 18 and 20	41.00
2x4 to 2x12—22 and 24	43.00
4x4, 4x6, 6x6, 8x8 and 3x8	44.25
1x10, 10x10 and 3x10	54.00
82x12 and 3x12	56.00

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.50	$4.37	$4.37	$5.40	$4.75
Cut	5.00	6.50	6.50	6.75	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl.	$0.03½	None
Hypochlorite of lime (bleaching powder), in 700-lb. drums.	.03	0.05½
Soda ash, in 400-lb. bbl.	.03	.0¼
Liquid chlorine in 100-lb. cylinders Lime is quoted separately	.12	.12

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$4 to $5	$4 to $5	$4 to $5

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	+17½%
Galvanized cast steel rigging	2½%
Bright plow steel	30%
Bright cast steel	17½%
Bright iron and iron tiller	List

San Francisco: Galvanized, +5%; bright, 12½% off.
Chicago: Galv., +20%; bright, 20% off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ½-in., 8 ft., ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.24	Denver	$0.22
New York	.23	Kansas City	.23½
Cincinnati	.24	New Orleans	.22½
Chicago	.21½	Los Angeles	.25
St. Paul	.23	Seattle	.24
San Francisco	.22	St. Louis	.21½

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	—Gelatin— 40%	60%	80%	Black Powder
New York	......	$0.29½	$0.34½	......	$2.40
Boston	$0.23¾	.26¾	.31¾	.35¾	2.65
Cincinnati	.18¾	.22¾	.26¾	.....	2.35
Kansas City	.20¾	.25¾	.30¾	.38¾	2.45
New Orleans	.20½	.26½	.31½	.37½	2.60
Seattle	....	.25½	.32½	.....	....
Chicago	.18¾	.22¾	.30	.36	2.35
St. Paul	.19	.25¾	.30¾	....	2.45
St. Louis	.19	.25¾	.30¾	.36¾	....
Denver	.17¾	.24	.29	.35	2.45
Dallas	.21	.25	.29	.39	....
Los Angeles	*.21*	*.28*	*.34*	....	*2.95*

POLES—Price of Western red cedar poles is as follows:

	—New York— Current	One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft.	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft.	7.65	7.45	6.85	6.10	6.85
7-in. x 35-ft.	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft.	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft.	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft.	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft.	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$9.00
12-in. butts, 6-in. tops, length 30-40 ft.	11.50
12-in. butts, 6-in. tops, length 41-50 ft.	12.50
14-in. butts, 6-in. tops, length 51-60 ft.	21.00
14-in. butts, 6-in. tops, length 61-71 ft.	23.50

	Dallas
6-in. x 20-ft.	$4.60
6-in. x 30-ft.	7.10
8-in. x 30-ft.	8.45
8-in. x 35-ft.	10.38

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	Chicago	St. Louis
No. 1 railroad wrought	*$18.50*	*$17.00*	*$17.00*
Stove plate	*14.50*	*17.50*	*16.00*
No. 1 machinery cast	*17.00*	*22.00*	*20.00*
Machine shop turnings	*10.00*	*8.50*	*7.50*
Cast borings	*10.50*	*11.50*	*10.50*
Railroad malleable cast	*14.50*	*16.50*	*17.00*

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	Black	Seattle Black
½	*$10.50*	$8.50	$8.55
⅝	*9.85*	7.85	8.25
¾	*9.70*	7.70	8.30

Pittsburgh base, $5.05 per 100 lb.

PROPOSALS

For Proposals Advertised See Pages 80-83 inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Feb. 11	Poughkeepsie, N. Y. Adv. Feb. 6.	Jan. 30
Feb. 12	Baltimore, Md.	Feb. 6
Feb. 13	Delevan, Wis.	Feb. 6
Feb. 18	Jersey City, N. J. Adv. Jan. 30 and Feb. 6	Jan. 30
Feb. 21	Akron, O. Adv. Feb. 6.	Feb. 6
Feb. 25	East Chicago, Ind. Adv. Jan. 30.	Jan. 30
Feb. 28	Clarksburg, W. Va. Adv. Jan. 30.	Jan. 30
Mar. 7	Pembroke, Ont.	Feb. 6

SEWERS

Feb. 7	Bayonne, N. J.	Feb. 6
Feb. 18	Wyandotte, Mich.	Feb. 6
Feb. 19	Creedmore, N. Y.	Feb. 6
Feb. 25	St. Louis, Mo.	Jan. 30

BRIDGES

Feb. 11	Oglethorpe, Ga.	Jan. 30
Feb. 17	Los Angeles, Cal.	Feb. 6
Mar. 3	Bisbee, Ariz.	Feb. 6

STREETS AND ROADS

Feb. 10	Fayetteville, W. Va. Adv. Jan. 23, 30 and Feb. 6.	Jan. 16
Feb. 10	Idaho	Jan. 30
Feb. 11	Indiana	Jan. 23
Feb. 11	Moulton, Ala.	Jan. 16
Feb. 11	Jasper, Tex.	Feb. 6
Feb. 12	Ft. Meyers, Fla.	Feb. 6
Feb. 14	Oswego, Kan.	Jan. 30
Feb. 14	Oswego, Kan.	Feb. 6
Feb. 17	Philippi, W. Va. Adv. Jan. 30 and Feb. 6	Jan. 23
Feb. 17	California	Jan. 30
Feb. 17	Tulsa, Okla. Adv. Jan. 23, 30 and Feb. 6.	Jan. 30
Feb. 17	St. Paul, Minn.	Feb. 6
Feb. 17	San Diego, Cal.	Feb. 6
Feb. 18	Indiana	Jan. 23
Feb. 18	Albany, N. Y. Adv. Jan. 23.	Jan. 23
Feb. 18	Clifton, Ariz.	Feb. 6
Feb. 18	Santa Ana, Cal.	Feb. 6
Feb. 20	Hamlin, W. Va.	Jan. 23
Feb. 20	Rumson, N. J. Adv. Jan. 23.	Jan. 23
Feb. 24	Middlebourne, W. Va. Adv. Jan. 23, 30 and Feb. 6.	Jan. 30
Mar. 3	Indianapolis, Ind.	Feb. 6
Mar. 4	Ripley, W. Va.	Jan. 23
Mar. 4	Indianapolis, Ind.	Feb. 6
Mar. 5	Alexandria, Minn.	Feb. 6
Mar. 6	Fairmont, W. Va.	Feb. 6
Mar. 31	Lockport, N. Y.	Feb. 6

EXCAVATION AND DREDGING

Feb. 10	St. James, Minn.	Jan. 30
Feb. 15	SouthBend, Ind. Adv. Jan. 30 and Feb. 6	Jan. 30
Feb. 17	Tunica, Miss.	Feb. 6
Feb. 18	Jonesboro, Ark.	Feb. 6
Feb. 18	Albany, N. Y. Adv. Jan. 23, 30 and Feb. 6.	Jan. 23
Feb. 19	Albany, N. Y. Adv. Jan. 23, 30 and Feb. 6.	Jan. 23
Mar. 13	Tyler, Minn.	Feb. 6

INDUSTRIAL WORKS

Feb. 18	Albany, N. Y. Adv. Jan. 23.	Jan. 23
Feb. 21	Brooklyn, N. Y.	Feb. 6
Feb. 25	New York, N. Y.	Jan. 30
Mar. 4	Thiells, N. Y.	Jan. 16
Apr. 1	Sioux City, Ia.	Jan. 16

BUILDINGS

Bids Close		See Eng. News-Record
Feb. 10	New York, N. Y.	Jan. 30
Feb. 11	Lusk, Wyo.	Jan. 23
Feb. 13	Detroit, Mich.	Feb. 6
Feb. 14	Brooklyn, N. Y.	Jan. 23
Feb. 14	Malone, N. Y.	Feb. 6
Feb. 17	New York, N. Y. Adv. Feb. 6.	Feb. 6
Feb. 19	Brooklyn, N. Y.	Jan. 30
Feb. 19	Waterloo, Ia.	Feb. 6
Feb. 21	Phillipsburg, O.	Jan. 30
Feb. 24	Norwood, O.	Jan. 23
Feb. 24	Cincinnati, O.	Jan. 30
Mar. 1	Cloquet, Minn.	Jan. 30
Mar. 1	Mountain Iron, Minn.	Jan. 30
Mar. 1	Duluth, Minn.	Jan. 23
Mar. 1	Duluth, Minn.	Feb. 6
Mar. 3	Rockport, Ill.	Jan. 23
Mar. 15	Culver, Ind.	Dec. 26
Apr. 2	New York, N. Y.	Jan. 23
Apr. 10	Newaygo, Mich.	Feb. 6
Apr. 15	Newark, N. J.	Feb. 6

FEDERAL GOVERNMENT WORK

Feb. 10	—Metal and Glass—Baltimore, Md. — Adv. Jan. 16.	Jan. 16
Feb. 10	Portland Cement — Denver, Colo.	Jan. 23
Feb. 10	Refrigerating Plant Equipment—Spec. 3749—Ward's Island, N. Y.	Jan. 30
Feb. 10	Steel Stock and Storage Shed—Spec. 3736—Boston, Mass.	Jan. 30
Feb. 10	Laundry Equipment—Spec. 3665—Ward's Island, N. Y.	Jan. 30
Feb. 10	Chimney for Boiler Plant—Spec. 3606 — New York, N. Y.	Jan. 30
Feb. 10	Coal and Ash Handling Equipment — Spec. 3300—Hampton Roads, Va.	Jan. 30
Feb. 10	Tanks—Spec. 3628—Quantico, Va.	Jan. 30
Feb. 10	Coal and Ash Handling Equipment — Spec. 3607 — New York, N. Y.	Jan. 30
Feb. 10	Fence—Spec. 3789—Charleston, W. Va.	Feb. 6
Feb. 11	Bridge—Washington, D. C. Adv. Jan. 16.	Jan. 16
Feb. 12	Elevator, etc. — Ft. Worth, Tex. Adv. Jan. 23.	Jan. 23
Feb. 15	Laboratory — Washington, D. C. Adv. Jan. 23.	Jan. 23
Feb. 15	Roads—Great Falls, Mont.	Feb. 6
Feb. 15	Roads — White Sulphur Springs, Mont.	Feb. 6
Feb. 15	Laboratory — Washington, D. C.	Feb. 6
Feb. 17	Piping and Circulating System — Spec. 3416 — Portsmouth, N. H.	Jan. 30
Feb. 17	Crane Runway—Spec. 3769 —Philadelphia, Pa.	Feb. 6
Feb. 17	Electric Elevator—Spec. 3731 —New York, N. Y.	Feb. 6
Feb. 17	Railroad Extension—Spec. 3727—Ft. Mifflin, Pa.	Jan. 30
Feb. 17	Equipment, etc.—Spec. 3328 Hampton Roads, Va.	Jan. 30
Feb. 20	Surgical Dressing Room—St. Louis, Mo.	Jan. 30
Feb. 21	Dredging, etc. — Norfolk, Va. Adv. Jan. 23.	Jan. 23
Feb. 21	Dredging—Norfolk, Va. Adv. Feb. 6.	Feb. 6
Feb. 24	Addition to Dispensary—Spec. 3780—Rockaway, N. Y.	Feb. 6
Feb. 24	Piping and Equipment—Spec. 3759—New York, N. Y.	Feb. 6
Feb. 24	Dredging—Spec. 3774—Chatham, Mass.	Feb. 6
Feb. 24	Wells and Pumps—Spec. 3577 —North Ft. Worth, Tex.	Feb. 6
Feb. 24	Fuel Oil Storage Plant—Spec. 3631—Mare Island (Vallejo P. O.) Cal.	Jan. 30
Feb. 25	Jetty Work—Sabine Pass, Tex. Adv. Jan. 23.	Jan. 23
Mar. 1	Foundation and Rip Rap—Baltimore, Md. Adv. Jan. 16.	Jan. 16
Mar. 1	Dredging—Superior, Wis.	Jan. 16
Mar. 3	Barracks — Spec. 3728 — Fire Island, N. Y.	Jan. 30
Mar. 3	Post Office—Walden, N. Y.	Feb. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Feb. 11	Boilers and Piping, etc. — Utica, N. Y.	Jan. 23
Feb. 11	Asphalt, etc.Brooklyn, N. Y.	Feb. 6
Feb. 12	Road Machinery — Alma, Wis.	Feb. 6
Feb. 13	Refrigeration Equipment—Iroquis, N. Y. Adv. Jan. 30 and Feb. 6	Jan. 30
Feb. 13	Road Oil, Asphalt, etc., Montclair, N. J.	Jan. 30
Feb. 14	Additional Window Guards —Bedford Hills, N. Y. Adv. Jan. 23.	Jan. 23
Feb. 14	Pier—Philadelphia, Pa. Adv. Jan 23.	Jan. 23
Feb. 19	Gantry Crane — Seattle, Wash. Adv. Jan. 2 and 9.	Jan. 2
Feb. 19	Dam—Los Angeles, Cal.	Feb. 6
Feb. 21	Crushed Rock—Visalia, Cal.	Feb. 6

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Fla., Pensacola—Council sold $10,000 bonds to extend and improve waterworks system. J. O. Walker, city clk.

Mich., Highland Park (Detroit P. O.)—City receives bids about Mar. 1, furnishing miscellaneous hydraulic valves to be installed in connection with filtration plant. About $8,000. L. C. Whitsit, city engr.

Ill., Rockford—City plans to expend $60,000 to build waterwork system. S. B. Hand, city engr.

Wis., Wausau—City Water Comn. having plans prepared by W. G. Kirchhoffer, engr., 31 Vroman Blk., Madison, building filtration plant, air lift system and two 250,000 gal. reservoirs.

Ia., Cedar Rapids—City having plans prepared building 6 in. c. i. water mains and 6-8 in. sanitary sewers. About $25,000. T. F. McCauley, city engr.

Kan., Baxter Springs—City plans to improve waterwork system to include well, reservoir and tower tank.

Kan., Osawatomie—State plans to repair and build concrete, brick and steel watermains and sewers at state hospital here. About $127,000. R. L. Gamble, Topeka, state archt.

Wyo., Rawlins—Committees representing Rawlins Bd. Trade, Union Pacific Ry. and Rawlins Townsite Co., considering bond issue for construction of water system for city. An offer has been made by Bosworth, Chanute & Co., Denver, to construct plant and take bonds in payment. Address J. C. Gallips, 1707 California St., Denver.

Mont., Ft. Benton—City defeated $35,000 bonds to improve water-works. M. L. Morris, Great Falls, engr. Noted Jan. 9.

Tex., Cisco—City plans to improve water-works system. About $50,000.

Tex., De Lion—City retained H. E. Elrod Co., engrs., Interurban Bldg., Dallas, to prepare plans for extension to water-works.

Tex., Hillsboro—City plans to bore artesian well. About $18,150. F. C. Metzger, city engr.

Tex., San Angelo—City plans to install modern filtration plant. About $30,000.

Okla., Marietta—City plans election soon to vote on bonds to improve water-works and light plant.

Okla., Pawhuska—City plans election to vote on $200,000 to $300,000 bonds to install water supply system.

Okla., Woodward—City election Feb. 14, to vote on $30,000 bonds to equip water and light plant.

Sask., Saskatoon—City plans to build intake well. About $36,000. A. Leslie clk.

Waterworks (Continued)

BIDS DESIRED

Md., Baltimore—Until Feb. 12, by Bd. Awards, furnishing and delivering valves to Water Dept. W. E. Lee, water engr.

O., Akron—Until Feb. 21, by H. S. Morse, dir. pub. serv., Delaware Bldg., furnishing 400 ton 6-16 in. Class "C" pipe, 170 tons 6-12 in. Class "B" pipe and 15 tons special castings; advertised in this issue.

Wis., Delavan—Until Feb. 13, by Water Comn. removing present watertank on 70 ft. brick tower and building steel support and wooden tank. W. H. Horton, pres.

Neb., Bayard—Until Feb. 18, by city, building extension to waterworks. Work involves 7540 lin. ft. 4 in., 155 lin.ft. 8 in. and 2800 lin.ft. 6 in. class "B" c.i. water mains; 2810 lb. c.i. specials, 11 fire hydrants, thirteen 4 in., seven 6 in. and one 8 in. double gate valves and boxes, one 14 in. well and 1 centrifugal pump. Selzer & Finley, Scottsbluff, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Md., Baltimore**—Bd. Awards let contract building 32 rein.-con. and terra cotta filter operating tables for Lake Montebello filters, Contr. 46, to Amer. Water Softener Co., 1011 Chester St., Phila., $23,500. Noted Jan. 16.

★**Minn., Bemidji**—City let contract installing pumping system and building two 200,000 gal. reservoirs, to Layne & Bowler, Chelsea Ave., Memphis, Tenn. About $35,000.

Sewers

PROPOSED WORK

Pa., Hazleton—City plans to build sanitary and storm sewers in various streets during year. About $10,000. J. Rough, city engr.

Pa., Scranton—City plans to build sewers in 15th and 22nd wards, about $41,847; work involves 2990 lin.ft. 8-10 and 15 in. pipe. W. M. Schunk, city engr.

Fla., Pensacola—Council sold $20,000 bonds to extend and improve sewerage and drainage system. J. O. Walker, city clk. Noted Oct. 24.

O., Cleveland—City soon lets contract building sewers in Bessemer, Chapelside, Continental, Greenwich, Griffing, and Meech Aves., East 97th, 129th, 135th and 140th Sts., involving 1200 ft., 24 in. rein.-con., 1300 ft., 13 in. vitr., 1500 ft., 15 in. segmental block and 3400 ft., 12 in. tile sewer pipe, 30 manholes and 25 catch basins. R. Hoffman, city engr.

O., Cleveland—City soon lets contract building sewers in Dove, Dunlap, Elliot, and Lorenzo Aves., East 105th, 106th, 108th, 132nd, 135th and 139th Sts., involving 1000 ft., 24 in. rein.-con., 2500 ft. 20 in. vitr., 1500 ft. 15 in. segmental block and 2000 ft. 12 in. tile sewer pipe, 25 manholes and 26 catch basins. R. Hoffman, city engr.

O., Cleveland—Bd. Pub. Serv. receives bids about Mar. 1 building sewage disposal plant in West 58th St., (westerly site), comprising coarse bar screens, grit chambers, 2 story tanks, disinfection equipment and sludge disposal facilities for barging sludge to Government dumping grounds in lake; cost $600,000. Bd. also plans to build plant in Warner Rd., (southerly site) involving completion of intercepting sewer, cost $750,000; one in East 140th St., (easterly site), partial plant to comprise coarse bar screens, grit chambers, disinfection equipment and pumping machinery for lifting portion of sewage discharged at this site, cost $1,250,000. F. H. Betz, City Hall, archt.

O., Lakewood—City having plans prepared building concrete sewer in Olive St. from Hilliard to Margaret Sts. About $17,300. E. A. Fisher, city engr.

O., Lakewood—City receives bids in spring building intercepting sewer in Webb Rd. to Rocky River. About $154,000. E. A. Fisher, city engr.

O., Lancaster—City receives bids in March building 45 and 54 in. segmental block or concrete sewer, in Storm Water Sewer Dist. No. 15. About $23,989. W. W. Graf, city engr.

Ill., Madison—City plans to build East End sewerage system. About $39,000. Sheppard & Morgan, Edwardsville, engr.

Ill., Rockford—City plans to expend $27,290 to build sewers in various streets. S. B. Hand, city engr.

Ia., Cedar Rapids—See "Water-Works."

Minn., Minneapolis—State Legislature authorized $300,000 bonds to build trunk sewers. W. F. Cappelin, city engr.

Kan., Osawatomie—See "Water Works."

Wyo., Cheyenne—E. W. Glafcke, city engr., submitted report to City Council recommending that 24 or 36 in. sanitary sewer be installed to relieve strain on present system, cost between $8000 and $12,000, or construct 5 ft. sewer under Union Pacific Ry. shops to creek for both sanitary and storm sewerage purposes, cost between $110,000 and $175,000.

Mont., Great Falls—City having plans prepared by M. L. Morris, engr., Great Falls, building South Side trunk storm sewer. About $235,000. Noted Apr. 18.

Mont., Havre—City plans to build sewage disposal plant. C. W. Swearingen, city engr.

Tex., De Lion—City retained H. E. Elrod Co., engrs., Interurban Bldg., Dallas, to prepare plans for sewerage system.

Tex., Laredo—City plans to build 9000 ft. 18 in. sewer and 40,000 ft. 8 in. laterals. About $100,000. F. A. Jones, Interurban Bldg., Dallas, engr.

Tex., Ranger—City plans to build sewerage system and sewage disposal plant.

Okla., Idabel—City having preliminary plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, building sewerage system and disposal plant. Bonds sold for project.

Idaho, Nampa—City plans to build sewerage system in southern section of city. About $50,000.

Ore., Portland—City plans to build sewers in East 82nd St. from north line of East Stark St. to Burnside St., East Ash and East Ankeny Sts. to East 82nd St., $4114; Henry Ave. to sewer in Milwaukee St., $2037; Glenn Ave. to East Lincoln St., $3995; Front St. to Couchs addition, $3870; Ellis Ave. to Milwaukee St., $626. Total cost, $10,645. O. E. Aurgaard, city engr.

Cal., Manteca—City receives bids about Feb. 10, building lateral sewerage system, involving 19,247 ft. 6-8 in. vitr. sewer pipe, 48 manholes etc. About $22,000. E. H. Jeffries, city engr.

Cal., San Luis Obispo—City receives bids in March building storm drain and paving Marsh St., with concrete. Former to cost $12,000. W. B. Burch, city engr.

Ont., Strathroy—City plans to build sewers and pave various streets. About $35,000.

Sask., Saskatoon—City plans to build sewers in various streets. About $34,950. A. Leslie, clk.

BIDS DESIRED

N. Y., Creedmore—Until Feb. 19, by State Hospital Comn., Capitol, Albany, building sewage disposal plant at Brooklyn State Hospital here. Plans include installation of Imhoff tanks, six 10 in. syphons, dosing chambers, 6 beds, diverting manhole, 1000 ft. 12 in. vitr. pipe, etc. About $30,000.

N. J., Bayonne—Until Feb. 7, by City Comrs., building sewer in Oak St., from point east of Ingham to Hobart Aves. Work involves, 676 lin.ft. 12-in. vitr. pipe sewer, 50 cu.yd. excav., etc. About $10,000. W. H. Clarkson, city engr. Noted Oct. 31.

Mich., Wyandotte—Until Feb. 18, by E. C. Bryan, city clk., trenching, backfilling and laying sewer pipes in western section of city. About $155,000. M. L. Brown & Co., 820 Chamber of Commerce, Detroit, engrs.

Neb., Bayard—Until Feb. 18, by city, building main sewer involving 2798 lin.ft. 15 in. pipe twenty 6 in. Y's. 10 manholes and 6.73 cu.yd. concrete; lateral sewer involving 4418 lin.ft. 10 in. and 15,935 lin..ft. 8 in. pipe, 167 ft. 6 in. Y's on 10 in. sewer, 468 lin.ft. 6 in. Y's on 8 in. sewer, 51 manholes, 6 flush tanks and 388 lin.ft. ½ in. water pipe for flush tank connections. Selzer & Finley, Scottsbluff, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Long Island City**—M. E. Connolly, pres. Queens Boro., let contract building sewers in Hobson Ave. from Newtown Creek to Halle Ave., Hobson Ave. from Hall to Jones Aves., Jones Ave. from Clinton Ave. to Laurel Hill Blvd., Laurel Hill Blvd. from Jones to Borden Aves., Montgomery Ave. from Columbine to Jones Ave., Congress Ave. from Laurel Hill Blvd. to Montgomery Ave., Townsend Ave. from Laurel Hill Blvd. to Hobson Ave., Waters Ave. from Hobson to Clifton Aves., Joy Ave. from Montgomery to Clifton Aves., Columbine Ave. from Hobson to Clifton Ave., Clifton Ave. from Water to Columbine Aves., with temporary connection to sewer in Columbine Ave., to Green Contg. Co., 734 Verona Ave., Flushing. $181,896. Noted Jan. 23.

★**Cal., Manteca**—City let contract building trunk line sewerage system, involving 15,700 ft. 10-14 in. sewer pipe, to F. Montague. About $21,406. Noted Oct. 31.

★**Cal., Sanger**—City let contract extending sewerage system and building cottage at sewer farm, to Frederickson & Shannon, Cory Bldg., Frenso. About $11,000. Noted Dec. 26.

Bridges

PROPOSED WORK

Mass., Freetown (Assonet P. O.)—State Legislature, Boston, petitioned to improve and rebuild approaches over Fall River bridge here. Cost to exceed $10,000.

R. I., Narragansett—I. W. Patterson, ch. engr., State Bd. Pub. Rds., 12 State House, Providence, receives bids in spring building rein.-con. single span, 100 ft. flat arch bridge over Pettaquamscott River here to replace present wooden bridge. About $60,000. Noted Mar. 28.

Conn., New Haven—City plans to build 200 ft. concrete and steel bridge over West River on Washington Ave., 25 ft. wide. About $300,000; two-thirds of cost to be borne by city and one-third by Orange Twp. F. L. Ford, city engr.

N. Y., Albany—State Legislature petitioned to appropriate $23,000 to build Hall Farm bridge , $21,000 for Baker bridge, $23,000 for Diefendorf or Tharatt bridge, and $25,000 to build Hillside Change bridge; all to span Black River canal.

N. Y., Rome—State Legislature, Albany, petitioned to appropriate $18,000 to build steel bridge over black River canal, on Stanwix St., here.

N. J., Paterson—Passaic Co. having plans prepared by G. Ferguson, co. engr., for concrete bridge over Passaic River at Pennington Park. About $125,000.

Ga., Dublin—Comrs. Laurens Co. plan to build concrete bridge across Oconee River. About $150,000. Federal Government will appropriate $75,000 toward cost.

Ga., Quitman—Comrs. Brooks Co. soon let contract building bridge and roadway. About $50,000. Garrett & Slack, Montgomery, Ala., engrs.

Ill., Rockford—City plans to expend $15,700 to build bridges. S. B. Hand, city engr.

Ill., Rockford—City plans to build memorial bridge over Rock River. About $200,000. S. B. Hand, city engr.

Wis., Ellsworth—Comrs. Pierce Co. had plans prepared building Stewart bridge, 20 ft. rein.-con. span, 18 ft. roadway, River Falls Twp.; Teubert bridge, 30 ft. rein.-con. span, 18 ft. roadway; Davidson bridge, 26 ft. I beam span, 16 ft. roadway; Baird bridge, 18 ft. rein.-con. span, 24 ft. roadway; Armbruster bridge, 14 ft. rein.-con. span, 24 ft. roadway. C. F. Kenall, co. highway comr.

Wis., La Crosse—See "Streets and Roads."

Wis., Manitowoc—City plans to build double leaf bascule bridge, 400 ft. opening. About $60,000. L. K. Pitz, city engr.

Wis., Manitowoc—City plans to move bridge and build new pile foundation for same. About $10,000. L. K. Pitz, city engr.

Wis., Menasha—City plans to build 390 ft. rein.-con. bridge, 57 ft. wide. A. E. McMahon, city engr.

Minn., Minneapolis—State Legislature authorized $200,000 bond issue, in addition to $162,000 now available, to rebuild Franklin Ave. bridge; also $100,000 for bridge over Nokomis Lake on Cedar Ave. W. F. Chappelin, city engr.

Kan., Lyndon—Osage Co. receives bids about Mar. 1, building 90 ft. rainbow arch bridge, 18 ft. roadway. About $14,000. C. C. James, co. engr.

Kan., Oswego—La Bette Co. plans to build rein.-con. highway bridge between here and Chetopa Twp., involving 540 cu.yd. rein.-con., 3.45 tons steel, 384 ft. 3 in. clay pipe, 1228 ft. 15-30 in. concrete pipe and 1800 cu.yd. earth approach and fill. About $15,000. W. J. King, co. engr.

Tex., Victoria—Comrs. Victoria Co. plan to build bridge over Arenosa Creek. About $10,000.

Bridges (Continued)

Wash., Spokane—City election Mar. 4, to vote on $900,000 bonds to build bridge over West Waterway, West Spokane St. A. D. Butler, city engr.

Ore., Oregon City—Clackamas Co. plans to build bridge over Willamette River between here and West Linn Twp. State will appropriate toward cost.

Cal., San Diego—A. H. Wright, city clk., soon receives bids building steel bridge with rein.-con. piers, 400 ft. long, 45 ft. wide, over San Diego River. About $60,000 appropriated for project. G. Cromwell, city engr.

Cal., San Diego—San Diego & Arizona Ry. petitioned City Council to fix grade so plans could be prepared for steel bridge over Imperial Ave. Cost between $12,000 and $15,000. E. J. Kallright, ch. engr.

Que., St. Pamphile—Municipal Council plans to build 175 ft. steel span bridge with 2 concrete piers over Black River. About $20,000. J. Moreau, secy.

BIDS DESIRED

Neb., David City—Until Feb. 6, by Bd. Supervs. Butler Co., building steel, wood and concrete bridges during year. M. J. Bouse, clk.

Ariz., Douglas—Until Mar. 3, by Cochise Co. Highway Comn., building rein.-con. bridge over Silver Creek near here. J. C. Ryan, engr.

Cal., Los Angeles—Until Feb. 17, by A. M. McPherrin, clk. Los Angeles Co., building rein.-con. bridge, 257 ft. long, 8 ft. wide, over street to connect buildings at county hospital. About $12,500. W. Davidson, Hall of Records, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Passaic—New York Belting & Packing Co., Passaic Ave., let contract building steel and concrete bridge here, 75 ft. long, 15 ft. wide, to J. W. Ferguson, United Bank Bldg., Paterson. About $10,000.

★**Kan., Topeka**—Comrs. Shawnee Co. let contract building 4 rein.-con. bridges on new Fort to Fort Highway between Ft. Riley and Ft. Lavenworth, to span Deer, Stinson, Tecumseh and Whitson Creeks, to F. Luttjohann, 1122 West 2nd St., $42,011. Noted Jan. 16.

★**Neb., Wayne**—Comrs. Wayne Co. let contracts building concrete and steel bridges during year, to Norfolk Bridge & Constr. Co., Norfolk, and Standard Bridge Co., 1302 City Natl. Bank Bldg., Omaha. Noted Dec. 26.

Structural Steel

PROPOSED WORK

Cal., San Diego—See "Bridges."

Reinforced Concrete

PROPOSED WORK

Conn., New Haven—See "Bridges."
N. Y., Carthage—See "Industrial Works."
Md., Baltimore—See "Buildings."
Ga., Dublin—See "Bridges."
Wis., Menasha—See "Bridges."

BIDS DESIRED

Minn., Alexandria—See "Streets & Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★**N. Y., New York**—See "Miscellaneous."
★**N. J., Passaic**—See "Bridges."

Streets and Roads

PROPOSED WORK

Massachusetts—State Legislature, Boston, petitioned to complete state highway between Cummington and Adams Twps., cost $50,000; improve highway between Holden Twp. and Wachusett Mountain, $10,000; highway between Middlefield, Chester and Worthington Twps., $20,000.

Mass., Boston—State Legislature petitioned to authorize city to borrow $10,000,000 to build highway from junction of Eliot and Tremont Sts., northeasterly across Washington St. and Harrison Ave. to Bedford St. and relocate and widen Bedford St. from Kingston St. to Church Green, 80 ft. wide. E. F. Murphy, city engr.

Mass., Brockton—A. McLeod, mayor, petitioned State Legislature, Boston, for authority to borrow $400,000 to extend Centre St. west to Warren Ave.

Connecticut—State Highway Comn., Hartford, plans to build state road from Coventry Twp. to State Institute at Mansfield Twp. About $100,000.

N. Y., Buffalo—Bd. Supervs. Erie Co. recommend construction of county and town roads as follows: 3 mi. East Concord-Springville Rd., Concord Twp., 3 mi. Langford-New Oregon Rd., North Collins Twp., 1.8 mi. Zoar Rd., Collins Twp., 4.5 mi. Center St. Colden Twp., 3.8 mi. Pontiac-Derby Rd., Evans Twp., 4.6 mi. Rapids-Greiner Rd., Newstead and Clarence Twps., 2.8 mi. Armor-Duell's Corners Rd., East Hamburg Twp., 4.6 mi. Getzville-Swormsville Rd., Amherst Twp., 3 mi. Hunters Creek Rd., Wales Twp., 4.6 mi. East Aurora-Griffins Mills Rd., Aurora Twp., 3 mi. Versailles-Mile Strip Rd., Brant Twp., 1.3 mi. Chaffee-Java Rd., Sardinia Twp., 4.8 mi. Vermont Hill Rd., Holland Twp., 2.5 mi. East Amherst Rd., Amherst Twp., 2.8 mi. New Oregon-Wyandale Rd., Concrete Twp., mostly waterbound macadam except 1 mi. Delaware Ave., Tonawanda Twp., concrete, 16 ft. wide on one side of street only, replacing brick pavement between car track and curb. Cost will be borne by county and townships.

N. Y., West Point—State Legislature, Albany, petitioned to appropriate sum to build road from West Point, Putnam Co., through Cold Spring, Kent Cliffs and Carmel Twps.

New Jersey—State Highway Comn., State House, Trenton, had surveys made and plans prepared for improving 3.68 mi. Roebling-Bordentown Sect., Route 14, 18 ft. concrete pavement, 30 ft. graded, involving 15,000 yd. excav. and 40,000 sq.yd. concrete paving, Burlington Co.; 5.87 mi. Egg Harbor-Ellwood Sect., Route 3, White Horse Pike, 18 ft., 30 ft. graded, involving 15,000 cu.yd. excav., 62,000 sq.yd. concrete paving, 27,000 sq.yd. gravel shoulders; 3.873 mi. Ellwood-Da Costa Sect., Route 3, White Horse Pike, 30 ft. graded, 18 ft. paved, involving 13,000 cu.yd. grading, 41,000 sq.yd. concrete paving, 20,000 sq.yd. gravel shoulders; 3.6 mi. Belcoville-Mays Landing Sect., Route 14, 30 ft. graded, 18 ft. paved, involving 5000 cu.yd. grading, 37,000 sq.yd. concrete paving, etc., Atlantic Co.; 3.575 mi. Rio Grande-Wildwood Junction Sect., Route 14, Main Shore Rd., 18 ft. paved, 30 ft. graded, involving 7000 cu. yd. excav., 38,000 sq.yd. concrete paving, 13,000 sq.yd. gravel shoulders; 2.1 mi. Wildwood Junction-Cape May Courthouse Sect., Route 14, Main Shore Rd., 30 ft. graded, 18 ft. paved, involving 5000 cu.yd. grading, 22,000 sq.yd. concrete paving, 8000 sq.yd. gravel shoulders, Cape May Co.; plans have been prepared for 4.418 mi. Da Costa-Hammonton Sect., Route 3, near Hammonton, 30 ft. graded, 18 ft. paved, involving 23,000 cu.yd. excav., 47,000 sq.yd. concrete paving and 15,000 sq.yd. gravel shoulders, Atlantic Co.; 5.15 mi. Mullica Hill-Mantua Sect., Route 6, 30 ft. graded, 18 ft. paved, involving 35,000 yd. grading, 54,000 sq.yd. concrete paving, Gloucester Co. W. G. Thompson, Broad St. Bank Bldg., Trenton, engr.

Pa., Du Bois—City plans election to vote on $75,000 bonds to rebuild Boulevard.

Pa., Hazleton—City plans to pave various streets during year. About $50,000. J. Rough, city engr.

Pa., Scranton—City plans to pave Tayler Ave. from Olive to Gibson Sts. sheet asphalt on concrete base, about $14,428; paving Pine St. from Webster to Taylor Aves., sheet asphalt and stone blocks on concrete base, $5680. W. A. Schunk, city engr.

Va., Petersburg—City plans to appropriate $50,000 to pave Halifax St. from present pavement to point south of Jones St.; Union St. from Washington to Halifax and Fleet Sts. R. D. Budd, city engr.

N. C., Charlotte—City soon lets contract for resurfacing and paving various streets. About $55,000 available for work. W. E. Vest, city engr.

N. C., Winston—Salem—City plans to pave various streets, bitulithic and asphalt. Cost between $200,000 and $300,000. J. Firth, city engr.

Ga., Quitman—See "Bridges."

Fla., Ft. Pierce—Comrs. St. Lucie Co. plan to expend $70,000 for building Dixie Highway, north of St. Lucie.

Fla., Jacksonville—City soon lets contract furnishing all material and laying about 8246 sq.yd. vitr. brick pavement, on 4 in. concrete base, with cement filler and 4 x 10 in. concrete curb set flush with brick, on Talleyrand Ave. from Deer Creek to city limits. F. M. Edwards, city engr.

Fla., Milton—Comrs. Santa Rosa Co. plan to issue $80,000 bonds to build hard surface road from west side of Oskaloosa line to east end of Black Water River, here. J. F. Poore, chn.

Fla., Pensacola—Council sold $50,000 bonds to grade, pave and curb various streets. J. O. Walker, city clk. Noted Aug. 15.

Ala., Guntersville—Comrs. Marshall Co. receive bids in April for surfacing about 8 mi. road between Guntersville and New Hope. Cost $30,000. G. Gilbreath, judge.

Mississippi—State Highway Comn., Jackson, has announced that various counties and road districts of Mississippi will have approximately $3,000,000 available for road work during 1919. Federal aid of $500,000 will also be expended. N. A. Kramer, Magnolia, engr.

Miss., Fayette—Comrs. Jefferson Co. plan to issue $330,000 bonds to improve 100 mi. road. O. S. Gillis, clk.

Miss., Lexington—Bd. Supervs. Holmes Co. plan to issue $75,000 bonds to build roads in Dist. No. 5. J. H. Fuqua, clk.

La., Gretna—Jefferson Parish plans election to vote on $125,000 bonds to build and improve various roads. State Highway Dept. will appropriate $50,000 toward work if election carries.

Tenn., Clarksville—Comrs. Montgomery Co. plan to issue $50,000 bonds to build roads. J. T. Cunningham, co. judge.

Ky., Louisville—City plans to expend $200,000 to pave and improve various streets. J. Chambers, city engr.

O., Cleveland—City soon lets contract grading, paving and draining Aetna, Denison, Flora, Korman, Poe, Roehl, Woodside, East 102nd, 103rd, 104th, 128th, and West 44th, 90th and 91st Sts., 2 mi.long, 25-75 ft. wide, involving 50,000 sq.yd. 6 in. concrete, 40,000 sq.yd. brick block, 80,000 sq.yd. 6 in. concrete base and 35,000 ft. Berea stone curbing. R. Hoffman, city engr.

O., Lakewood—City plans to pave Carabel Ave., 7400 yd. long, 29 ft. wide. About $36,840. E. A. Fisher, city engr.

O., Lakewood—City receives bids in summer paving, grading, draining, opening and extending Franklin Ave. E. A. Fisher, city engr.

O., Lakewood—City receives bids in spring paving 2415 yd. Woodford Ave., 25 ft. wide, cost, $12,600; 2415 yd. Shaw Ave., 30 ft. wide, $12,600; 4500 yd. Andmar Ave., 30 ft. wide, $31,700; 1800 yd. Detroit Ave., 60 ft. wide, $14,500; 47,000 yd. Madison Ave., 40 ft. wide, $305,500; 82,000 yd. Clifton Blvd., 60 ft. wide, $473,000; also paving and grading 4000 yd. Chesterland and Olive Aves., 25 ft. wide, $19,000; paving, grading and draining 2870 sq.yd. Marlowe Ave., 30 ft. wide, $18,350. E. A. Fisher, city engr.

O., Lakewood—City receives bids in summer paving 4320 yd. Bell Ave., 25 ft. wide, cost $36,500; 600 yd. Morrison Ave., 45 ft. wide, $30,000. E. A. Fisher, city engr.

O., Lakewood—City receives bids in summer paving Rio and Idlewood Aves., 2500 yd. long, 25 ft. wide. About $13,350. E. A. Fisher, city engr.

Mich., Detroit—Bd. Pub. Wks. plans to resurface and widen 1000 ft. Cass Ave. from Grand River to Michigan Aves., from 56 to 80 ft.; 1000 ft. Madison Ave. from Randolph to Antoine Sts., 40 to 90 ft.; 300 ft. Beaubien St. from Madison to Gratiot Aves., 40 to 60 ft.; 300 ft. Witherell St. from Montcalm to High Sts., opened to 60 ft. width. H. H. Esselstyn, comr.

Mich., Detroit—Bd. Pub. Wks. soon receives bids paving Ellsworth Court from Lenox to Newport Aves., 30 ft. wide, cost $24,300; Eastlawn Ave. from Korte to Essex Aves., 26 ft. wide, $28,952; Drexel Ave. from Korte to Essex Aves., 26 ft. wide, $23,876; Lenox Ave. from Korte to Essex Aves., 26 ft. wide, $21,573; Piper Blvd. from Korte to Freud Aves., 26 ft. wide, $42,911; Newport Ave. from Korte to Essex Aves., 26 ft. wide, $30,550; Blaine Ave. from Dexter Blvd. to Radford St., 26 ft. wide, $16,866; asphaltic concrete pavement on 8 in. concrete base, Berea or Medina curbing. H. H. Esselstyn, comr.

Streets and Roads (Continued)

Mich., Detroit—H. H. Esselstyn, comr. pub. wks. soon lets contract paving Gilbert Ave. from north line Michigan Ave. to south line Wagner St., 26 ft. wide, involving 5642 cu.yd. earth excav., 7702 lin.ft. Berea or Medina curbing, 13,312 sq.yd. asphalt, 6 in. concrete base, 246 cu.yd concrete under and behind curb, 1625 lin.ft. retaining stone; Anderson Ave. from north line Kercheval Ave. to south line Charlevoix Ave., 26 ft. wide, involving 3190 cu.yd. earth excav., 3236 lin.ft. Berea or Medina curbing, 4944 sq.yd. asphaltic concrete, 6 in. concrete base, 92 cu.yd. concrete under and behind curb, 166 lin.ft. retaining stone; Trenton Ave. from north line Ferndale to south line Woodmere Aves., 26 ft. wide, involving 1784 cu.yd. earth excav., 2734 lin. ft. Berea or Medina curbing, 4182 sq.yd. asphaltic concrete, 6 in. concrete base, 79 cu.yd. concrete under and behind curb, 228 lin.ft. retaining stone; Oregon Ave. from present pavement to east line Colfax Ave., 26 ft. wide, involving 2041 cu.yd. earth excav., 2056 lin.ft. Berea or Medina curbing, 3053 sq.yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 78 lin.ft. retaining stone; Petoskey Ave. from north curb Joy to north line Graham Aves., 26 ft. wide, involving 1787 cu.yd. earth excav., 1965 lin.ft. Berea or Medina curbing, 3038 sq. yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 210 lin.ft. retaining stone; Boxwood Ave. from north line Moore to south line Tireman Aves., 26 ft. wide, involving 1080 cu.yd. earth excav., 1424 lin.ft. Berea or Medina curbing, 2178 sq.yd. asphaltic concrete, 6 in. concrete base, 41 cu.yd. concrete under and behind curb, 108 lin. ft. retaining stone; White St. from north line Jefferson Ave. to south line Harbaugh St., 20 ft. wide, involving 800 cu.yd. earth excav., 1564 lin.ft. Berea or Medina curbing, 1866 sq.yd. asphaltic concrete, 6 in. concrete base, 46 cu.yd. concrete under and behind curb, 156 lin.ft. retaining stone; Wilson Ave. from north line Virginia Park to south line Euclid Ave., 26 ft. wide, involving 754 cu.yd. earth excav., 674 lin.ft. Berea or Medina curbing, 1058 sq.yd. asphaltic concrete, 6 in. concrete base, 19 cu.yd. concrete under and behind curb, 65 lin.ft. retaining stone; Wilson Ave. from north line Bethune to south line Pallister Aves., 26 ft. wide, involving 520 cu.yd. earth excav., 588 lin.ft. Berea or Medina curbing, 827 sq.yd. asphaltic concrete, 6 in. concrete base, 16 cu.yd. under and behind curb; Wilson Ave. from north line Clairmont to south line Atkinson Aves., 26 ft. wide, involving 597 cu.yd. earth excav., 533 lin.ft. Berea or Medina curbing, 892 sq.yd. asphaltic concrete, 6 in. concrete base, 17 cu.yd. concrete under and behind curb, 104 lin.ft. retaining stone. C. F. Hubbel, city engr.

Mich., Grand Rapids—City plans to pave Grand Ave. from Fulton to Fountain Sts., sheet asphalt on concrete base, cost $8000; Gezon Alley from Leonard to Crosby Sts., $4735; Godfrey Ave. from Hill St. to city limits, $7130; Lincoln Ave. from Bridge to Walker Sts., concrete, $32,600; Alabama Ave. from 1st to 3rd Sts., brick, $10,380; repave Island St. from Ellsworth to Ionia Sts., brick, $8950; Madison St. from State to Washington Sts., sheet asphalt on concrete base, $5385; Hilton Ave. from Prescott to Franklin Sts., brick on concrete base, $21,660; Terrance Ave. from Washington to State Sts., asphalt on concrete base, $3980; College Ave. from Carrier St. to Sweet Ave., $31,960; Folton St. from Jefferson to Grand River Sts., concrete, $38,820. C. J. Wagner, city engr.

Ill., Rock Island—City having plans prepared paving 13th St. between 18th and 19th Aves. and 19th Ave. between 12th and 13th Sts., asphalt, 900 ft. long, 60 ft. wide. About $11,000. W. Treichler, city engr.

Wis., Chilton—City having plans prepared by J. Donahue, engr., Sheboygan, paving 8000 ft. Main St., 30 to 40 ft. wide. Work involves 20,000-30,000 sq.yd. 8 in. concrete pavement. About $60,000.

Wis., Kaukauna—City having plans prepared by A. E. McMahon, engr., Menasha, paving 10 blocks Lawe St., 40 ft. wide. About $30,000. Work involves 15,000 sq. yd. asphalt pavement on 5 in. concrete base.

Wis., LaCrosse—Comrs. La Crosse Co. having plans prepared for road and bridge work. About $75,000 appropriated for project.

Minn., Minneapolis—Park Bd. plans election to vote on $3,000,000 bonds to pave roads in parks. W. F. Cappelin, city engr.

Minn., Minneapolis—State Legislature authorized $400,000 bonds for paving streets. W. F. Cappelin, city engr.

Neb., Lincoln—City soon receives bids paving 1340 ft. Starr, Charles and 33rd Sts., Dist No. 403, 25 ft. wide, asphaltic concrete. About $10,000. Work involves 3400 sq.yd. asphaltic concrete, 2900 lin. ft., combined concrete curbing and guttering and 3400 sq.yd. 5 in. concrete base.

Neb., Tekumseh—City plans to pave 12 blocks in business sect., 30-60 ft. wide. About $90,000.

North Dakato—State Highway Comn., Bismarck, plans to build 4.5 mi. road in Bottineau Co., cost $10,000; 10 mi. road in Oliver Co., south from Center City, $10,055; 5 mi. road through La Moure City, La Moure Co., $10,000. W. H. Robinson, Bismarck, engr.

N. D., Wahpeton—City receives bids about Apr. 1, paving and curbing 42,500 sq.yd. 6th and 8th Sts. L. W. Burdick, city engr.

Mo., Kansas City—Jackson Co. having tentative plans prepared by O. C. Sheley, co. highway engr., for highway between here and Independence, 1¼ mi. long, 100 ft. wide. About $18,750.

Mo., Warsaw—Comrs. Benton Co. plan to build 22 mi. road. About $20,000.

Ark., De Queen—Comrs. Rd. Dist. No. 4, Sevier Co. sold $100,000 bonds to build road from here to county line.

Tex., Albany—Comrs. Shackelford Co. had plans prepared building 11.2 mi. road. Cost between $30,000 and $40,000.

Tex., Dallas—City plans to pave section of Jeffries and Wall Sts., Forest, Pennsylvania and Peabody Aves., bitulithic. G. D. Fairtrace, city engr.

Tex., Ft. Worth—City plans to pave Calhoun St. Cost between $30,000 and $40,000. F. J. Von Zuben, city engr.

Tex., Gonzales—Comrs. Gonzales Co. soon lets contract building 24 mi. Houston-San Antonio Highway from Waelder to Belmont.

Tex., Granbury—Comrs. Hood Co. plan election to vote on bonds to build 10 mi. Highway No. 25.

Tex., Greenville—Comrs. Hunt Co. plan election to vote on $112,303 bonds to build 12.5 mi. road from Fannin Co. line south. J. H. Rush, Greenville, engr.

Tex., Houston—City and Comrs. Harris Co. plan to rebuild Camp Logan Highway. About $64,000. E. E. Sands, city engr.

Tex., Weatherford—Parker Co. election Mar. 1, to vote on $400,000 bonds to build roads. Noted Oct. 24.

Tex., Weatherford—City election Apr. 1 to vote on $60,000 bonds to pave streets. E. B. Ferrell, city, clk.

Colo., Denver—City receives bids about Mar. 1, surfacing with smelter slag, loam sand and gravel, 30 blocks, North Denver Surfacing Dist. No. 4, cost $19,645; building cement side walks, cross walks, culverts, etc., on 45 blocks, South Denver Impvt. Dist. No. 15, $53,934. J. H. Hunter, city engr.

Colo., Pueblo—City plans to expend $216,000 for paving various streets. D. P. Gaymon, city engr.

Idaho, Boise—City plans to pave 24,500 sq.yd. streets, probably bitulithic. About $47,000. C. C. Stevenson, city engr.

Idaho, Caldwell—City plans to pave Kimball Ave. About $50,000.

Ore., Portland—Comrs. Multnomah Co. notified by R. C. Holman, chn., to make survey of highway to Oregon Medical College on Marquam Hill.

California—State Highway Comn., Forum Bldg., Sacramento, soon receives bids grading 11 mi. Hanford-Coalinga-San Lucas Rd., 18 ft. wide, involving 6 in. concrete pavement, concrete and galvanized iron culverts, etc. A. B. Fletcher, state highway engr. Noted Jan. 30.

Cal., San Diego—City receives bids in spring paving 11,500 lin.ft. Cass and Garnet Sts. through Pacific Beach to Rose Canyon, cost, $44,000; 18,300 lin.ft. road from Camp Kearney Rd. to Rose Canyon, $72,000; Park Blvd., $27,000; Jackdaw, Hunter and Avalon Sts., $23,000, all pavement to be concrete, 5 in. thick. G. Cromwell, city engr.

Cal., San Diego—City soon lets contract paving Robinson Ave., Indiana St. and Park Blvd. Work involves 178,140 sq.ft. asphalt macadam wearing surface on 4-in. concrete base, 26,525 lin. ft. cement concrete sidewalk, 5248 lin. ft. cement concrete curb, 2441 cu.yd. excav., 1387 cu.yd. embankment, 293 lin. ft. culverts, 445 lin. ft. water pipes, etc. G. Cromwell, city engr.

Cal., Santa Barbara—Bd. Supervs. Santa Barbara Co. soon receives bids paving 2 mi. Santa Rita Rd., 16 ft. wide, concrete on 5 in. concrete base. About $15,000.

N. B., Fredericton—City plans to pave various streets. About $200,000. G. Perkins, clk.

Que., Sherbrooke—City plans to expend $100,000 for paving various streets. E. C. Gatien, clk.

Ont., Carlton—Comrs. Carlton Co. receive bids in spring building various roads. About $40,000. Patterson & Byrne, 71½ Sparks St., Ottawa, engr.

Ont., Chesterville—Town plans to build 4 mi. concrete sidewalks. G. Elliott, clk.

Ont., Ottawa—Dept. of Highways, Toronto, soon receives bids building 54 mi. Ottawa-Prescott Highway, concrete and tarmacadam. G. Hogarth, engrs.

Ont., Strathroy—See "Sewers."

Sask., Saskatoon—City plans to pave various streets. About $202,420. A. Leslie, clk.

BIDS DESIRED

N. Y., Lockport—Until Mar. 31, by Bd. Supervs. Niagara Co., building 3.507 mi. Lockport Rd. Sect. 2, bituminous macadam, 16 ft. wide, Wheatfield and Cambria Twps., 3.097 mi. Mapleton Rd., bituminous macadam, 16 ft. wide, Pendleton Twp., 0.275 mi. Sugar St., Lewiston Twp., 1.527 mi. Sugar St., concrete, 16 ft. wide, Niagara Falls Twp., 2.30 mi. Old Niagara Rd., concrete, 15 ft. wide, Lockport City and Twp., 1.39 mi. Gilbert Cor-Griswold Rd., bituminous macadam, 16 ft. wide, St. Royalton Twp., 2.07 mi. Stone Rd., bituminous macadam 14 ft. wide, Hartland Twp., 2.26 mi. Slayton Settlement Rd., bituminous macadam, 12 ft. wide, Royalton Twp. F. H. Krull, clk.

W. Va., Fairmont—Until Mar. 6, by Marion Co. building 6 mi. improved roads and streets, Grant Dist. here. A. G. Martin, co. clk.; advertised in this issue.

Fla., Ft. Meyers—Until Feb. 12, by Comrs. Lee Co., grading portion of Tamiami Trail Rd. R. G. Collier, chn.

Indiana—By Bd. Co. Comrs. building roads in following counties:

Mar. 3, Warren Co., Williamsport, gravel and concrete road in Pine, Washington, and Warren Twps. W. H. Stephens, aud.

Mar. 4, Bartholomew Co., Columbus, crushed stone roads in Rockcreek and Hawcreek Twps. A. Henderson, aud.

Minn., Alexandria—Until Mar. 5, by V. Thomas, aud. Douglas Co., building 16 mi. State Rd. No. 1, Federal Aid Project No. 27, involving 144,543 cu.yd. excav., 13,700 lin.ft. guard rail, 1814 lin.ft. 12-36 in. concrete culverts, leading and hauling 19,001 cu.yd. gravel surfacing material and 2-W 46 x 24 ft. rein.-con. culverts; 3 mi. State Aid Job No. 1904 involving 29,812 cu.yd. excav., 5450 lin.ft. guard rail, 196 lin.ft. 12-24 in. concrete culverts and loading and hauling 3284 cu.yd. gravel surfacing material. Noted Jan. 9.

Minn., St. Paul—Until Feb. 17, by Comrs. Ramsey Co., paving and grading with clay and gravel 1 mi. Highwood Rd.; 1 mi. Dale St. from Crosby Rd. north; ½ mi. Frost Ave.; 1 mi. Hamline Ave. from Valentine to Menomine Sts.; 1 mi. Fairchild Ave. from Dale to Rice Sts.; ¾ mi. Snelling Ave. from Robinson Lake Rd. north; 1¾ mi. Anoka Co. Line Rd. from Centerville Rd. west to 1917 improvement; 1¾ mi. Mayant St. from St. Paul and Duluth Rd. east to White Bear and Lake Phalen Rd.; 1¼ mi. Labere St. from Edgerton St. north to East Town Lake Rd., ½ mi. Newell St. from Dale St. east, and ¾ mi. Oak Dale Ave.

Kan., Oswego—Until Feb. 14, by Comrs. La Bette Co. graveling Kings Trail Rd., Federal Aid Project No. 2, in Federal Rd. Dist. No. 5, 48,450 ft. long, 18 ft. wide, involving 50,002 cu.yd. earth excav., 86,164 sq.yd. gravel roadway. About $75,000. W. J. King, co. engr.

Streets and Roads (Continued)

N. D., Forman—Until Feb. 18, by Sargent Co., building 31.5 mi. earth road and culverts on Federal Aid Project No. 15, 36 ft. wide. About $54,384. W. H. Robinson, Bismarck, engr.

Tex., Jasper—Until Feb. 11, by Comrs. Jasper Co. building 17 mi. hard surfaced road from Call Junction to Buna. Project includes concrete drainage structures and vitr. clay culverts. G. R. Abney, co. engr.

Ariz., Clifton—Until Feb. 24, by A. L. Terry, clk., Greenlee Co., building Sects. 1 to 6 and part of 7 Clifton-Springerville Rd.

Cal., San Diego—Until Feb. 17 by A. H. Wright, city clk., grading and paving Cass and Turquoise Sts. and La Jolla Blvd., 18,435 ft. long, 20 ft. wide, 5 ft. graded on either side. About $79,500. Work involves asphaltic oil-stone screening surface, 5 in. concrete base, etc.

Cal., Santa Ana—Until Feb. 18 by E. L. Vegely, city clk., improving various streets. Work involves 570 cu.yd. excav. and 24,194 sq.ft. class "B" concrete pavement.

Cal., Santa Ana—Until Feb. 18, by J. M. Backs, clk. Orange Co., paving 1 mi. Edinger St. in 5th Rd. Dist., concrete, 16 ft. wide. About $15,000. E. L. McBride, co. surv.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—M. E. Connolly, pres. Queens Boro., received bids Jan. 29, (1) regulating and grading roadway space, etc., in 88th St. from 102nd to 104th Sts.; (2) regulating, grading, curbing and laying sidewalks and paving Hancock St. from Wyckoff Ave. to Evergreen branch of Long Island R.R., sheet asphalt on 6 in. concrete base (3) 124th St. from Metropolitan to Jamaica Aves., (4) 125th St. from Jamaica to 89th Aves., (5) 150th St. from Beaver Rd. to South Rd., (6) Barclay St. from Parsons Blvd. to 147th St., (7) Emerson St. from Freedom Ave. to Oxford St., (8) Delaware Ave. from Parsons Ave. to 147th St., (9) 153rd St. from Northern Blvd. to 34th Ave., (10) Gates Ave. from Grandview to Forest Aves., (11) Armand Pl. from Walter St. to point southwest, (12) 102nd St. from Jamaica Ave. to Park Lane, S., (13) 123rd St. from point north of 85th to 89th Aves., from R. A. Hess, Inc., Elmhurst, L. I., (1) $2224, (5) $826, (8) $341, (9) $1531, (10) $1142, (11) $1276; Grimm Constr. Co., Maginta St., Brooklyn, (1) $2544, (3) $9942, (4) $5042, (5) $1051, (10) $1246; E. W. Fitzpatrick, 244 Jackson Ave., Long Island City, (1) $2593, (6) $644, (7) $21,450, (11) $1427, (13) $15,442; Sicilian Asphalt Paving Co., 41 Park Row, (2) $5448; Uvalde Asphalt Paving Co., 1 Bway., (2) $6306; C. Gallagher, (3) $9595. (13) $13,863; Peace Bros. 20 Main St., Flushing, (3) $10,030, (4) $5230, (6) $690, (8) $360, (9) $1630, (11) $1490, (12) $300; T. Welch, (4) $5350; J. Jennings, 3927 Ferris Ave., Long Island City, (5) $1081, (12) $315; McCarthy Rush & Ryan, East Trenton Ave., Bronx, (6) $593, (8) $298, (9) $1250, (10) $1040; Serverio & Britton, 238 South Elm St., Richmond, S. I., (7) $21,790, (12) $338; Scott & Kurth, Woodhaven, L. I., (7) $28,157; C. A. Meyers, Stagg St., Brooklyn, (13) $15,633. Noted Jan. 23.

★Fla., Lakeland—City let contract building 4 mi. asphalt paving, to Wm. P. McDonald Constr. Co., Lakeland. About $80,000 available for work.

★Ala., Gadsen—City plans to repair various streets. About $10,000. Work will be done by day labor.

Ohio—State Highway Comn., Columbus received bids Jan. 31, building roads and bridges as follows:

Ashtabula Co., Sect. N, O and P, Cleveland-Buffalo Rd., 1192 mi., from F. P. Fitzgerald, Ashtabula, $421,419.

Ashland Co., Sect. "G" Savannah-Vermillion Rd., 4.08 mi., from S. Newhall Co., 623 Citizens Bldg., Cleveland, monolithic brick, $104,752.91; plain concrete, $67,975.

Columbiana Co., Sect. "E." Cleveland-East Liverpool Rd., construction of bridge, Hardin & Maurer, Sidney, $20,535.

Guernsey Co., Sect. "T," Stuebenville-Cambridge Rd., 2.04 mi., from J. P. Mumaw, Huntington, W. Va., $21,698.

Sect. "A," McConnelsville-Spencer Rd., 1.36 mi. from G. Shafer, Caldwell, $22,159.

Highland Co., Sect. "I," Milford-Hillsboro Rd., 2.79 mi., from Brewer & Brewer Sons, Chillicothe, waterbound macadam, $43,276; T. Vogelburg, London, bituminous macadam, $49,000.

Sect. "K," Milford-Hillsboro Rd., 4.63 mi. from J. M. Snouffer, Columbus, bituminous macadam, $89,148, waterbound macadam, $84,964.

Sect. "C-2," Hillsboro-Chillicothe Rd., 0.14 mi., from Hardin & Maurer, Sidney, $15,781.

Knox Co., Sect. "L," Columbus-Wooster Rd., 1.99 mi., from Edwards & Erwin, Sunbury, rein.-con., $58,200. R. S. Blinn, Mt. Vernon, semi-monolithic brick, $68,023.

Miami Co., Milton-Carlisle Rd. from Huber, West Milton, "A," $19,791, B-1, $6,142. Noted Jan. 16.

Ill., Edwardsville—City received lowest bid paving Brown St. from Vandalia to Logan Sts., Aldrup St. from Brown to Fillmore Sts., Woif St. from Brown to Buchanan Sts. and Dewey Ave. from Brown St. to city limits, from J. Kesl, Edwardsville. About $23,680. Noted Jan. 16.

★Ill., Moline—City let contract paving 25th St., to McCarthy Impvt. Co., Davenport, Ia. About $40,000.

★Kan., Topeka—Shawnee Co. let contract paving, grading and building culverts on 3.889 mi. Sect. A. Federal Aid Project No. 4, Topeka-Lawrence Rd. on Fort to Fort Highway, 18 ft. roadway, including 2 course concrete, 6 in. base and 2 in. top course, involving 41,416 sq.yd. concrete, 940 lin.ft. concrete gutter, 20,577 cu.yd. earth excav., 563 cu.yd. rock excav., 25,666 lb reinforced steel, to Cook & O'Brien Constr Co., Kansas City, Mo., cost $137,294; 5.966 mi. Sect. B. involving 63,157 sq.yd. concrete, 56,933 cu.yd. dry earth excav., 4473 cu.yd rock excav., 36,626 lb reinforced steel, to J. O. Patterson & Co., Kansas City, Mo., $230,931. Noted Jan. 30.

★Okla., Oklahoma—City let contract to Western Paving Co., 518-19 Terminal Bldg., $16,903, paving 12th St. from Bway. to Oklahoma Ave.; Olie Ave. from 17th to 18th Sts.; 13th St. from Western Ave. to right of way of Oklahoma Ry.; part of block op Classen Blvd. and 10th St. west of Hudson Ave.

Railways

PROPOSED WORK

District of Columbia—See "Buildings," Wash., D. C.

Washington—City of Spokane plans election Mar. 4, to vote on bond issue to improve municipal car line. A. D. Butler, city engr.

California—La Jolla Electric Line, recently incorporated with $250,000 capital stock, plans to purchase part of abandoned right of way of La Jolla Ry. between Bird Rock and La Jolla and will build electric line to connect with Mission Beach electric line. Cost about $108,000, of which $54,000 will be paid to old La Jolla line for track. E. F. Stahle, c/o Chamber of Commerce, La Jolla, treas.

Saskatchewan—City of Saskatoon plans to extend street railway. About $46,000.

Excavation and Dredging

PROPOSED WORK

Mass., Quincy—Excavation—State Legislature passed bill for appropriation of $50,000 to deepen Neponset River, 3 mi. long to 14 ft. depth. J. N. Cole, chn. waterways & pub. lands comn.

N. Y., Albany—Barge Canal Terminals—State Legislature petitioned to appropriate $950,000 to build barge canal terminals at Kingston, Newburgh, Poughkeepsie and Yonkers.

N. Y., Kingston—Barge Canal Terminals—See "Albany."

N. Y., Newburgh—Barge Canal Terminals—See "Albany."

N. Y., Poughkeepsie—Barge Canal Terminals—See "Albany."

N. Y., Seneca Falls—Barge Canal Terminal—State Legislature, Albany, petitioned to appropriate $100,000 to build barge canal terminal here.

N. Y., Waterloo—Barge Canal Terminal—State Legislature, Albany, petitioned to appropriate $100,000 to build barge canal terminal here.

N. Y., Yonkers—Barge Canal Terminals—See "Albany."

Ga., Royston—Drainage—C. A. Ginn soon lets contract draining Beaverdam Creek. Work involves 160,000 cu.yd. excav. and 1200 cu.yd. rock excav., dipper dredge. About $38,000.

Ia., Clarion—Drainage—Comrs. Wright Co. (Clarion) and Hamilton Co. (Webster City) soon let contract building system in D. D. No. 178 and Joint Dist. No. 223 involving 5955 ft. 8-30 in. tile. F. H. Eyler, aud.

Ia., Jefferson—Drain—Comrs. Greene Co. soon let contract building Drain No. 128, involving 114,080 ft. 6-42 in. tile and 46 ft. sewer pipe, assorted sizes. S. J. Melson, engr.

Ia., Monona—Drainage—Comrs. Onawa Co. soon let contract repairing cut-offs of Little Sioux River D. D. No. 1 involving 434,000 cu.yd. excav. on 4½ mi. ditch; repairing main canal of D. D. No. 1, involving 950,000 cu.yd. excav. on 19 mi. ditch. J. A. Gray, chn.

Colo, Sterling—Excavation—North Sterling Irrigation Dist., Logan Co. Bank Bldg., plans to increase capacity of 60 mi. canal by deepening portion 3 ft. E. H. Jones, dist. engr.

Cal., Dinuba—Irrigation—Alta Irrigation Dist. plans to build about 106,000 sq.ft. cement lining in ditches, cement drops, etc. in connection with irrigation system. Work involves about 900 ft. cement pipe. About $30,000. Address E. Sibley, supt.

Cal., El Centro—Canal—Dirs. Imperial Irrigation Dist. ratified contract with U. S. Recl. Serv. by which district secures right to take water from Colorado River at Laguna Dam. For this privilege it must pay $1,600,000 in 20 annual payments. Contract requires that district build works at Laguna Dam for diverting water, enlarge present government canal 6 mi. from dam to Syphon Drop, also build new 40 mi. canal within United States from Syphon Drop to point north of Calexico, etc. Cost between $20,000,000 and $25,000,000. Noted Jan. 16.

Cal., Riverside—Drainage—West Riverside D. D. plans election to vote on bond issue to drain 1100 acres along Santa Ana River. Address G. A. Sarou, Riverside, atty.

BIDS DESIRED

S. C., York—Ditches—Until Feb. 11, by Comrs. Turkey Creek D. D. No. 1, building 26 mi. open ditches in York and Chester Counties, involving 861,860 cu.yd. W. D. Alexander, Charlotte, N. C., engr. Noted Dec. 26.

Miss., Tunica — Excavation — Until Feb. 17, by Comrs. Prichard D. D., Tunica Co., for 540,000 yd. floating dredge work and 25,000 cu.yd. earth embankment. S. J. Houston, pres. L. W Mashburn, Clarksdale, engr.

Ind., Greenfield—Drain—Until Feb. 22, by C. Boon, engr., Hancock Co., building G. W. Parker et al Drain, Buck Creek Twp. Work involves 500 ft. 8 in., 1300 ft. 10 in., 2910 ft. 12 in., 5500 ft. 14 ft. and 1717 ft. 20 in. tile.

Wis., Stiles—Ditch—Until Feb. 25, by Comrs. 1st D. D. of Stiles and Lena Twps., at Court House, Oconto, building 15 mi. open ditch involving 12,000 ft. 16-24 in. tile. A. Rocque, secy.

Ia., Logan—Drainage—Until Feb. 18, by Comrs. Harrison Co. (Logan), and Monona Co. (Onawa), building Upper Willow D. D. No. 2, Sects. 1 to 9, involving 520,786 cu. yd. excav. H. B. Owens, aud. Noted Dec. 26.

Minn., Alexandria — Excavation — See "Streets and Roads."

Minn., Tyler—Ditch—Until Mar. 13, by A. L. Swenson, aud., Lincoln Co. (Ivanhoe), building Co. Ditch No. 45, involving 14,885 ft. 6-22 in. tile. About $12,806. G. Thorn, engr.

Kan., Oswego—Excavation—See "Streets and Roads."

Ark., Jonesboro—Ditch—Until Feb. 18, by A. W. Hall, secy. Comrs. Cache River D. D., Craighead, Lawrence and Jackson Counties, building 22 mi. main ditch and 12 mi. lateral, involving 5,500,000 cu.yd. excav. J. R. Rhyne, Corning, engr. Noted Sept. 26.

Tex., Jasper—Drainage—See "Streets & Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Cal., Lindsay—Irrigation—Lindsay—Strathmore Irrigation Dist. let contract excavating, trimming and lining 105,000 sq.yd. ditches with 1 in. cement, to W. A. Kraner, Marsh Strong Bldg., Los Angeles, $50 per cu.yd. for excav. and $.105 sq. ft. for trimming and lining. Noted Oct. 17.

Industrial Works

PROPOSED WORK

Mass., Chelsea—Griffin Wheel Co., 49 Federal St., having plans prepared by S. K Vial, engr., c/o owner, building 1-story foundry to replace one destroyed by fire.

Mass., Everett—W. T. Littlefield, archt., 9 Hamilton Pl., Boston, soon receives bids building 2-story, 65 x 125 ft. brick and concrete factory, concrete flooring and foundation on Boulevard and Winter Sts. for Standard Envelope Sealer Mfg. Co., c/o architect. About $50,000.

Mass., Pittsfied—W. T. Littlefield, archt., 9 Hamilton Pl., Boston, receives bids in spring building 2-story, 190 x 220 ft. brick and concrete factory, rein.-con. flooring and concrete foundation, for McGilvray-Cummings Co., c/o. architect. About $200,000.

Mass., Worcester—A. S. Hanson, 873 Main St., had plans prepared by E. T. Chapin, archt., 340 Main St., for 2-story, 64 x 111 ft. brick garage at 741 Main St. About $30,000.

R. I., Elmwood (Providence P. O.)—Providence Body Co., 32 Eagle St., Providence, receives bids about Mar. 1, building 1 story, 80 x 200 ft. brick and mill construction factory with 2 wings on Elmwood Ave. here. About $55,000.

N. Y., Carthage—Natl. Paper Products Co., 1789 Montgomery St., San Francisco, Cal., plans to build 2 story, concrete and steel addition to mill here. About $150,00.

N. Y., New York—W. H. Hussy & Son, 150 West 35th St., having plans prepared by G. Keister, archt, 56 West 45th St., for 4-story, 42 x 98 ft. steel and brick warehouse, rein.-con. flooring, concrete foundation, 233-235 West 35th St. About $75,000.

N. Y., Watertown—Knowlton Bros., 139 Mill St., had plans prepared by C. Eaton, engr., Sherman Bldg., for brick and concrete addition to plant. About $50,000.

N. Y., Woodhaven—Amer. Tool & Dye Co., Lexington Ave., Brooklyn, having plans prepared by W. T. McCarthy, archt., 16 Court St., Brooklyn, building 2 story, 50 x 95 ft., steel or rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Atlantic and Freedom Aves., here. About $25,000.

Pa., Green Ridge (Scranton P. O.)—Susquehanna Collieries Co., Commercial Trust Bldg., Phila., had plans prepared for building central power plant here with high voltage transmission lines to other collieries. About $2,000,000.

Pa., Hollidaysburg—Pennsylvania R. R., Broad St. Sta., Phila., plans to build extension to engine house, here. About $50,000. A. C. Shand, ch. engr.

Pa., Honesdale—Honesdale Consolidated Heat, Light & Power Co., 110-7th St., plans to build electric power plant. About $50,000.

Pa., Phila.—W. T. Clark and S. Craighead, 1635 North Broad St. having plans prepared for 1 story, 103 x 194 ft. garage at 1736-1748 North Broad St.

Pa., Scranton—Maloney Oil & Mfg. Co., 141 Meridan St., having plans prepared by J. J. Howley, archt., Trader's Bank Bldg., for 3 story 90 x 100 ft. brick and concrete service station on Washington Ave. and Mulberry St.

Md., Baltimore—See "Buildings."

Md., Sparrows Point—Bethlehem Steel Corp., Bethlehem, Pa., plans expenditure of $20,000,000 during 1919 to complete commercial steel plant. J. N. Stringley, in charge of construction.

Tenn., Centerville — Standard Ground Rock Phosphate & Fertilizer Co. receives bids in spring building mill construction fertilizer plant. About $40,000. A. H. Grigsby, Pres.

Tenn., Memphis—Memphis Packing Corp., Central State Natl. Bank Bldg., plans to build and equip modern packing house. About $1,000,000. T. Newson, pres.

O., Cleveland—Century Realty Co., 209 Williamson Bldg., plans to build 4 story, 60 x 104 ft. brick steel and rein.-con. manufacturing plant, rein.-con. flooring and concrete foundation on East 17th St. and Payne Ave. About $50,000.

O., Cleveland—H. M. Morse & Co., archts., 413 Citizens Bldg., soon receives bids building 2 story, 80 x 160 ft. brick, steel, and rein.-con. factory, rein.-con. flooring on West 110th St. and New York Central R.R., for Reflex Ignition Co., 1708 Payne St. About $65,000.

O., Toledo—Toledo Ry. & Light Co., Smith and Baker Bldg., plans to issue $3,200,000 bonds for acquisition, construction, extension and equipping of additional property; also for improvements and extensions to existing light and power plants. None of money to be raised by these bonds is to be spent upon street railways property. F. R. Coates, pres. and genl. mgr.

Mich., Detroit—J. G. Kastler Co., archts., 523 Chamber of Commerce, receives bids about Feb. 15, building 3-story, 53 x 156 ft. brick and rein.-con. bakery, rein.-con. flooring and concrete foundation on 31st and Herbert Sts., for Polonia Baking Co., 420 30th St. About $100,000. Noted Sept. 26.

Mich., Muskegon—Brunswick-Balke-Collender Co., Laketon Ave., plans to build addition to factory. About $200,000.

Wis., Green Bay—Conradson Machine Tool Co., recently incorporated with $300,000 capital stock, acquired 12 acre site and plans to build plant to include machine shop, experimental shop, drafting room, office and warehouse and shipping building. C. A. Conradson, ch. engr. and mgr.

Wis., Menasha—Lakeside Paper Co. had plans prepared for additions to its plant. Cost including equipment, $80,000.

Wis., Milwaukee—Amer. Automobile Co., 187 Wisconsin St., purchased site at Prospect Ave. and Ivanhoe Pl. and plans to build garage, service station and machine shop. About $45,000. A. E. Raffauf, mgr.

Wis., Wausau—Marathon Shoe Co. plans to build 3 story brick and concrete factory. About $30,000. S. J. Pentler, secy. and mgr.

Minn., Minneapolis—Bd. Charities & Corrections plans election to vote on $344,000 bonds to build work-house. W. F. Chappelin, city engr.

Kan., Topeka—State plans to build brick, concrete and steel addition to printing plant here. About $40,000. R. L. Gamble, state archt.

Wyo., Manville—Town granted franchise to E. P. Bacon, Casper, to build and operate light, heat and power system here.

Wyo., Thermopolis—Town adopted resolution to make application to Wyoming Pub. Serv. Co. for transferable franchise for building municipal light and power system. This action taken in connection with application to Wyoming Pub. Serv. Co. by Hot Springs Light & Power Co. for increase in rates, which was opposed by town on grounds of poor service.

Mo., Chesterfield—L. B. Faust, pres., Chesterfield Cooperative Grain Assn., receives bids about March building grain elevator with 70,000 bu. capacity. About $30,000.

Mo., Kansas City—Kansas City Light & Power Co., 1500 Grand Ave., plans to expend $5,500,000 for improvements. H. Blackweil, vice pres.

Mo., Springfield—United Iron Wks., Mill and Prospect Sts., plans to build brick machine shop on Natl. Blvd. About $30,000. C. H. Cole, Kansas City, pres.

Mo., St. Louis—Floor Shine Paint & Varnish Mfg. Co., 2744 Olive St., receives bids about March building addition to factory. About $30,000. C. F. McKinley, pres.

Ark., Ashdown—United Oil Mills, Hope, plans to build mill construction plant here to replace one recently destroyed by fire. About $50,000. W. Y. Foster, Sr., Hope, pres.

Tex., Dallas—Wyatt Metal & Boiler Wks., 1817 Coombs St., purchased 155 x 500 ft. site and plans to build an addition to its plant. About $25,000. W. J. Wyatt, pres.

N. F., St. John's—Imperial Oil Co., 56 Church St., Toronto, Ont., plans to build addition to plant here. About $50,000.

Ont., Galt.—Riverside Silk Mills, Water St. N., purchased site on Melville St., and plans to build factory. About $50,000.

Ont., Port Colborne—Dominion Government, Ottawa, plans to build addition to grain elevator here, to have capacity of 1,000,000 bu.

BIDS DESIRED

N. Y., Brooklyn—Until Feb. 21, by F. H. Kimball, archt., 71 Bway., New York City, building 1-story, 75 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, 69th St. and Ft. Hamilton Pkway., for Municipal Auto Garage Co. 25 Court St. About $35,000.

N. Y., Long Island City—Until Feb. 14, by Buchman & Kahn, archts., 56 West 45th St., New York City, building 2 story, 200 x 200 ft., steel and brick factory, rein.-con. flooring, concrete foundation, Johnson, Stewert and Varick Aves. and Long Island R.R. here for Englander Spring Bed Co., 88-35th St., Brooklyn. Noted Jan. 2 under "Brooklyn."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—Rockwood & Co., 88 Washington Ave., let contract altering and building 3 story, 100 x 200 ft., steel and brick addition, rein.-con. flooring, concrete foundation, 21-35 Waverly Ave., to W. L. and G. H. O'Shea, 29 Bway., New York City. About $83,000.

★N. Y., Brooklyn—Spencer Realty Co., Bway., and Havermeyer St., will build 1 story, 50 x 200 ft., steel and brick garage, rein.-con. flooring, brick foundation, Bedford and Myrtle Ave. About $65,000. Work will be done by day labor. Noted Jan. 16.

★N. Y., Buffalo—Donner-Union Coke Corp., Abbey Rd., let contract building plant consisting of brick and steel by-product coke building, cost, $100,000; concrete coal bin, $100,000; machine shop, $17,000; etc., to H. J. Koppers Co., Abbey Rd. Total cost of plant will amount to approximately $5,000,000.

★N. Y., Lyonsville—Moyer & Pratt let contract improving plant, to W. Charlebois, 841 Mill St., Watertown. About $70,000.

★N. Y., New York—A. C. Merkle, Inc., 233 Bway., will build 4 story, brick and steel factory, rein.-con. flooring, concrete foundation, 517 West St. About $145,000. Work will be done by day labor. Noted Jan. 30.

★Va., Norfolk—I. Fass, foot of Water St., Portsmouth, let contract building 1-story, 111 x 115 ft. brick ice and cold storage plant, Crawford St., to J. H. Harris. About $30,000.

★O., Cleveland—Bd. Pub. Serv. let contract building 1 story, 105 x 133 ft. brick and concrete garage, rein.-con. flooring, concrete foundation, on East 3rd St. and St. Clair Ave., to G. A. Rutherford Co., 1922 East 18th St. About $50,000.

★O., Cleveland—Clover Meadow Creamery Co., 1837 East 55th St., let contract building 2 story brick steel and rein.-con. creamery plant, rein.-con. flooring, concrete foundation, to Bolton & Pratt Co., 801 Columbia Bldg. About $60,000. Noted Jan. 30.

★Wis., Milwaukee—A. B. and B. Specialty Co., 3300 Fond du Lac Ave., let contract building 2 story, 55 x 100 ft., brick and concrete addition to plant, to J. Metz, 1014 Center St.

★Mo., St. Louis—Yung & Mueller Baking Co., 1913 North Prairie Ave., let contract building 2 story, 54 x 115 ft. brick bakery, to Hartman & Schuermann, Odd Fellows Bldg. About $40,000.

Buildings

PROPOSED WORK

N. H., Laconia—Hotel—Eastern Hotel Co., c/o F. C. Watson, archt., 30 Elm St., Gloucester, Mass., had plans prepared building 4-story, 40 x 180 ft. frame and stucco on Lake Shore Ave., here.

Mass., Belchertown—Dormitory—Commonwealth of Massachusetts receives bids in spring building home for feeble-minded, here, 2-story, 75 x 90 ft. brick and rein.-con., rein.-con. flooring and concrete foundation. About $100,000. Address G. M. Kline, 36 State House, Boston, dir. mental diseases . Kendall, Taylor & Co., 94 Federal St., Boston, archts.

Mass., Boston—Hospital—Comn. Mental Diseases applied to State Legislature for appropriation to build kitchen and dining room in west group, Boston State Hospital, cost, $100,000, kitchen and dining room, east group, $110,000; home for nurses in east group, $80,000.

Buildings **(Continued)**

Mass., Boston — Hospital — Beth Israel Hospital. Townsend St., plans to build. About $150,000.

Mass., Boston—Temple, etc.—City had plans prepared by F. C. Brown, archt., 9 Park St., for memorial liberty temple to consist of civic auditorium, museum and colonnade of nations. About $4,000,000.

Mass., New Belford—Hospital—City receives bids in spring building brick, concrete and steel hospital group, rein.-con. flooring and concrete foundation on Mt. Pleasant, Myrtle, Van Buren and Jefferson Sts. Plans include ward and operating buildings, laundry and power house. About $100,000. H. T. Borden, 154 Fair St., chn. comm. J. S. McIntyre, 22 Clifford Bldg., archt.

Mass., North Reading—Hospital, etc.—Trustees of Hospitals for Consumptives filed petition in State Legislature, Boston, for authority to expend $82,618 to build new hospital at North Reading Sanitorium, $48,156 for nurses' dormitory and chapel and $5000 for radial brick chimney.

Mass., Plymouth—Memorial—City voted $250,000 bonds to build memorial to commemorate landing of Pilgrims and services of sons in other wars.

Mass., Rutland—Hospital—Central New England Sanitorium receives bids about Mar. 1 building 3-story, 40 x 90 ft. administration building and two 3-story 35 x 100 ft. ward buildings, hollow tile and stucco construction, rein.-con. flooring and concrete foundation. About $250,000. E. F. Stercus, 9 Park St., Boston, archt. B. T. Crane, supt.

R. I., Pawtucket—Church and Parish House—Notre Dame congregation receives bids in spring building brick church and parish house. About $200,000.

R. I., Pawtucket—Church—St. Edwards congregation plans to build. About $100,000.

R. I., Pawtucket—Club House—B. P. O. E., 14 School St., plans to build. About $50,000.

R. I., Pawtucket—Club House—Knights of Columbus receives bids about Mar. 15, building clubhouse and home. About $80,000. M. J. Gallagher, chn.

R. I., Providence — Auditorium — City plans to build large memorial auditorium.

R. I., Providence—Dormitory—Brown University, College, St., receives bids in spring building dormitory on Cushing St. for Pembroke College. About $130,000.

R. I., Providence—High School—Bd. Educ. receives bids in spring building 3 story, 170 x 300 ft. brick, rein.-con. flooring and concrete foundation, on Pond, Winter and Spring Sts. and Montcalm Court. About $400,000.

Conn., Bridgeport—Bank—North End Bank & Trust Co., plans to build brick and marble on Main St. and Wheeler Ave. Address J. T. L. Hubbard, 1115 Main St.

Conn., Hartford — Auditorium — D. B. Hillyer, 108 Gillett St., plans to build auditorium on Trinity St., to be known as Bushnell Memorial. About $500,000.

Conn., Hartford—Office—Aetna Life Insurance Co., 650 Main St., purchased site on Jowell, Hicks and Trumbull Sts. and plans to build large office building, probably 30 stories high.

Conn., Hartford—School—Bd. Educ. appropriated $250,000 to build addition to Northeast School on Westland St.

Conn., Middletown.— Hospitals — State plans to construct 2 tuberculosis hospitals and building for acutely insane at South Farms here. About $125,000 and $175,000 respectively.

Conn., Naugatuck — Armory — State Legislature, Hartford, petitioned to appropriate $60,000 to build new state armory here.

Conn., New Haven — Armory — State Legislature, Hartford, petitioned to appropriate $500,000 to build new state armory here.

Conn., New London—Schools—Bd. Educ. plans to issue $500,000 bonds to build new schools.

Conn., Norfolk—Home—Comrs. Fairfield Co. (Bridgeport), plan to build 2-story, brick addition on Westfield Ave. here. About $50,000.

Conn., Unionville — School — St. Marys congregation soon receives bids building 2-story brick, concrete and steel, rein.-con. flooring and concrete foundation. About $60,000. W. H. Redding, pastor. Brown & Buren, 185 Church St., New Haven, archts.

Conn., Wallingford — Armory — State Legislature, Hartford, appropriated $225,000 to build new state armory here.

Conn., Wallingford—Office—R. Wallace & Sons Mfg. Co., Quinnipiac St., plan to build. About $50,000. W. P. Crabtree, 272 Main St., New Britain, archt.

N. Y., Albany—School—Bd. Educ. Colonie Twp., soon receives bids building 2-story, 60 x 65 ft., concrete and brick, concrete foundation, Stop 28, Schenectady Rd. About $50,000. E. H. Newmann, Stop 24, Schenectady Rd., archt.

N. Y., Brooklyn — Parish House — St. Bartholomews Protestant Episcopal congregation, 1227 Pacific St., having preliminary sketches prepared by M. Montrose & Sons, archts, 533 Bedford Ave., for steel, brick and stone parish house, brick foundation, Pacific St. and Bedford Ave. F. M. Townley, rector.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York City, soon receives bids building P. S. 100, 4 story, 100 x 144 ft., West 1st St., Coney Island, cost, $299,500; P. S. 80, 4 story, 100 x 144 ft., West 19th St., Coney Island, $310,230; P. S. 29, 5 story, 118 x 192 ft., Henry and Harrison Sts., $543,474; P. S. 182, 5 story, 118 x 192 ft. Dumont Ave. and Wyona St., all brick and concrete construction, concrete foundation. Noted Dec. 5.

N. Y., Forest Hills—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by C. B. J. Snyder, archt., Municipal Bldg., for 2-story, 105 x 108 ft., steel and brick, concrete foundation, here. About $200,000.

N. Y., Middletown—Memorial—City receiving competitive plans for brick, steel and concrete memorial building. About $200,000

N. Y., New York—Armory—State Legislature, Albany, petitioned to appropriate $600,000 to build armory in Queens Boro.

N. Y., New York—Office—J. J. Astor, London, England has had tentative plans prepared by C. E. Birge, archt., 29 West 34th St., for 31 story, 66 x 98 ft., at 8-12 Wall St. About $1,500,000.

N. Y., New York—Theatre—B. F. Keith, 1564 Bway., had plans prepared by W. H. McElfatrick, archt., 701 7th Ave., for 3-story, 200 x 228 ft., steel and brick, concrete foundation, Fordham Rd. and Valentine Ave., Bronx. About $300,000.

N. J., Newark—Memorial—Bd. Educ. had tentative plans prepared by J. H. and W. C. Ely, archts., Firemen's Bldg., for 4 story, 300 x 600 ft., on Broad St. and Clinton Ave. About $1,000,000.

N. J., South Orange—Memorial—South Orange Service Memorial Corp. plans campaign to raise $150,000 to build 2 story, brick and limestone, South Orange Ave. and Valley St. E. Stout, 66 Ralston Ave., archt.

N. J., Verona—Hospital—Bd. Freeholders Essex Co., (Newark) soon receives bids on revised plans for rein.-con. steel and brick, tuberculosis hospital, rein.-con. flooring, concrete foundation, on Fairview Ave. J. Green, Essex Bldg., Newark, archt.

Pa., Mt. Carmel—Church—St. Joseph's congregation plans to build. About $60,000. M. Mayer, pastor.

Pa., Palmerton—School—Bd. Educ. having plans prepared by C. H. Lloyd, archt., Telegraph Bldg., Harrisburg, building grade school. About $100,000.

Pa., Phila.—Bank—Kensington Trust Co., Kensington and Allegheny Aves., plans to build 1-story, 54 x 78 ft. and 15 x 54 ft. additions. About $50,000. Heacock & Hokanson, Bailey Bldg., archts.

Pa., Phila.—Store—L. W. Hirsch Co., 923 Market St., soon lets contract remodelling 5-story, 46 x 200 ft. building adjoining present store into addition for its own use. About $250,000. F. E. Hahn, 112 Chestnut St., archt. Noted Jan. 16.

Pa., Pittsburgh — Church — East End Christian Church had plans prepared by B. Janssen, archt., Century Bldg., for church on Shady Ave. and Howe St. About $150,000.

Md., Aberdeen—Bank—Smith & May, archts., 1133 Calvert Bldg., Baltimore, receive bids about Mar. 15, building 1 story, 50 x 75 ft., concrete, steel and brick, concrete foundation, for 1st Natl. Bank, here. About $50,000.

Md., Baltimore—Bank—Seaboard Bank, Park Ave. and Fayette St., receives bids about Mar. 1, altering 5 story, concrete and steel bank. About $60,000. R. L. Harris, 2027 Kennedy Ave., archt.

Md., Baltimore—Terminal United Rys & Electric Co., Continental Bldg., purchased site on Eastern Ave. and 15th St., East Baltimore, and plans to build steel and concrete passenger terminal and carhouse. Cost between $150,000 and $200,000. J. R. Pratt, genl. mgr.

Md., Dundalk—(Baltimore P. O.)—Business—E. L. Palmer, Jr., archt., 513 North Charles St., Baltimore, receives bids about Mar. 1, building 2-story, 200 x 400 ft., rein.-con. and brick, brick, and concrete foundation here, for Liberty Housing Co., 330 North Charles St., Baltimore. About $60,000.

D. C., Wash.—Terminal Station, etc.—Washington, Baltimore & Annapolis Electric Ry., 108 North Liberty St., Baltimore, Md. plans to build station on New York Ave.; 12th, H and 11th Sts., here. Plans include waiting and baggage rooms, double tracks for "dead" cars and single track entering and leaving terminal. J. J. Doyle, Baltimore, **Md.,** genl. mgr.

La., Baton Rouge—Y. M. C. A. receives bids about Feb. 20 constructing 2 story brick building. About $75,000. Shattuck & Hussey, 19 South La Salle St., Chicago, Ill., archts. Noted Aug. 8.

La., Shreveport—Church—Highland Ave. Baptist congregation plans to build, steel and rein.-con., brick facing, on Olive and Stephens Sts. Cost between $75,000 and $100,000. C. P. Roney, 1333 Jennings Ave., pastor.

Tenn., Chattanooga — Auditorium and School—City plans to build auditorium and school. About $600,000. J. M. Payne, secy. finance dept.

Tenn., Memphis—Auditorium—Shelby Co. and City plan to build auditorium here. About $1,000,000. T. C. Ashcroft, mayor.

Tenn., Memphis — Hospital — Methodist Hospital, Bank Commerce & Trade Bldg., soon receives bids building on Mallory Ave. About $500,000. Address T. B. King, secy.

O., Ironton—Store and Theater—F. L. Packard, archt., Hayden Bldg., Columbus, soon receives bids building store and moving picture theater for H. A. Marting, here. About $100,000.

O., Sandusky—Hotel—H. L. Stevens & Co., archts., 910 South Michigan Ave., receives bids in spring building 6-story, 75 x 130 ft. brick, concrete, steel and rein-con., rein.-con. flooring, concrete foundation for D. Olmstead c/o architect. About $200,000. Noted Jan. 9.

Mich., Detroit—Club House—Fellowcraft Athletic Club, 1602 Woodward Ave., having plans prepared for club house near City Hall to include 200 bedrooms, assembly room, dining rooms, swimming pool and gymnasium. F. E. Holmes, pres.

Mich., Grand Rapids—Church—Fountain St. Baptist Church purchased site on Fulton St. and Lafayette Ave., and plans to build new church. Cost between $400,000 and $500,000.

Mich., Pilgrim—(Houghton P. O.)—Home—Good Will Farm Assn. plans to rebuild home recently destroyed by fire. About $50,000.

Ill., Chicago—Hotel and Baths—W. W. Ahlschlager, archt., 133 West Washington St., receives bids about Apr. 1, building 12-story, 80 x 170 ft. brick and rein.-con., rein.-con. flooring and concrete foundation at 410-416 Wabash Ave. for Kercher Hotel Co., 505 South Wabash Ave. About $1,200,000. Noted Jan. 9.

Ill., Chicago—Office and Stores—Marshall & Fox, 721 North Michigan Ave., soon receives bids building 3-story, 47 x 70 ft. at 700 North Michigan Ave. About $75,000. Noted Apr. 11.

Ill., Streator—Store and Office—D. C. Murray, 309 East Main St., soon receives bids building 5-story, 50 x 142 ft. brick and rein.-con., concrete foundation. About $175,000. G. C. Nimmons & Co., 120 South Michigan Ave., Chicago, archts.

Wis., Kenosha—Theater—Paccini Amusement Co. plans to build on Main and South Sts. About $200,000.

Wis., Kenosha—Theater—Paccini Amusement Co. plans to build 2 story on Elizabeth and Grove Sts. About $100,000.

Buildings (Continued)

Wis., La Crosse—Hotel—Linker Realty Co. soon receives bids building 4-story, 20 x 152 ft. addition on 4th St. between Main and Pearl Sts. About $50,000 Parkinson & Dockendorff, La Crosse, archts.

Wis., Marshfield—School—City soon lets contract building 2 story, 50 x 125 ft., rein.-con. and brick. About $60,000. Childs & Smith, 64 Van Buren St., Chicago, archts.

Wis., Milwaukee — School— Bd. Educ. soon receives bids building 2-story, 170 x 175 ft., rein.-con., brick and steel, concrete foundation, on Greenbush Ave. About $160,000. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Wis., Milwaukee — School — Bd. Educ. receives bids in summer building 3-story, 95 x 200 ft., rein.-con., brick and steel, concrete foundation on Grand Ave. About $240,000. Van Ryn & De Gelleke, 114 Grand Ave., archts. Noted June 6 .

Ia., Dubuque—Dormitory—Perkins, Fellows & Hamilton, archts., 814 Tower Court, Chicago, preparing preliminary plans for 2-story, 50 x 100 ft. brick and timber. About $65,000. Owners name withheld.

Ia., Ft. Dodge—High School—City election Feb. 26, to vote on $650,000 bonds to build high school.

Minn., Chicago City — School — Consolidated School Dist. Bd. Educ. receives bids about Feb. 11, building 2 story, 60 x 100 ft., rein.-con. and brick. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt.

Minn., Duluth—Church—Second Presbyterian congregation plans to build 2 story, 75 x 120 ft., rein.-con., brick and steel, rein.-con. flooring, concrete and rock foundation, on 2nd St. About $75,000.

Minn., Minneapolis—Auditorium, etc.—Civic & Commercial Assn. will apply to State Legislature for authority to build auditorium and municipal building. About $3,500,000. W. F. Cappelin, city engr.

Minn., Minneapolis — Library — Library Bd. plans election to vote on $1,000,000 bonds to build. W. F. Cappelin, city engr.

Minn., Minneapolis—Market—City voted $2,500,000 bonds to build. W. F. Cappelin, city engr.

Minn., Minneapolis—School—Bd. Educ. plans election to vote on $4,750,000 bonds to build schools. W. F. Cappelin, city engr.

Minn., St. Paul — Hospital — Northern Pacific Mutual Benefit Assn., 203 R. R. Bldg., receives bids in March building 4-story, brick hospital and power plant. Simpson and Edmund Sts. About $300,000. L. Bassindale, 321 Capital Bank Bldg., archt.

Kan., Dodge City—Auditorium—City election Apr. 1, to vote on $90,000 bonds to build auditorium.

Kan., Emporia—School—State plans to build normal school here, brick, steel and concrete. About $85,000. R. L. Gamble, Topeka, state archt.

Kan., Lansing—Home—State plans to build women's detention home here, brick, steel and concrete. About $100,000. R. L. Gamble, Topeka, state archt.

Kan., Larned—Hospital—State plans to build brick, steel and concrete hospital here. About $125,000. R. L. Gamble, Topeka, state archt.

Kan., Lawrence—University—State plans to build brick, stone and steel university here. About $200,000. R. L. Gamble, Topeka, state archt.

Kan., Manhattan—College—State plans to build agricultural college here, brick, concrete and steel. About $165,000. R. L. Gamble, Topeka, state archt.

Kan., Norton—Hospital—State plans to construct farme buildings, concrete foundation also 1 brick building for State Hospital here. About $150,000. R. L. Gamble, Topeka, state archt.

Kan., Quindaro (Kansas City P. O.)—University—State plans to build Western University here, brick, steel and concrete. About $85,000. R. L. Gamble, Topeka, state archt.

Kan., Rosedale—School—State plans to build medical school here, brick, concrete and steel. About $125,000. R. L. Gamble, Topeka, state archt.

Kan., Topeka—Institute—State plans to build industrial and educational institution here, brick, concrete and steel. About $90,000. R. L. Gamble, state archt.

Kan., Topeka—School—State plans to build boys' industrial school here, brick, concrete and steel. About $90,000. R. L. Gamble, state archt.

Kan., Wichita — Academy — Sisters of Blessed Virgin plan to build addition to Mt. Carmel Academy at 4000 West Douglas St. About $150,000.

Neb., Beatrice—Institution—State Legislature, Lincoln, petitioned to appropriate $75,000 to build and equip dining room, bakery, refrigerating and vegetable rooms also $15,000 for addition to hospital.

Neb., Lincoln—Hospital—State Legislature petitioned to appropriate $75,000 to construct and equip kitchen, dining room and dormitory for Hospital for Insane here.

Neb., Norfolk—Hospital—State Legislature, Lincoln, petitioned to appropriate $75,000 to build and equip kitchen, dining room and dormitory; $35,000 for addition to power house and smoke stack and $80,000 for chapel and assembly hall.

Mont., Lewistown — Auditorium — City plans to build. About $100,000. A. C. Birkland, city engr.

Mo., Columbia — Hospital — Boone Co. plans election to vote on $100,000 bonds to build county hospital here.

Mo., Florissant—Academy—Sisters of Loretto plan to rebuild Loretto' Academy here, recently destroyed by fire. About $50,000. Address Mother General, Loretto, Ky.

Ark., Blytheville—Auditorium—Blytheville Auditorium Co., Chamber of Commerce, plans to build 75 x 140 ft. brick. About $50,000.

Ark., Little Rock—Temple—B'Nai Israel congregation, 5th St. and Bway., plans to build. About $100,000. Address H. Lasker, 707 West Capitol Ave.

Tex., Ft. Worth—Bank—Ft. Worth Natl. Bank, 514 Main St., plans to remodel and enlarge bank. About $75,000.

Tex., Houston — School — City having plans prepared by M. J. Sullivan, archt., 207 City Hall, building Houston Heights School, at Blvd. and 20th St., 3 story, 65 x 200 ft., rein. con., brick and stone, rein. con. flooring. About $100,000.

Tex., Seminole — Courthouse — Comrs. Gaines Co. plan to build. About $75,000.

Okla., McAlester—School—City election Feb. 11, to vote on $250,000 bonds to build school. W. G. Masterson, supt.

Okla., Pauls Valley—High School—Bd. Educ. having plans prepared by J. Hicks, archt., 19½ West Main St., Oklahoma, building 2-story, 72 x 112 ft., rein.-con. and brick. About $55,000. Noted Dec. 27.

Colo., Denver—Hospital—St. Luke's Hospital Assn., East 19th and Pearl Sts., plans to build addition to hospital. Cost between $50,000 and $75,000.

Colo., Edgewater—Sanitarium—Evangelical Lutheran Sanitarium Assn., Arvada St., soon receives bids building 3 story brick and rein.-con. sanitarium on West 38th Ave. About $150,000. W. N. Bowman, 916 Central Savings Bank Bldg., archt.

Idaho, Lewiston—Administration—State Legislature, Boise, appropriated $150,000 to reconstruct administration building at State School here.

Wash., Seattle—Church—First Christian congregation having plans prepared by R. O. Orr, archt., 1301 Van Nuys Bldg., Los Angeles, Cal., building on Harvard Ave. and Spring St. About $100,000.

Ore., Portland—Hospital—Comrs. Multnomah Co., plan to build county hospital on grounds of Oregon Medical College. About $200,000.

Cal., Bakersfield—Hotel—F. W. Tegeler and associates plan to build 6 story brick or concrete. About $500,000.

Cal., Bakersfield—Lodge—B. P. O. E. No. 266, purchased site and having plans prepared for lodge, probably brick. Cost between $100,000 and $150,000.

Cal., Glendale—Church and School Group—Holy Family congregation considering preliminary plans for group of buildings consisting of church, school, parish house, guild hall, etc., larger buildings of brick, others of frame construction, rein.-con. flooring, concrete foundation, Louise St. and Lomita Ave. About $100,000. H. M. Doll, South Louise St., member bldg. com.

Cal., Santa Barbara—Courthouse—Bd. Supervs. Santa Barbara Co. plans to issue $500,000 bonds to build courthouse.

Cal., Taft—Hotel—W. L. Adkisson and associates plan to build 4 story, 75 x 125 ft., brick or concrete on Center St. About $60,000.

Ont., London—School—St. Peter's Cathedral having plans prepared for building school for junior boys. About $100,000. M. F. Fallon, pastor.

Ont., Ottawa—Hospital—Bd. Control recommended that City Council authorize $100,000 debentures to build extension to Royal Ottawa Sanatorium on Carling Ave. A. F. McCallum, City Hall, city engr.

Ont., Ottawa—Hospital—Salvation Army, 20 Albert St., Toronto, receives bids in spring building hospital here on Wellington St. A. Millar, 20 Albert St., Toronto, archt. About $55,000. Noted Dec. 19.

Ont., Toronto—Clubhouse—Y. M. H. A. plans campaign to raise $300,000 to construct here. L. Frankel, 504 Jarvis St., and L. Gelberg, 153 McCaul St., interested.

Sask., Saskatoon — School — Provincial Government having plans prepared for normal school on University campus to be known as Teachers' College. About $300,000. Noted Nov. 28.

BIDS DESIRED

N. Y., Malone—Armory—Until Feb. 14, by J. A. Coffey, secy. state bd. armory comrs., 158 State St., Albany, building addition to state armory; advertised in this issue.

N. Y., New York—Schools—Until Feb. 17, by C. B. J. Snyder, archt., bd. educ. Municipal Bldg., building P. S. 6, 5 story, 60 x 142 ft., brick and steel, concrete foundation, Tremont and Bryant Aves., Bronx, cost, $200,000; P. S. 57, 5 story, 118 x 192 ft., steel and brick, concrete foundation, Crotona Ave. and 181st St., Bronx, $543,474. Noted Jan. 23.

N. J., Newark—Restaurant and Dance Hall—Until Apr. 15, by N. Myers, archt., 7 Nelson Pl., remodeling existing building, and constructing 1 story, 25 x 95 ft., rein.-con., and steel addition rein.-con. flooring, 187 Market St., for Hong Kong Investment Co., care of Feist & Feist, 238 Broad St. About $60,000.

Mich., Detroit—School—Until Feb. 13, (change of date) by Bd. Educ., 50 Bway., building 2-story, 102 x 223 ft. brick, steel and rein.-con., rein.-con. flooring and concrete foundation on Emerson Ave. south of Jefferson Ave. About $275,000. Malcolmson & Higginbotham, 404 Moffat Bldg., archts. Noted Jan. 16.

Ill., Chicago—Library—Holabird & Roche, archts., 104 South Michigan Ave., receiving bids for constructing John Crerar Library, Michigan Ave. and Randolph St., to be 13-story, 81 x 127 ft. library and office building, steel and tile arch construction, concrete caisson foundation (alternative), flat slab concrete flooring; also 5-story, 81 x 81 ft. library and office building (ultimately 13-stories), same construction and alternative as above. Estimated cost, former, $1,000,000; latter, $500,000. Address John Crerar Library Bd., Marshall Field Bldg.

Mich., Newaygo—Court—Until Apr. 10, by Newaygo Co. Bldg. Com., for 2 story, 64 x 93 ft. brick, rein.-con. and steel, concrete foundation. About $50,000. J. G. Petersen, Traverse City, archt.

Ia., Waterloo—School—Until Feb. 19, by Bd. Educ. building 3 story, 55 x 125 ft., rein.-con. and brick. About $80,000. J. G. Ralston, L. and J. Bank Bldg., archt. Noted Jan. 30.

Minn., Duluth—Club House—Until Mar. 1, by M. N. Willis, archt., Wolvin Bldg., building 2 story, 100 x 140 ft., brick and steel, rein.-con. flooring, concrete and rock foundation, on East Superior St. for Northland Country Club. About $75,000.

Neb., Barnestown—High School—Until Feb. 10, by Bd. Educ., building 2 story, 75 x 124 ft., brick and stone. About $50,000. F. Malicky, secy. Noted Sept. 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Hartford—Hotels—Johnson & Webster Co., 327 Trumbull St., will build two 6-story, 40 x 126 ft. brick apartment hotels, rein.-con. flooring and concrete foundation, on Washington and Park Sts. Work will be done by day labor. About $160,000.

Buildings **(Continued)**

★N. Y., New York—Bank—Franklin Trust Co., 46 Wall St., let contract altering 1-story brick and steel, Madison Ave. and 40th St., to C. T. Willis, Inc., 286 5th Ave. About $75,000.

★N. Y., New York—College—New York Academy of Medicine, 17 West 43rd St., let contract building 6 story, 25 x 100 ft., brick addition, concrete foundation, 15 West 43rd St., to M. Eidlitz, 30 East 42nd St. About $175,000; cost plus percentage.

★Pa., Wilson—Homes—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, let contract building 20 superintendent's homes here, to Mellon Stuart Co., Oliver Bldg., Pittsburgh. About $160,000.

★Ill., Aurora—Bank—Second Natl. Bank let contract building 5-story, brick and steel, concrete foundation, to Hoggson Bros., 485 5th Ave., New York City. About $100,000.

★Wis., Kenosha—School—Bd. Educ. let contract building 2-story, 140 x 180 ft. brick and timber, brick foundation, to Madsen & Peterson, 802 Plymouth Bldg., Minneapolis, Minn. About $200,000. Noted Jan. 30.

★Neb., Eagle—School—Bd. Educ. let contract building 1-story, 120 x 120 ft. for Dist. No. 104, to H. Ohlsen & Son, David City, $75,191. Noted Jan. 16.

★Tex., College Station—Administration, etc. Agricultural & Mechanical College of Texas let contract building 60 x 100 ft. administration building and 65 x 130 ft. physics building, rein.-con. and brick, to J. E. Johnson, Waco, $90,000 and $70,000 respectively. Noted Jan. 2.

★Okla., Heavener—School—Bd. Educ. let contract building 1-story, 50 x 225 ft., brick and stone, to Green Constr. Co., Miami. About $50,000. Noted Sept. 26.

★Okla., Okmulgee—Office—N. M. Kimbley let contract building 6-story, 50 x 100 ft. rein.-con., brick and stone, to E. L. Winn Constr. Co., 105 Exch. Bldg., Kansas City, Mo. About $130,000 Noted Dec. 12.

★Ariz., Ajo—School—Bd. Educ. let contract building 2 story, here, to Edwards & Wildey, Black Bldg., Los Angeles, Cal., $113,315. Noted Jan. 23.

★Cal., Los Angeles—School—Bd. Educ., 730 Security Bldg., let contract building 2 story, 125 x 160 ft., hollow tile, concrete foundation, on Soto St., to C. Karseboom, 1445 Dana St., $53,890. Noted Jan. 30.

★Ont., Toronto—Hospital—Dept. Pub. Wks., Ottawa, let contract building officers' hospital in connection with Military Orthopedic Hospital, here, to Dickie Constr. Co., Ryrie Bldg., cost $58,112. Noted Dec. 26.

★Alta., Ponoka—Hospital—Dept. Pub. Wks., Ottawa, Ont., let contract building hospital here, to T. Jamieson & McKenzie, Calgary. About $144,000.

Federal Government Work

PROPOSED WORK

Mass., Wakefield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., plans to build 2 story. About $100,000.

R. I., Newport — Boat House — Bureau Yards & Docks, Navy Dept., Wash., D.C., plans to build; Spec. 3786. About $83,000.

N. Y., Ft. Lafayette—Dredging—Bureau Yards & Docks, Navy Dept., Wash., D. C., received no bids Feb. 3, dredging here; Spec. 3579. Noted Jan. 16.

N. J. Hoboken—Warehouse—Constr. Div., War Dept., Wash., D. C, plans to build wooden warehouse. About $66,000.

Pa., Parkview Sta.—Altering Hospital—Constr. Div., War Dept., Wash., D. C., plans to alter attic of General Hospital No. 24 and install heating and lighting systems in attic of middle building. About $10,250.

Pa., Phila.—Barracks, Mess Hall, etc.—Constr. Div., War Dept., Wash., D. C., plans to build seven 1 story barrack buildings, mess hall, lavatory building, all frame construction. About $20,000.

Pa., Phila.—Forced Induced Draft Fans—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3793. About $35,000.

Md., Indianhead — Incinerator — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3790. About $7000.

D. C., Wash.—River and Harbor Improvements—Congress approved appropriations for river and harbor improvements as follows: $29,720 for Pawtucket, R. I.; $88,000 for Hackensack River, N. J.; $550,000 for passes in Mississippi River; $975,000 for ship channel, Houston, Tex.; $30,000 for Chicago and Calumet Rivers, Illinois; $61,000 for St. Joseph, Saugatuck and other Michigan projects; $155,000 for Sacramento, Feather and San Joaquin Rivers, Cal.; $47,000 for Coos Bay Ore.; $41,000 for Columbia River; $27,000 for Willamette River; $33,000 for Anacortes Harbor; $125,000 for Hilo, Hawaii Harbor; $100,000 for additional surveys as follows: Miami and Erie Canal, Ohio, and other routes between Lake Erie and Ohio River with view of obtaining 12 ft. channel; Morro Bay, Cal., including entrance channel; also Yaquina River, Ore., from Newport to Toledo.

Va., Alexandria—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 6 additional cranes here. Spec. 3794. About $10,800.

Va., Hampton Roads—Grandstand and Bleachers—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3795. About $64,500.

Va., Newport News—Sewage Disposal Plant—Constr. Div., War Dept., Wash., D. C., plans to build sewage disposal plant including installation of septic tank, etc., at Camp Alexander. About $20,000.

Va., Norfolk—Forced Induced Draft Fans—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3793. About $35,900.

Ga., Brunswick—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3792. About $75,000.

Fla., Pensacola—Electrical Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install; Spec. 3785. About $30,000.

La., New Orleans—Paint Shop and Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3784. Bids will be received at local Navy Yard.

O., Fremont—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 7, same being in excess of appropriation. Noted Jan. 16.

Tex., Ft. Sam Houston—Road Work—Constr. Div., War Dept., Wash., D. C., plans to pave, curb and grade roads. About $14,000.

Ariz., Nogales—Laundry—Constr. Div., War Dept., Wash., D. C., plans to build at Camp S. D. Little. About $37,500.

Cal., Mare Island—Structural Shop—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids building steel and terra cotta structural shop, concrete or wood pile foundation; Spec. 3691. About $1,450,000. Noted Nov. 28.

Cal., San Diego—Flood Lighting System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in fuel depot; Spec. 3787. About $3000. Bids will be received at local Navy Yard.

Cal., San Diego—Gasoline Storage and Supply System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec., 3791. About $12,000.

BIDS DESIRED

Mass., Chatham—Dredging—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging at Naval Air Sta. here; Spec. 3774. About $40,000; $10 deposit required for plans and spec. Noted Jan. 23.

N. Y., New York—Electric Elevator—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing in light machine and electric shop here. Spec. 3731. About $30,000; $10 deposit required for plans and spec.

N. Y., New York—Piping and Equipment—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing in power house here: Spec. 3759. About $70,000; $10 deposit required for plans and spec. Noted Jan. 16.

N. Y., Rockaway—Addition to Dispensary—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3780. About $25,000; $10 deposit required for plans and spec. Noted Jan. 30.

N. Y., Walden—Post Office—Until Mar. 3, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C.

Pa., Phila.—Crane Runway—Until Feb. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building addition to crane runway at shipbuilding slips 2 and 3; Spec. 3769. About $125,000; $10 deposit required for plans and spec. Noted Jan. 23.

Md., Indianhead—Small Boat Basin, etc.—Until Feb. 10, (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., building small boat basin and bulkhead, involving timber piping, sheet piling and concrete work, etc.; Spec. 3776. About $42,000. Noted Jan. 30.

D. C., Wash.—Laboratory—Until Feb. 15, by U. S. Constr. Quartermaster, War College, Wash. Barracks, building photographic laboratory at Army War College. This item incorrectly noted in our issue of Jan. 23.

Va., Norfolk—Dredging—Until Feb. 21, by U. S. Eng. Office, Custom House, Norfolk, dredging inland Waterway from here to Beaufort Inlet, N. C.; advertised in this issue.

W. Va., Charleston—Fence—Until Feb. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3789. About $25,000; $10 deposit required for plans and spec.

O., Cincinnati—Lock—Until Mar. 29; by U. S. Eng. Office, Customhouse, Cincinnati, building lock and abutment for Dam No. 30, Ohio River, near Greenup, Ky.

Mont., Great Falls—Roads—Until Feb. 15, by Dist. Engr., Bureau Pub. Rds., U. S. Dept. of Agriculture, 413 Montana Bldg., Missoula, building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co., involving 79,000 cu.yd. earth excavs. 10,000 cu.yd. rock excav., 30 acres clearing and grubbing, also building ten 8-40 ft. span bridges, etc. L. I. Hewes, 202 Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

Mont., White Sulphur Springs—Roads—Until Feb. 15, by Dist. Eng., Bureau Pub. Rds., U. S. Dept. of Agriculture, 413 Montana Bldg., Missoula, building Sect. 1 Sheep Creek Natl. Forest Rd., 5 mi. long, involving 350,000 cu.yd. earth excav., 1600 cu.yd. rock excav., 18 acres clearing and grubbing. Sect. 2, 5.3 mi. long, involving 28,000 cu.yd. earth excav., 1000 cu.yd. rock excav., 1 log truss bridge, 10 acres clearing and grubbing, etc. L. I. Hewes, 202 Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

Tex., North Ft. Worth—Wells and Pumps—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3577. About $35,000; $10 deposit required for plans and spec. Noted Jan. 30.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Chelsea—Kitchen Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 3, installing in U. S. Naval Hospital Reservation, (1) price and time, (work complete), (2) price and time, (work complete), omitting all refrigerators, (3) price and time, for all refrigerators, exclusive of all other equipment, from Morandi Proctor Co., 86 Washington St., Boston, (1) $5464 (50 days); (2) $4484; (3) $980; Rod Iron Range Co., 6 Portland St., (1) $5636 (60 days); (2) $4586 (60 days); (3) $1050; L. Barth & Son, 32 Cooper Sq., New York City, (1) $6085 (30 days); (2) $4419; (3) $1666. Noted Jan. 16.

★N. Y., Owego—Post Office—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., let contract, to A. E. Badgley, Stone Opera House., Binghamton, $49,787 (12 months). Noted Jan. 23.

Pa., Phila.—Emergency Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 3, building addition to emergency hospital at U. S. Naval Hospital Reservation, Grays Ferry Rd., (1) net price and time for entire work, complete, in accordance with drawings and specification, (including all service lines as specified) but not including building for garage, stable and chauffeurs' quarters, greenhouse, and shed as specified under "Carpentry," (2) net price and time for work complete as outlined under (1) based on using slate for roofing as specified under alternative A, in lieu of roofing specified, (3) amount and time deducted from net price and time under (1) in accordance with drawings and specifications if nurses' quarters be omitted, (4) amount and time deducted from net price under (2) if nurses' quarters be omitted, based on using slate for roofing as outlined in (2), (5) amount and time deducted from net price under (1) in accordance with drawings and specifications, if officers' quarters be omitted, (6) amount

Federal Government Work (Continued)

and time deducted from net price and time under (2) if officers' quarters be omitted, based on using slate for roofing as outlined in (2), (7) amount and time added to net price and time under (1) if building for garage, stable and chauffeurs' quarters be included, (8) amount and time added to net price and time under (1) if greenhouse, demolition of present greenhouse, and construction of shed as specified under "Carpentry" be included, from

Dawson Constr. Co. 810 Union Trust Bldg., Wash., D. C., (1) $227,120, (120 days); (2) $232,120, (120 days); (3) $86,000, (15 days); (4) $87,500, (15 days); (5) $42,000, (10 days); (6) $42,600, (10 days); (7) $27,250, (8) $20,800, (10 days).

Mellody & Keating, 1322 Race St., Phila., Pa., (1) $243,062, (135 days); (2) $248,862, (135 days); (3) $98,810; (4) $100,610; (5) $46,159; (6) $47,009; (7) $29,849; (8) $22,595, (5 days).

F. W. Mark Constr. Co., 1701 Finance Bldg., Phila. Pa., (1) $254,900, (150 days); (2) $260,500; (3) $96,900, (10 days); (4) $98,600, (10 days); (5) $47,000, (10 days); (6) $47,700, (10 days); (7) $28,450, (120 days); (8) $17,260, (120 days). Noted Jan. 23.

Pa., Philadelphia—Water Tower, Pump, Tank House, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 3, building water towers, pump and tank house and installing equipment, at U. S. Naval Hospital, Grays Ferry Rd., (1) price and time, (work complete), (2) price and time to be added to (1) if slate is used instead of ready to lay roofing, from M. H. McClosky, Jr., 1620 Thompson St., (1) $15,292 (90 days), (2) $275; Melody & Keating, 1322 Race St., (1) $16,373 (90 days), (2) $245; W. Steel & Sons Co., 1600 Arch St., (1) $17,561 (90 days), (2) $325. Noted Jan. 16.

★**Pa., Sunbury**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract to A. E. Badgley, Stone Opera House, Binghamton, N. Y., $85,367 (16 months) Noted Jan. 23.

D. C., Anacostia—Heating Hangar—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Jan. 27, heating hangar at Naval Air Sta., (work complete) from L. E. Breuninger, Colorado Bldg., $10,625 (75 days); S. A. Gregory, 1349 Kenyon St., $10,977 (90 days); J. E. Granbery, $10,984; all contractors of Wash. Noted Jan. 16.

D. C., Wash.—Mechanical Equipment—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids installing equipment in hygienic laboratory here, from J. E. Granbury, Wash., $54,984; Standard Eng. Co., 2129 I St., N. W., $64,500. Noted Jan. 2.

★**Ga., West Point**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $52,900. Noted Jan. 16.

Fla., Key West—Dredging—U. S. Eng. Office, Jacksonville, received bids Jan. 28, dredging in Key West Harbor, involving 174,926 cu.yd. dredging, from Bowers Southern Dredging Co., 16th St. and River, Miami, $1.38 per cu.yd.; M. J. Dady Eng. & Contg. Co., 350 Fulton St., Brooklyn, N. Y., $2.60 per cu.yd.; P. S. Ross, Inc., 277 Washington St., Jersey City, N. J.; $4.15 per cu.yd. Noted Jan. 2.

★**Fla., Pensacalo**—Extension to Steam Line—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing steam line in barracks and mess hall, to C. A. Born, 25 West Garden St., $14,889 (90 days). Noted Nov. 14.

Fla., Pensacola—Fence and Gates—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building around ammunition depot, Naval Air Sta.,

(1) net price and time, work complete, in accordance with the drawings and specification.

(2) unit price per linear foot in addition or deduction for fence complete, with posts, rails, iron arms, wire fabric and barbed wire.

(3) unit price in addition or deduction for each 18 ft. gate, from

Cyclone Fence Co., 715 Woodward Bldg., Wash., D. C., (1) $7133.20, (120 days); (2) $2.20; (3) $108; alternate bid, (1) $6828.60, (120 days); (2) $2.05; (3) $108; alternate bid, (1) $6676; (2) $2; (3) $108.

Anchor Post Iron Wks., 165 Bway., New York City, (1) $7300; (2) $2, (120 days); (3) $1.35, (120 days); alternate bid. (1) $7037; (2) $2.09; (3) $135.

Wayne Iron Wks., 818 Commercial Bldg., Phila. (1) $8300, (150 days); (2) $2.50; (3) $140. Noted Jan. 16.

★**La., New Orleans**—Nurses' Quarters, etc.—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building nurses' quarters and extension to and changes in mess hall and kitchen, to R. P. Farnsworth & Co., Owensboro, Ky., $19,800 (120 days); outside service connections and work in power house and laundry, to H. W. Bond & Bro., 1019 Constantinople St., $2200 (120 days).

★**Ind., Shelbyville**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to Dunlap & Co., Columbus, $57,198 (12 months). Noted Jan. 23.

★**Tex., Ft. Worth**—Gas Holder, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building gas holder and installing C. O. 2 removal system, to Pittsburgh Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $89,700 (150 days). Noted Jan. 30.

Tex., Galveston—Hangars, Pavement and Beach—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 3, building at Naval Air Sta., (1) net price and time for work complete in accordance with drawings and specification. (2) this item shall be omitted according to addendum No. 4. (3) net price and time to be added to or deducted from net price for work complete, as required in (1) using asbestos-covered metal for walls in lieu of asbestos shingles over sheathing. Asbestos covered metal will be as specified in paragraph 105, and will be secured direct to studs and girts. Under this item interior sheathing of walls will also be omitted except in offices and toilet. (4) net price to be added to or deducted from net price for work complete as required in (1) for each pile in excess of or less than number shown on drawing, based on length of 30 ft. from point to cutoff. (5) net price to be added to or deducted from net price for work complete as required in (1) and (4) for each linear foot of pile in excess of or less than length specified above, from

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $315,120, (120 days); (3) deduct $500; (4) add $13, deduct $8; (5) add $.50, deduct $.20.

Horton & Horton, McKinney St., Houston, (1) $327,150, (150 days); (3) $327,000; (4) $12; (5) $.40.

Paschen Bros., 111 West Washington St., Chicago, (1) $391,000, (150 days); (3) add $28,000, (150 days); (4) $15; (5) $.50. Noted Jan. 30.

★**Cal., San Francisco**—Extension to Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building extension to wharf, to Healy Tibbits Constr. Co., Market and Main Sts., $18,938 (20 days). Noted Jan. 30.

Miscellaneous

PROPOSED WORK

Ferry Improvement — Boston, Mass. — State Legislature petitioned to appropriate $500,000 to improve East Boston ferry service, to include slips, approaches and city ferry boats.

River Improvement—Chelsea, Mass.—State Legislature petitioned to authorize Comn. Waterways & Pub. Lands to improve Mystic River from innavigable point through Chelsea Creek to sea, also establish river shipping and docking facilities on same. Cost to exceed $10,000.

Chimney—North Reading, Mass.—See "Buildings."

Dock—Quincy, Mass.—A. Whiton, mayor, appointed committee to investigate and report on feasibility of building Quincy dock. Cost between $50,000 and $200,000.

Wharves, etc.—New London, Conn.—City plans to sell $1,000,000 bonds to build wharves and dockage facilities for harbor here. G. K. Crandall, city engr.

Clearing Channel, Etc.—Albany, N. Y.—State Legislature, Albany, petitioned to appropriate $15,000 to clear channel and protect bank of Griffin creek, between junction of said creek with Old Genesee Valley canal and point 2000 ft. easterly up stream.

Pitch, Road Oil, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro., rejected all bids received Jan. 16, furnishing and delivering 25 tons paving pitch, 800 tons limestone dust, etc., 10,000 gal. bituminous road surfacing material and 150,000 gal. tar road oil. Noted Jan. 9.

SEWERS—LONG ISLAND CITY, N. Y.

Bids were received by M. E. Connolly, president of Queens Boro., Jan. 15, constructing sewers and appurtenances in 80th St., from Liberty to Atlantic Aves., N. S.; Atlantic Ave. from 80th to 76th Sts.; 76th St. from Atlantic Ave. to Pratt Pl.; 93rd Ave. from 76th St. to Elderts Lane; Elderts Lane from 93rd to Jamaica Aves.; 78th St. from Atlantic Ave., N. S., to Jamaica Ave. and in Jamaica Ave. from Elderts Lane to the Crown, Brooklyn and Queens Boros., from (A) H. J. Mullen, Fulton St., Brooklyn; (B) U. S. Drainage & Irrigation Co., 17 Battery Pl., New York City; (C) J. Jennings Co., 3927 Ferris Ave., New York City. The unit bids were as follows:

	A	B	C
2,428 lin.ft. 7 ft. 3 in. reinforced concrete sewer	$35.00	$54.80	$75.00
871 lin.ft. 5-ft. reinforced concrete sewer	19.00	26.50	40.00
723 lin.ft. 4 ft. 6 in. reinforced concrete sewer	17.00	20.00	35.00
962 lin.ft. 4 ft. 3 in. reinforced concrete sewer	17.00	20.00	35.00
929 lin.ft. 4-ft. reinforced concrete sewer	17.00	18.00	30.00
809 lin.ft. 3 ft. 9 in. plain concrete sewer	18.00	18.00	25.00
564 lin.ft. 3 ft. plain concrete sewer	13.00	15.00	15.00
874 lin.ft. 18-in. vitrified pipe sewer	4.10	6.00	4.23
243 lin.ft. 15-in. vitrified pipe sewer	3.30	4.00	3.90
732 lin.ft. 12-in. vitrified pipe sewer	3.00	3.50	3.26
61 manholes, complete	100.00	125.00	2.25
57 basin manholes, complete	110.00	200.00	1.60
88 inlets, complete	60.00	135.00	80.00
1,570 lin.ft. 12-in. vitrified pipe basin connections	2.00	2.50	2.42
1,460 lin.ft. 10-in. vitrified pipe basin connections	2.00	2.30	1.15
489 six-inch spurs (24 in. long) on concrete sewers	1.00	.50	.65
2 eight-inch spurs (24 in. long) on concrete sewers	1.00	1.00	.65
64 six-inch spurs on 18-in. vitrified pipe sewers	3.50	6.00	.01
20 six-inch spurs on 15-in. vitrified pipe sewers	2.50	5.00	.01
56 six-inch. spurs on 12-in. vitrified pipe sewers	2.00	3.50	.01
3,696 lin.ft. 6-in. vitrified pipe house connection drains	1.00	1.50	2.75
32 lin.ft. 8-in. vitrified pipe house connection drains	1.00	2.00	2.91
1 junction chamber at Hudson St. and Beaufort Ave., complete (lump sum)	600.00	810.00	1,000.00
1 junction chamber at Rockaway Blvd. and Atlantic Ave. (north side), complete (lump sum)	2,500.00	4,000.00	3,000.00
1 junction chamber at Snediker Ave. and Atlantic Ave. (north side), complete (lump sum)	600.00	870.00	1,000.00
1 junction chamber at Lott Ave. and Atlantic Ave. (north side), complete (lump sum)	600.00	700.00	700.00
1 junction chamber at Lott Ave. and Pratt Pl., complete (lump sum)	600.00	800.00	800.00
1 junction chamber at Elderts Lane and Pratt Pl., complete (lump sum)	600.00	650.00	800.00
20 cu.yd. Class "A" concrete (exclusive of concrete shown on plan)	12.00	20.00	18.00
2,000 lb. reinforcement steel (exclusive of steel shown on plan)	..05	.10	08
20,000 ft.b.m. timber for sheeting and bracing	.01	30.00	65.00
10 cu.yd. rock excavation	.01	12.00	01
20,000 cu.yd. of displaced material for fill for sewer embankment.	.01	.40	50
1,500 cu.yd. excavation for sewer embankment	.01	.40	1.00
Extended totals	$209,068*	$293,630†	$314,757

* Type "A," Sewer Department Standard.
† Type "B," (Precast Type "B" on first 7 items).
‡ Bid on "A" and "B."

Bids were received by M. E. Connolly, president of Queens Boro., Jan. 15, constructing sewers and appurtenances in Woodland Ave. from Huntington St. to Beaufort Aves.; Beaufort Ave. from Boyd to Hatch Aves.; Walker Ave. from Beaufort to Woodhaven Aves., Woodhaven Ave. from Walker Ave. to Fulton St., 4th Ward, Queens Boro., from (A) A. Paino, 2622 Bath Ave., Brooklyn; (B) Ajax Drainage Contg. Corp., 60 Herkimer St., Brooklyn; (C) E. W. Fitzpatrick, 244 Jackson Ave. The unit bids were as follows:

	A	B	C
1,151 lin.ft. 6 ft. 3 in. reinforced concrete sewer	$50.00	$48.00	$53.45
1,017 lin.ft. 5 ft. 9 in. reinforced concrete sewer	40.00	50.00	43.10
1630 lin.ft. 5 ft. 3 in. reinforced concrete sewer	40.00	40.00	47.50
427 lin.ft. 2 ft. 3 in. plain concrete sewer	10.00	10.00	9.10
791 lin.ft. 12-in. vitrified pipe sewer	4.00	3.50	4.45
39 manholes, complete	100.00	90.00	90.00
45 basin manholes, complete	100.00	125.00	110.00
63 inlets, complete	72.00	40.00	75.00
1,125 lin.ft. 12-in. vitrified pipe basin connections	.01	1.50	3.00
945 lin.ft. 10-in. vitrified pipe basin connections	.01	.75	2.00
233 6-in. spurs (24-in. long) on concrete sewers	.01	.50	.50
58 6-in. spurs on 12-in. vitrified pipe sewers	.01	1.50	2.00
2 8-in. spurs (24 in. long) on concrete sewers	.01	.50	3.00
2,290 lin.ft. 6-in. vitrified pipe house connection drains	1.00	1.50	1.50
32 lin.ft. 8-in. vitrified pipe house connection drains	1.00	1.50	2.00
30 vertical feet risers for house connection drains	5.00	3.00	2.00
1 junction chamber at Woodland and Beaufort Aves. (lump sum)	1,000.00	1,200.00	1,100.00
1 junction chamber at Beaufort and Walker Aves. (lump sum)	1,000.00	1,100.00	900.00
10 cu.yd. Class "A" concrete (exclusive of concrete shown on plan)	.01	15.00	16.00
500 lb. reinforcing steel (exclusive of steel shown on plan)	.01	.10	.08
5,000 ft.b.m. timber for sheeting and bracing	100.00	80.00	80.00
10 cu.yd. rock excavation	.01	.01	.01
Extended totals	$188,800*	$199,065†	$212,098‡

* Type "A," Sewer Department Standard.
† Type "B" (Precast Type "B" on first four items).
‡ Bid on "A" and "B".

Bids were received by M. E. Connolly, president of Queens Boro., Jan. 15, constructing sewers and appurtenances in Hobson Ave. from Newtown Creek to Halle Ave.; Hobson Ave. from Halle to Jones Aves.; Jones Ave. from Clinton Ave. to Laurel Hill Blvd.; Laurel Hill Blvd. from Jones to Borden Aves.; Montgomery Ave. from Columbine to Jones Aves.; Congress Ave. from Laurel Hill Blvd. to Montgomery Ave.; Townsend Ave. from Laurel Hill Blvd. to Hobson Aves.; Waters Ave. from Hobson to Clifton Aves.; Joy Ave. from Montgomery to Clifton Aves.; Columbine Ave. from Hobson to Clifton Aves.; Clifton Ave. from Water to Columbine Aves. with temporary connection to sewer in Columbine Ave., 2nd Ward, Queens Boro., from (A) Green Contg. Co., 734 Verona Ave., Flushing, (awarded contract); (B) F. L. Paino, 67 Bay 47th St., Brooklyn; (C) Peace Bros., 20 Main St., Flushing. The unit bids were as follows:

	A	B	C
855 lin.ft. 5 ft. 6 in. reinforced concrete sewer	$66.00	$80.00	$80.00
1,566 lin.ft. 3 ft. 9 in. plain concrete sewer	26.00	35.00	33.00
1,097 lin.ft. 3 ft. 3 in. plain concrete sewer	21.00	29.00	30.00
396 lin.ft. 18-in. vitrified pipe sewer	5.90	8.00	7.00
1,533 lin.ft. 15-in. vitrified pipe sewer	5.00	6.00	5.50
2,440 lin.ft. 12-in. vitrified pipe sewer	4.50	5.00	4.50
56 manholes, complete	150.00	100.00	125.00
35 basin manholes, complete	130.00	100.00	125.00
46 inlets, complete	60.00	50.00	75.00
960 lin.ft. 12-in. vitrified pipe basin connections	2.00	2.00	4.00
710 lin.ft. 10-in. vitrified pipe basin connections	1.50	2.00	2.00
100 six-inch spurs (24 in. long) on concrete sewers	2.00	1.00	1.00
17 six-inch spurs on 18-in. vitrified pipe sewers	2.40	10.00	3.00
81 six-inch spurs on 15-in. vitrified pipe sewers	1.75	10.00	2.00
158 six-inch spurs on 12-in. vitrified pipe sewers	1.20	10.00	2.00
1,854 lin.ft. 6-in. vitrified pipe house connection drains	1.10	2.00	1.75
110 vertical feet risers for house connections	1.00	2.00	2.00
1 drop chamber at Hobson and Halle Aves. (lump sum)	2,500.00	2,000.00	3,000.00
1 drop chamber at Hobson and Cassel Aves (lump sum)	2,500.00	2,000.00	1,500.00
1 drop chamber at Hobson and Columbine Aves. (lump sum)	2,500.00	2,000.00	1,810.00
1 junction chamber at Hobson and Jones Aves. (lump sum)	600.00	2,000.00	1,300.00
1 chamber at Laurel Hill Blvd. and Jones Ave. (lump sum)	600.00	1,000.00	700.00
1 chamber at Laurel Hill Blvd. north of Congress Ave. (lump sum)	600.00	1,000.00	800.00
15,400 lin.ft. piles	.30	.15	.50
17,000 ft.b.m. timber for foundation	70.00	60.00	60.00
2,100 lb. structural steel (bolts, nuts, washers, etc.)	.20	.10	.10
25 cu.yd. Class "A" concrete (exclusive of concrete shown on plan)	11.00	18.00	18.00
1,000 lb. reinforcement steel (exclusive of steel shown on plan)	.09	.10	.10
60,000 ft.b.m. timber for sheeting and bracing	55.00	60.00	60.00
10 cu.yd. rock excavation	12.00	15.00	15.00
Extended totals	$181,896*	$218,757†	$220,930‡

* Type "A," Sewer Department Standard.
† Type "B" (Precast Type "B" on first 3 items).
‡ Bid on "A" and "B."

Stadium—New York, N. Y.—Dept. Parks, Bronx Boro., had plans prepared by A. G. Waldreaon, archt., building reinforced-concrete stadium on 241st St. and Bway., Bronx Boro. About $1,000,000.

Creek Improvement—Watkins, N. Y.—State Legislature, Albany, petitioned to appropriate $15,000 to improve channel and banks of Glen or Mill Creek here.

Tanks—Baltimore, Md.—(Canton) Standard Oil Co., Pier 2, Pratt St., having plans prepared building 3 or more oil storage tanks here. Cost between $75,000 and $100,000. T. Goodwillie, genl. mgr.

Dock and Warehouse—Fayetteville, N. C.—City receives bids in spring, building on Cape Fear River. About $75,000. J. A. Strange, city engr.

Floating Dry Dock—Green Bay, Wis.—C. Hartman, 114 South Oakland Ave., receives bids about Feb. 21, building rein.-con. floating dry dock for tugs and smaller vessels. About $400,000. F. Early, Chicago, engr.

Lakeshore Protection—Kenosha, Wis.—Comrs. Kenosha Co. (Kenosha) and Racine Co. (Racine) plan to build lakeshore protection. About $125,000. Work involves 4100 ft. breakwater, 2 rows tight piling with stone filling and 16 ft. piles. P. Hurtgen, Kenosha, engr.

Zoo, etc.—St. Louis, Mo.—Zoological Bd., Park Dept. plans to build concrete bear and wolf pits, animal hospital and bakery and bridge over Wells Drive in Forest Park. About $80,000. N. Cunliff, comr.

Pavilion—Denver, Colo.—Natl. Jewish Hospital Assn., East Colfax and Jackson Sts., plans to build pavilion for tubercular children, on East Colfax and Fox Sts. About $50,000. S. Simon, supt.

Harbor Improvements—Grays Harbor, Wash.—City of Aberdeen plans to improve Grays Harbor port facilities, both inner harbor and outer bar. Plans include dredging bar to provide 30-40 ft. of water, improvement of inner harbor, dredge for bar and inner harbor, and public dock. Grays Harbor Port Comn. has about $100,000 available for inner harbor improvements; Federal Government will appropriate $95,000 for bar improvement and $750,000 for dredge for outer harbor.

Stadium—Portland, Ore.—Oregon Stock Raisers having preliminary plans prepared by L. I. Thompson, archt., 91 North 10th St. About $250,000.

Pier—Vancouver, B. C.—Canadian Pacific Ry., Winnipeg, Man., having plans prepared for 100 ft. concrete pier here, 1000 ft. long and 300 ft. wide, with fill of approximately 500,000 cu.yd. About $1,500,000. J. G. Sullivan, ch. engr.

Harbor Improvements—Goderich, Ont.—Dominion Government, Ottawa, voted $50,000 bonds for improving harbor here.

Swimming Pools—Ottawa, Ont.—Bd. Control recommended that City Council engage architect to prepare plans and submit estimate of cost of building 2 swimming pools, one at King Edward Ave., and York St., and other at Plouffe Park. A. F. McCallum, City Hall, engr.

Subway—Regina, Sask.—City having plans prepared for building subway on Hamilton St. About $70,000.

Incinerator—Saskatoon, Sask.—City plans to build. About $30,000.

BIDS DESIRED

Asphalt, etc., Brooklyn, N. Y.—Until Feb. 11, by E. Riegelmann, boro. pres., furnishing and delivering 240,000 gal. refined asphalt in liquid form, 50 tons refined asphalt in containing packages, 50,000 asphalt paving blocks, 2½ in. deep, 40,000 grade 1 granite paving blocks, 40,000 wood paving blocks, 6000 bbl. Portland cement, 1500 tons limestone or other suitable inorganic dust, 10,000 sq.ft. bluestone flagging, 2 in. thick, 800 cu.yd. paving gravel, 250 tons paving pitch, 7000 cu.yd. asphalt sand, 4000 cu.yd. paving sand, 3000 cu.yd. binder stone, 3000 cu.yd. 1½ in. broken stone for concrete, etc.

Road Machinery—Alma, Wis.—Until Feb. 12, by city for 1 tractor, 15-30 hp., one 8 ft. grader, 2 horse graders, drag scraper, road drags and road plows.

Dam—Los Angeles, Cal—Until Feb. 19 (change of date) by Bd. Supervs., Los Angeles Co., building concrete masonry arch dam, 120 ft. high, northwest of Pasadena, involving 6000 yd. rock excav., 5000 yd. earth excav., 33,000 yd. concrete with stones embedded, 300 ft. concrete outlet tunnel, 120 ft. concrete spillway, concrete arches supporting roadway on top, etc. for county flood control districts. About $300,000. J. W. Reagan, ch. engr. Noted Jan. 9.

Crushed Rock—Visalia, Cal.—Until Feb. 21, by Bd. Supervs. Tulare Co., furnishing crushed rock for Springville Worth Rd.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Electric Generating Capacity—Brooklyn, N. Y.—E. Riegelman, boro. pres., let contract reserving and furnishing electric generating capacity, etc., during year, to Edison Electric & Illuminating Co., Pearl St. About $47,400.

★Electric Generating Capacity—New York, N. Y.—F. L. Dowling, boro. pres., let contract reserving and furnishing electric generating capacity for use of high pressure fire service pumping station for year, to New York Edison Co., 130 East 15th St. About $48,600.

★Coal Bin, etc.—Buffalo, N. Y.—See "Industrial Works."

★Cement, Sand, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro., let contract furnishing and delivering 750 tons asphaltic cement, to Warner Quinlan Asphalt Co., 79 Wall St., $1686; 9500 cu.yd. sand grits, to Amer. Bldg. & Material Co., Kingsbridge, $13,704; 2000 bags binder stone, to A. Tompkins, $4700; 2000 bags Portland cement, to J. A. McCarty & Bros., 551 Exterior St., $1750; 4500 cu. yd. ½ in. broken trap rock stone and 2000 cu.yd. broken trap rock screenings, to New York Trap Rock Co., 101 Park Ave., $17,420; 250,000 gal. asphaltic road oil, to Atlantic Refinery Co., 3144 Passyunk Ave., Phila., Pa., $18,500. Noted Jan. 9.

Levees—Blythe, Cal.—Palo Verde Joint Levee Dist. let contract (1) building 4 mi. earth levee requiring dragline dredger equipment and involving about 180,000 cu.yd. dredging, to P. B. Engh, $.20 per cu.yd.; (2) similar work and same yardage as (1) 6 mi. southeast of here, to Palo Verde Mutual Water Co., $.20 per cu.yd.; (3) building cut-off canal across Palo Verde bend, 2½ mi. long, involving 40,000 cu.yd. dredging, requiring teams, fresnos and scrapers or dredger or excavator, to J. C. Donovan, 780 Lyon St., Los Angeles, $.55 per cu.yd.

★Foundation—Halifax, N. S.,—Navy League of Canada let contract building foundation for home here, to Foundation Grading Co., 85 Almon St. About $13,000.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Feb. 18 & 19.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, February 18, 1919, at which place and hour they will be publicly opened and read, for the improvement of the State canals as authorized by Chapter 147 of the Laws of 1903 and amendatory laws, and Chapter 391 of the Laws of 1909; and for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, as follows:

TERMINAL CONTRACT NO. 57

For constructing certain parts of an approach from Court Street and South Avenue to the Barge canal terminal at Rochester.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 69

For protecting the shore of Erie Basin between Lake Street and Slip No. 1, at Buffalo.

Contract plans, sheets 1 and 2.

TERMINAL CONTRACT NO. 107

For installing electric wiring, lighting, power and battery charging equipment for the canal terminal at Erie Basin, Buffalo.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 223

For constructing a Barge canal terminal freight-shed at Greenpoint, Brooklyn, New York City.

Contract plans, sheets 1 to 11 inclusive.

And until twelve o'clock noon of Wednesday, February 19, 1919, for the following pieces of work:

CONTRACT NO. 200

Erie Canal—Sections 9 and 10

For driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

CONTRACT NO. 201

Erie Canal—Section 9

For completing the concrete prism lining at Cartersville and constructing a stream entrance near Knapp's bridge.

Sheets 1 to 3 inclusive.

CONTRACT Q

Cayuga and Seneca Canal—Section 1

For constructing pile dolphins for aids to navigation on Cayuga and Seneca lakes.

Sheets 1 to 5 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at the office of the State Engineer and Surveyor.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Price, $3.60 an inch—Copy can be received until Tuesday, 10 a.m., for issue out Thursday.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20%) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

OFFICIAL PROPOSALS

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.
January 15, 1919.

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed "Proposal for Water Main Under Hackensack and Passaic Rivers," directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

Dated: City Clerk's Office,
FRANK A. DOLAN, City Clerk.
Jersey City, January 24, 1919.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

Proposals for Jetty Work—U. S. Engineer Office, Dallas, Tex.—Sealed proposals will be received here until 11 a. m., Feb. 25, 1919, and then opened, for jetty work at Sabine Pass, Tex. Further information on application.

Waterworks (Continued)

Mich., Detroit—Water. Bd.. submitted plans to City Council for completing filtration plant, cost $5,326,000; building and equipping boiler house, $439,600; building Booster station to increase volume of present intake and supply filtration plant, $482,000; installing 23 mi. main pipe lines, $1,706,000 and 130 mi. distributing lines in various parts of city, $1,544,000. G. H. Fenkell, ch. engr.

Mich., Detroit—City soon lets contract furnishing 2000 tons 48 in. Class "C" A. W. W. A. c. i. bell and spigot pipe. G. H. Fenkell, ch. engr.

Minn., Tyler—City voted $20,000 bonds to rebuild water and light plants.

Kan., Hutchinson—City plans to build 2 cement water cranes and improve waterworks system.

Kan., Junction City—City plans to extend water system and install 2 high pressure hydrants. T. Dever, city engr.

Kan., Topeka—State Legislature, appropriated $10,000 to improve water system, also steam heating and electric light plants at State Hospital here.

N. D., Minot—City soon receives bids building 3,000,000 gal. concrete reservoir. About $116,000. E. J. Thomas, city engr. Noted Oct. 31.

Tex., Mission—See "Sewers."

Okla., Ada—City defeated $85,000 bonds for improvements to water-works. W. B. Jones, clk. Noted Jan. 2.

Okla., Walters—City election Feb. 14 to vote on $45,000 bonds to extend water, sewer and light systems. A. H. Japp, city atty.

Colo., Denver—City plans to build 7000 ft. 16 in. c. i. water main on 16th Ave. from Bellaire St. to Monaco St. Pkway, cost $53,000; repair 5500 ft. 40 in. wood stave pipe between Kasstler Station and Willard filters, $15,000. B. Lowther, ch. engr., water system.

Ont., Ottawa—Bd. Control receives bids about Mar. 15 for purchasing and installing water meters. About $40,000. A. F. McCallum, Ottawa, engr.

BIDS DESIRED

N. Y., New York—Until Feb. 20, by N. J. Hayes, comr. water supply, gas and electricity, furnishing, delivering, unloading, stacking and storing c. i. valve box castings, valves and hydrants.

N. J., Bayonne—Until Feb. 21, by Bd. Comrs., furnishing and laying about 3100 ft. new 30 in. water pipe upon pile and timber foundation on east and west banks of Hackensack River, double 30 in. c.i. pipe with flexible joints in trench to be dredged under Hackensack River, valves, connections, etc., taking up and relaying 330 ft. 30 in. c.i. water pipe now located on old right of way on east and west sides of Hackensack River and thoroughly cleaning and repainting same inside and out and removing and relaying same on new right of way parallel with new 30 in. line, furnishing and laying 900 ft. 18 in. c.i. water pipe with valves and appurtenances, 760 ft. 12 in. and 700 ft. 4 in. c.i. water pipe to be of Class B. Amer. Water Works Standard. Project involves furnishing and laying 950 tons 30 in. flexible joint c.i. pipe, 520 tons 30 in. c.i. pipe, 3300 ft. 30 in. c.i. pipe, 70 tons 18 in. c.i. pipe, 30 tons 12 in. c.i. pipe, 8 tons 4 in. c.i. pipe, 1700 piles, dredging 100,000 cu.yd. in Hackensack River, placing 1000 cu.yd. concrete, furnishing valves, hydrants, meters, etc. M. R. Sherrerd, 20 Clinton St., Newark. consult. engr.; advertised in this issue.

Md., Brunswick—Until Feb. 19, by E. L. Harrison, mayor, furnishing and laying 26,000 ft. 4-10 in. wood stave pipe and 3-10 in. c.i. pipe, including construction of river crossing and appurtenant work. Norton, Bird & Whitman, 1320 Munsey Bldg., Baltimore, engrs.; advertised in this issue.

Okla., Wewoka—Until Feb. 19, by city, building extension to water-works system as follows, (1) furnishing, transporting, laying and backfilling complete 15,000 lin.ft. Class A, B and C c.i. pipe; (2) furnishing, trenching, laying, backfilling complete 500 lin.ft. No. 2 vitr. sewer pipe, 2 manholes, 50 cu.yd. rock excav. in sewer trench; (3) furnishing, transporting and setting in place two 10 in. hub end valves and boxes; (4) rein.-con. coagulating basins, agitator and filter complete including excav.; (5) 1 filter house complete above foundations; (6) remodeling clearwell; (7) filter equipment complete, capacity 300 gallons per minute; (8) spring creek dam complete, 25,000 cu. yd. compacted earth fill, 1500 sq.yd. 4 in. rein.-con. pavement, 800 sq.yd. 12 in. stone riprap pavement, 180 cu.yd. rein.-con. corewall, (9) 3000 sq.ft. wood sheet piling; 1 rein.-con. spillway, complete including flume through dam, control valves, screens and piping; (10) clearing reservoir site of all timber; (11) alternate bids as per item (1) using 10 in. wood pipe for 50 ft. head and Class No. 100 universal pipe. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs.

Ont., Ottawa—Until Feb. 20, by Bd. Control laying 3500 ft. 3-6 in. c.i. pipe, 13,100 ft. 6-24 in. vitr. clay pipe, thirty-three 3-12 in. stop valves, quarter bends and junctions, etc. A. F. McCallum. City Hall, engr.

Ont., Pembroke—Until Mar. 7, by town, for furnishing and installing 1 water works pumping unit comprising turbine pump of 2000 gal. capacity against 330 ft. head, and steam turbine or gasoline engine, direct connected to pump. W. J. Moore, town engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Minn., Hallock—Village let contract building 60,000 gal. steel water tank, to Des Moines Bridge & Iron Co., Tuttle St. between 9th and 10th Sts., Des Moines, Ia., $6500. Noted Jan. 2.

Sewers

PROPOSED WORK

Conn., Bridgeport—Sewer Bd. receives bids in spring building storm and sanitary sewers in various streets, cost $100,000; storm sewer in Black Rock Sect., $71,800. J. A. McElroy, city engr.

Conn., Bridgeport—City receives bids in spring building sanitary sewer in Wood and Hillside Aves., cost $15,500; Island Brook Ave. and River St., $25,000; combined sewer in East Washington Ave., $6300; Spring St., $25,000; storm sewer in Railroad Court extension, $18,000 and sanitary intercepting sewer in Bay St., $17,100. J. A. McElroy, city engr.

N. Y., Utica—City plans to build sewers in various streets. About $30,000. J. Kimper, city engr.

O., Niles—City plans to build sewers in East Side Sewer Dist. No. 4. H. Turner, city engr.

O., Warren—City plans to build sewers in Northwest Dist. About $20,000. C. H. Lawrence, city engr.

Mich., River Rouge—Ford Motor Co., Highland Park, plans to build 6 mi. sanitary sewer system. Work involves 16 and 54 in. concrete crocks, also 8 and 12 in. vitr. crocks. Bids will soon be received for material; installation of sewers to be done by day labor. S. D. Bullock, constr. supt.

Wis., Kenosha—City plans to build sewer outlet. About $10,000.

Tex., Mission—City plans to build sewerage and waterworks systems. About $25,000.

Okla., Duncan—Bd. Pub. Wks. rejected bids building sewage disposal plant. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs. Noted Sept. 30.

Ore., Portland—City soon lets contract building sewers in Harris St. and Ellis Ave. O. L. Aurgaard, city engr. Noted Feb. 6.

Cal., Los Angeles—H. C. Hansen, city engr., recommended that $78,826 be appropriated to replace 240 culverts in paved streets with concrete structures 1-5 ft. wide.

Cal., Los Angeles—Bd. Pub. Wks. receives bids in March building cement or vitr. pipe sewers, manholes, flush tanks, etc., in Wilmington Harbor Dist. About $160,000. W. T. Knowlton, sewer engr. Noted Oct. 24.

Cal., San Bernardino—City soon receives bids building 6 and 8 in. sewers in D St. from 19th St. to Highland Ave.; F St. from 13th to 14th Sts. and 14th St. from D to E Sts. C. E. Johnson, city engr.

BIDS DESIRED

O., Cleveland—Until Feb. 20, by city, building 2920 ft. 12-24 in. vitr. sewer in Corsk[illegible], Damon and Grovewood Aves.; 2600 ft. 12-24 in. vitr. sewers in East 140th, 157th and 160th Sts.; 5050 ft. 12-24 in. vitr. sewer in Hale, Huntmere, Parkgrove and Sylvia Aves. R. Hoffman, city engr. Noted Jan. 30.

O., Columbus—Until Feb. 25, by G. E. Borden, dir. pub. serv., building following sewers: 12,542 ft. Franklin Park extension; ⅝ mi. Clintonville main sewer, Walhalla Branch; 750 ft. in alley south of Sullivant Ave. from Wrex Lane Ave. to Williamson St.; ¼ mi. in alley west of Woodland Ave. from Maryland to Emerald Aves.; 1¼ mi. in Grace St.; 1⅜ mi. in first alley north of Mound St. and 14 other streets and alleys; ¾ mi. in alley north of Howard Ave. to Rosethorn Ave.; ⅝ mi. 3rd. Ave. relief sewer, Mt. Pleasant Branch. H. Maetzel, city engr.

Minn., St. Paul—Until Feb. 17, by Purch. Dept., building sewer in Syndicate Ave. from Stanford Ave. to St. Clair St., and Noswell Ave., from Keston Ave. to St. Anthony Park. Work involves three manholes, 483 lin.ft. 12 in. and 209 lin.ft. 9 in. concrete pipe. O. Claussen, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Long Island City—M. Connolly, pres. Queens Boro., let contract building sewers in 80th St. from Liberty to Atlantic Aves., Atlantic Ave. from 80th to 76th Sts., 76th St. from Atlantic to 93rd Aves., 93rd Ave. from 76th to Elderts Lane, Elderts Lane from 93rd to Jamaica Aves., 78th St. from Atlantic to Jamaica Aves., and Jamaica Ave. from Elderts Lane to the crown. Queens and Brooklyn Boroughs, to H. J. Mullen Contg. Co., Inc., Fulton St., Brooklyn, $209,068. Noted Jan. 23.

N. Y., Syracuse—Intercepting Sewer Bd. received bids Feb. 6, building Div. 3, 4 and 5 of Onondaga Creek improvement and main intercepting sewer, from J. Young, Bastable Blk., $543,327; I. M. Luddington Sons, Power Bldg., Rochester, $543,402. Plans include 2 mi. creek improvement and 1.3 mi. intercepting sewer and involves 111,500 cu.yd. excav. and 18,000 cu.yd. concrete. Noted Jan. 30.

★N. D., Forman—Sargent Co. let contract laying drains, to Great Northern Bridge Co., Wahpeton. About $15,000.

Bridges

PROPOSED WORK

Conn., Bridgeport—City receives bids in spring building concrete culvert on Arcadia St., cost $5500; Capitol Ave., $7500; Cleveland Ave., $5000. J. A. McElroy, city engr.

Conn., New Haven—J. J. Lane, dir. pub. wks., City Hall, receives bids in spring repairing and building Neck Bridge, on State St., cost $20,000; Middletown Ave. Bridge, $80,000; Barnesville Bridge, $60,000; Washington Ave. Bridge, $60,000; Mill River Bridge, Grand Ave., $70,000; Whalley Ave. Bridge, $50,000; West River tide gates on Congress Ave., $40,000 and Orange St. Bridge over Mill River, $40,000. F. L. Ford, city engr.

N. J., Lodi—Bd. Freeholders Bergen Co., Hackensack, soon receives bids building steel and concrete bridge here. About $20,000.

Fla., Arcadia—See "Streets & Roads."

O., Columbus—City and Pennsylvania R.R. soon receive bids building concrete viaduct over Pennsylvania tracks on Cleveland Ave. About $300,000. Braun, Fleming, Knollman & Prior, 233 South High St., archts. Cost to be borne by city and railroad.

Cal., Merced—See "Streets & Roads."

BIDS DESIRED

W. Va., Buckhannon—Until Mar. 23, by Upshur Co. building rein.-con. arch bridge over Buckhannon River at Ours Mill. Noted Oct. 3.

Tenn., Sneedville—Until Feb. 25, by Comrs. Hancock Co. Pike Rd., building 160 ft. single span steel bridge, 12 ft. wide, over Powells River at mouth of Mulberry Creek. H. B. Jarnagin, chn.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Pa., New Castle—Lawrence Co. let contract building 1 through span steel bridge, 218 ft. long, 38 ft. wide, over Neshannock Creek on South Mill St., to F. S. Wilson, Kittanning. About $113,800. Noted Jan. 9.

★O., Lisbon—State Highway Comn., Columbus, let contract building bridge on Sect. "E" of Cleveland-East Liverpool Rd., Columbiana Co., to N. R. Porterfield, Yugstown. $20,859. Noted Feb. 6 under "Streets and Roads."

★Okla., El Reno—Canadian Co. let contract building 510 ft. rein.-con. bridge, cost, $25,400 and 160 ft. rein.-con. bridge, cost, $7300, to Kansas City Bridge Co., Orear-Leslie Bldg., Kansas City, Mo.

Bridges (Continued)

★Nev., Fallon—State Highway Comn., State Printing Office Bldg., Carson City, let contract building 87 ft. rein.-con. girder bridge over Truckee-Carson Canal near here, involving 175 cu.yd. excav., 504 lin.ft. concrete piles, 126 cu.yd. Class "A" concrete and 202 lin.ft. iron pipe railing and 162 ft. rein.-con. trestle over Carson River, near here, involving 20 cu.yd. excav., 824 lin.ft. rein.-con. piles, 52.5 cu.yd. Class "A" precast concrete, 134.2 cu.yd. Class "A" concrete and 324 lin.ft. iron pipe railing, to Parrott & Thompson, 824 South 4th St., W., Salt Lake City, Utah. About $6483 and $11,448 respectively. Noted Jan 9

★Nev., Winneucca—State Highway Comn., State Printing Office Bldg., Carson City, let contract building 137 ft. rein.-con. trestle over Humbolt River, to Parrott & Thompson, 824 South 4th St., W., Salt Lake City, Utah. About $10,883. Work involves 20 cy.yd. excav., 1000 lin.ft. concrete piles, 46.7 cu.yd. Class "A" precast concrete, 107 cu.yd. Class "A" concrete, 288 ft. iron pipe railing, etc. Noted Jan. 9.

★Ore., Roseburg—Douglas Co. will build 140 ft. approach to north side of Winchester bridge. Plans include lowering grade on county road from river to Kolhagen ranch. Work will be done by day labor under supervision of M. Germond, roadmaster.

Structural Steel

PRICES AND CONTRACTS AWARDED

(★Indicate award of contract)

★Pa., New Castle—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. Y., New York—See "Industrial Works."

N. J., Hoboken—See "Miscellaneous."

N. J., Lodi—See "Bridges."

Cal., Quincy—See "Buildings."

BIDS DESIRED

N. Y., Buffalo—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Nev., Fallon—See "Bridges."

★Nev., Winneucca—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Medford (Boston P. O.)—City plans to build Chardon Rd., Evans and Cove Sts., Golden Ave. and Jackson Rd. bituminous macadam, 40 ft. wide. About $75,000. F. R. Charnock, city engr.

N. Y., Utica—City plans to pave and resurface various streets. About $200,000. J. Kimper, city engr.

N. J., Belvidere—Bd. Freeholders Warren Co. soon receives bids improving Sect. 3 of Hope-Buttzville Rd.

N. J., Hackensack—Bd. Freeholders Bergen Co., soon receives bids paving Willow Ave., rein.-con., cost, $80,000; Paterson Plank Rd. from Hackensack bridge to Carlstadt, granite block, $120,000; Bergen Turnpike, $120,000.

N. J., Jersey City—Hudson Co. Blvd. Comrs. receive bids in March resurfacing Hudson Co. Blvd., between Central R.R. tracks and Communipaw Ave., bituminous concrete surface on stones or macadam foundation. About $100,000. T. J. Wasser, co. engr. Noted Sept. 26.

N. J. Linden—City soon receives bids improving Woods Ave. About $15,000.

N. J., Paterson—Bd. Freeholders Passaic Co. soon receives bids building Greenwood Lake Rd., Barclay St. Hill, Van Houten St.; also Main Rd. from Little Falls Twp. to Paterson city line. G. Ferguson, Paterson, engr.

N. J., Weehawken—Hudson Co. Blvd. Comn., Jersey City, will receive bids in February removing portion of floor system of roadway and sidewalk of Park Ave. bridge over New Jersey Junction and Erie R.R. tracks. About $10,000.

Pa., Johnstown—Superv. Upper Yoder Twp., will soon receive new bids improving Mill Creek Rd., involving 36,700 cu.yd. excav., 19,960 cu yd. fill and 62,611 sq.yd. pavement. Former bids rejected. Noted Dec. 19.

Md., Baltimore—Bd. Awards soon receives bids resurfacing and curbing 3 blocks Boone St from North Ave. to 22nd St., 3 blocks Homewood Ave. from North Ave. to 22nd St., 1 block Oakhill Ave. from North Ave. to 20th St., 1 block Cecil Ave. from North Ave. to 20th St., 2 blocks Kennedy Ave. from North Ave. to 22nd St., 9 blocks 20th St. from St. Paul to Kennedy Ave., 9 blocks 21st St. from Oak to Homewood Aves., 5 blocks Guilford Ave. from North Ave. to 24th St., 3 blocks Oak St. from 21st to 24th St., 2 blocks Park Ave. from North Ave. to Reservoir St., 2 blocks Park Ave. from Newington Ave. to Lake Dr., 2 blocks Newington Ave. from Brookfield to Park Aves., 3 blocks Brookfield Ave. from Callow Ave. to Whitelock St., 2 blocks Bolton St. from North Ave. to Reservoir St., 3 blocks Lennox St. from Brookfield to Mt. Royal Aves., 1 block Ducatel St. from Linden to Brookfield Aves., 1 block Reservoir St. from Brookfield to Callow Aves., sheet asphalt over cobbles; 6 blocks Maryland Ave. from North Ave. to 25th St., redressed granite blocks on concrete base, 66 ft. wide, 40 ft. from curb to curb; also tearing out cobbles and replacing them with sheet asphalt, in McCulloh St. from North Ave. to Cloverdale Rd., Powers St. from Chestnut to Elm Aves.; 23rd St. from St. Paul to Barclay Sts. and from Greenmount Ave. to Starr Lane. About $225,000. J. M. McCummings, engr. com. for opening streets.

Md., Cumberland—City plans to pave various streets. About $35,000 available for project. R. L. Rizer, city engr.

Va., Chincoteague Island—Chincoteague Toll Rd. & Bridge Co. plans to build 12,000 ft. road on marsh meadow also connecting bridges. About $100,000. L. Jester, secy. bd. dirs.

N. C., Danbury—Stokes Co., Peters Creek Twp., voted $30,000 bonds to improve roads.

Fla., Arcadia—De Soto Co., McCall Special Road & Bridge Dist., plans to issue $35,000 bonds to build roads and bridges. A. L. Durant, clk.

Fla., Jacksonville—Comrs. Duval Co. soon let contract building 1 mi. John Anderson Highway, brick on sand base. Ellis Curtis and Kooker, Realty Bldg., engrs.

Fla., Jacksonville—Comrs. Duval Co. soon let contract laying 5000 sq. yd. brick paving and 10,000 lin. ft. concrete curbing on St. Augustine Rd. from end of brick road to Bayard Co. Noted May 23.

Ala., Tuscumbia—City plans to build 2 to 2½ mi. road, 50 ft. wide, concrete or asphalt. H. G. Ferree, engr.

Miss., Clarksdale—Bd. Supervs. Coahoma Co., receives bids about Mar. 1 grading and surfacing 22 mi. concrete roads, 9 ft. wide with earth shoulders. L. W. Mashburn, Clarksdale, engr.

Miss., Greenville—Washington Co. Highway Commission soon receives bids building about 100 mi. concrete and hard surfaced roads. W. E. Wilson, asst. engr.

La., New Iberia—Iberia Parish plans election Feb. 27 to vote on $60,000 bonds to build roads in 2nd Ward; $30,000 for roads 3rd Ward, and $47,000 for roads 5th Ward.

La., New Iberia—Rd. Dist. No. 6 Iberia Parish plans to issue $35,000 bonds for building roads; Dist. No. 4 will issue $60,000 bonds for same purpose. A. A. Theriot, pres. police jury.

O., Cleveland—Comrs. Cuyahoga Co. receive bids in spring paving 9 mi. McCracken Rd. from Bedford to Lee Rd. 16-25 ft. wide, water bound macadam, cost $31,000; grading, draining and paving 1.18 mi. Lee Rd. from Miles Ave. to East View Village, 16-30 ft. wide, $70,000. W. A. Stinchcomb, co. engr.

O., East Liverpool—City plans to issue $50,000 bonds to repave 4th 5th and 6th Sts., also St. Clair Ave. and Bway. J. E. Kelly, city engr.

Ind., Terra Haute—Comrs. Vigo Co. plan to grade and pave ½ mi. College Ave., 20 ft. wide, monolithic brick, on 4 in. concrete base. R. E. Gibbons, co. engr.

Mich., Detroit—Bd. Educ. plans to improve and grade site of Nordstrom High School on Fort and Waterman Sts. and pave walks, terrace, etc. of St. Michaels Junior High School. About $50,381.

Mich., Detroit—City plans to improve Grand River Ave. and Northwestern Field. About $12,220. H. H. Esselstyn, comr. pub. wks.

Mich., Detroit—City soon lets contract paving following streets: Cardoni Ave. from north line Holbrook to south line Lynn Ave., 26 ft. wide; Willett Ave., from west line Livernois Ave. to west line of B. & W. Div. 26 ft. wide; Ellery St. from north line Harper to south line Milwaukee Ave., 26 ft. wide; Kanter St., from east line Moran St. to west line Mt. Elliott Ave., 26 ft. wide; Howard St. from west line Junction Ave. to east line Cavalry Ave., 24 ft. wide; all asphalt on 6 in. concrete base, Berea or Medina curbing. Work involves 11,717 cu yd. excav., 13,748.9 lin.ft. curbing, 21,079.8 sq.yd. asphaltic paving, 397.3 cu.yd. concrete behind curb, 1232.7 lin.ft. retaining stone and 21,080 sq.yd. 6 in. concrete base. C. W. Hubbell, City Hall, engr.

Mich., Detroit—Dept. Parks & Blvds. submitted plans to City Council for resurfacing Belle Isle and Palmer Park Blvds. About $300,000. W. T. Dust, comr.

Mich., Hamtramck—Village plans to widen and repave 1¾ mi. Joseph Cambau Ave., asphalt on concrete base, Berea or Modena curbing. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Mich., Sault Ste. Marie—City plans to pave Carrie St. from Kimball to Johnson Sts., bituminous macadam, cost $4800; Dawson St. from Bingham Ave. to Johnson St., $11,000; East Spruce St. from Magazine to Johnson Sts., $21,000; Arlington St., from Ashnum to Douglas Sts., brick on concrete base, $16,000; Oak St., brick on concrete base, $11,000; Algonquin Rd., bituminous macadam, $28,000; also resurfacing Ridge and Maple Sts., from Magazine to Johnson Sts.. $14,500 and $14,000 respectively; repairing Shallows Rd., $3000.

Illinois—State Highway Comn., Springfield, plans to build following roads: State aid route north of Jacksonville, Morgan Co., 16 ft. wide, concrete, cost, $18,000; 4700 ft. Sect. "F" and 4000 ft. Sect. "G," state-aid roads, Bureau Co., 15 ft. wide, concrete, involving 4316 cu.yd. grading. 12,427 cu.yd. 7 in. paving and 111 cu.yd. concrete in culverts, $35,000; 7300 ft. Polo-Freeport Rd., Ogle Co., 10-16 ft. wide, concrete, involving 4476 cu.yd. grading, 11,800 sq.yd. 7 in. paving and 13 cu.yd. concrete in culverts, $27,000; 5300 ft. Route 1, Freeport-Wisconsin Rd., Stephenson Co., state aid. 10 ft. wide, brick, with 3 ft. macadam shoulders, involving 3500 cu.yd. grading, 5890 sq.yd. brick block, 3533 sq.yd. macadam shoulders and 61 cu.yd. concrete in culverts, $23,000; 10,000 ft. Joliet-Plainfield Rd., Will Co., 18 ft. wide, involving 3600 cu.yd. grading, 20,300 sq.yd. 7 in. paving and 75 cu.yd. concrete in culverts, $44.000. H. E. Bilger, rd. engr.

Ill., Murphysboro—City plans to expend between $50,000 and $100,000 for paving various streets. R. A. Rollo, city engr.

Ill., Oak Park—City plans to expend $500,000 on paving and other improvements W. F. Sargent, comr. pub. wks.

Wis., Elkhorn—Comrs. Walworth Co. receive bids in spring building 5 mi., Highway No. 20, concrete.

Wis., Grand Rapids—City plans to pave various streets. Work involves 25,000 sq.yd. pavement. A. T. Thompson, city engr.

Wis., Oshkosh—City plans to pave 5200 sq.yd. Otter St., 5800 yd. 10th St., from Brown to Rosalia Sts., 4000 yd. Marion St. from Main to Ohio Sts. and Jackson to Wisconsin Sts. G. Randall, city engr.

Ia., Cedar Rapids—City plans to build 3 mi. sidewalks, 5 ft. wide. T. F. McCauley, city engr.

Ia., Clinton—Clinton Co. receives bids about Mar. 1, grading 18 mi. Lincoln Highway. M. Sorensen, engr.

Nebraska—State Highway Comn., Lincoln, plans to build Federal Aid roads in following counties:

Washington and Burt Counties, 26.3 mi. Washington-Burt Rd., 24 ft. wide, involving 131,000 cu.yd. excav., 160 cu.yd. concrete culverts, cost $56,332.

Buffalo Co., 16.5 mi. Kearney-Pleasanton Rd., 24 ft. wide, 118,600 cu.yd. excav., 960 cu.yd. sand clay topping, $38,556.

Custer Co., 35 mi. Litchfield-Broken Bow Rd., 24 ft. wide, 188,400 cu.yd. excav., 3545 cu.yd. sand-clay topping, $74,874.

Lancaster and Gage Counties, 17.95 mi. Lincoln-Beatrice Rd., 24 ft. wide, 204,828 cu.yd. excav., 180 cu.yd. concrete culverts, $98,615.

Dodge and Saunders Counties, 33.67 mi. Fremont-Ceresco Rd., 24 ft. wide, 100,000 cu.yd excav., 340 cu.yd. concrete culverts, $50,050.

Seward, York and Hamilton Counties, 50.85 mi. Seward-Aurora Rd., 24 ft. wide, 220,000 cu.yd. excav., 300 cu.yd. concrete culverts, $103,007.

Otoe and Cass Counties, 27.55 mi. Nebraska City-Plattsmouth Rd., 24 ft. wide, 125,000 cu.yd. excav., 270 cu.yd. concrete culverts, $57,750.

Streets and Roads (Continued)

Dodge Co., 5.94 mi. Fremont-Ames Rd., 24 ft. wide, 16,567 cu.yd. excav., 33 cu.yd. concrete culverts, 55,757 sq.yd. concrete paving, $140,000.

Box. Butte and Sheridan Counties, 14.83 mi. Alliance-Antioch Rd., 24 ft. wide, 72,200 cu.yd. excav., 17 cu.yd. concrete culverts, 11,500 cu.yd. sand-clay topping and 5750 cu.yd. gravel, $71,763.

Sioux and Dawes Counties, 40.8 mi. Harrison-Whitney Rd. 24 ft. wide, 124,700 cu.yd. excav., 300 cu.yd. concrete culverts, $56,720.

Douglas Co., 27 mi. Douglas Co.-Lincoln Rd., 24 ft. wide, 115,000 cu.yd. excav., $45,000.

Hayes and Chase Counties, 16.8 mi. Hamlet-Imperial Rd., 24 ft. wide, 80,000 cu.yd. excav., 175 cu.yd. concrete culverts, $36,465.

Custer and Loup Counties, 20 mi. Sargent-Harrop Rd., 24 ft. wide, 40,000 cu.yd. excav., 300 cu.yd. concrete culverts, $27,461.

Howard and Hall Counties, 17 mi. St. Paul-Grand Island Rd., 24 ft. wide, 54,000 cu.yd. excav., 190 cu.yd. concrete culverts, $27,376.

Nance and Boone Counties, 24 mi. Genoa-Albion Rd., 24 ft. wide, 87,000 cu.yd. excav., 260 cu.yd. concrete culverts, $42,500.

Frontier Co., 12 mi. Curtis-Stockville Rd., 24 ft. wide, 64,000 cu.yd. excav., 250 cu.yd. concrete culverts, $30,000.

Dixon Co., 17 mi. Allen-Ponca Rd., 24 ft. wide, 50,000 cu.yd. excav., 200 cu.yd. concrete culverts, $26,070.

Holt and Boyd Counties, 41.8 mi. O'Neill-Butte Rd., 24 ft. wide, 190,000 cu.yd. excav., 300 cu.yd. concrete culverts, $83,875.

Polk and Butler Counties, 24 mi. Osceola-David City Rd., 24 ft. wide, 164,043 cu.yd. excav., 275 cu.yd. concrete culverts, 8178 sq.yd. concrete paving, 16 ft. wide, $66,678.

Colfax and Platte Counties, 16.5 mi. Schuyler-Columbus Rd., 24 ft. wide, 32,000 cu.yd. excav., 190 cu.yd. concrete culverts, $20,000.

Furnas Co., 32.5 mi. Cambridge-Oxford Rd., 24 ft. wide, 65,000 cu.yd. excav., 300 cu.yd. concrete culverts, $34,283.

Gage and Jefferson Counties, 31.1 mi. Beatrice-Fairbury Rd., 24 ft. wide, 140,650 cu.yd. excav., 300 cu.yd. concrete culverts, $63,982.

Franklin and Harlan Counties, 23.5 mi. Bloomington-Orleans Rd., 24 ft. wide, 90,000 cu.yd. excav., 260 cu.yd. concrete culverts, $42,644.

Sherman Co., 25.3 mi. Rockville-Loup City Rd., 24 ft. wide, 40,000 cu.yd. excav., 270 cu.yd. concrete culverts, $25,114. G. E. Johnson, state engr.

S. D., Huron—City plans to pave Nebraska St. from 3rd to 9th Sts., and 1st St. from Kansas to Wisconsin Sts. O. A. Ricker, city engr.

North Dakota—State Highway Comrs. Bismarck, soon receive bids building 10.3 mi. State Aid Project No. 3372 from Center Twp. south, Oliver Co., cost $10,055; 4.5 mi. State Aid Project No. 0582 including bridge over Mouse River, Bottineau Co., $10,000. W. H. Robinson, state highway engr.

N. D., Bismarck—Comrs. Burleigh Co. having plans prepared building 12 mi. River Rd. north from Bismarck. About $38,028. W. H. Robinson, state highway engr. Federal Government will appropriate toward cost.

N. D., Fargo—Comrs. Cass Co. plan to build 5 mi. hard surface road from here along Red Trail to new million dollar packing plant, probably concrete. About $40,000. W. B. Stevenson, co. engr.

N. D., Rugby—Comrs. Pierce Co. plan to build 21.6 mi. road south of Balta Twp. About $46,235. W. H. Robinson, Bismarck, state highway engr.

Montana—State Highway Comn., Helena, plans to build State-Aid roads as follows:

Granite Co., reshaping 10 mi., cost $25,000.

Flathead Co., building 45 mi. road in connection with Belton-Glacier Park Project, $55,000.

Phillips Co., grading and gravel surfacing 2 mi. road, Saco Flats Project, $10,000.

Valley Co., grading 7 mi. road, Glasgow Project, $20,000.

Lincoln Co., grading and gravel surfacing 9 mi. road, Libby Project, $10,000.

Carter and Fallon Counties, grading 40 mi. road, Baker-Elkalaka Project, $25,000.

Custer Co., grading and gravel surfacing 6 mi. Yellowstone Trail east of Miles City, $15,000. P. D. Pratt, engr.

Montana—State Highway Comn., Helena, applied to U. S. Government for aid in constructing following highways:

Valley Co., grading 2 sections Hinsdale-Thoeny Rd., cost $12,000; Glasgow-Opheim Rd. $8000.

Choteau Co., 6½ mi. Highwood Rd., $5000.

Phillips Co., 12 mi. Musselshell Rd., $12,000; 10 mi. Saco-Whitewater Rd., $10,000; 8 mi. Dodson-Zortman Rd., $8000; 10 mi. Malta-Zortman Rd., $10,000; 10 mi. Malta-Canada Rd., $10,000; 10 mi. Tait Creek Rd., $10,000; 19 mi. Dodson-Caldwell Rd., $19,000; 8 mi. D. H. S. Rd., $8000; 12 mi. Zortman-Power Plant Rd., $12,000; 7 mi. Sun Prairie-Leedy Rd., $7000; 15 mi. Saco-Greve Rd., $15.000; 2 mi. Saco-Genevieve Rd., $2000; 4 mi. Dodson-Zortman Rd., $4000; 2 mi. Dodson R. F. D. No. 1, $2000; surfacing 2 mi. Dodson R. F. D. No. 2, $5000. P. D. Pratt, engr.

Mont., Butte—City plans to improve various streets to include 24,000 sq.yd. pavement. W. H. Ellis, city engr.

Mo., Benton—Scott Co. plans to gravel surface 7 mi. Poplar Bluff-Cairo Rd., 16 ft. wide. About $39,253.

Mo., Bethany—Harrison Co. plans to pave 9.6 mi. Jefferson Highway, concrete, 9 ft. wide with macadam shoulders. About $141,669.

Mo., Billings—Billings Special Rd. Dist., Christian Co., plans to build 2.9 mi. Springfield-Aurora Rd., chert macadam, 15 ft. wide. About $18,264.

Mo., Bolivar—Springfield Special Rd. Dist., Polk Co., plans to gravel surface 13.5 mi. Springfield-Bolivar Rd., 9 ft. wide. About $42,315.

Mo., Caruthersville—Pemiscot Co. plans to build 10.5 mi. Caruthersville-Kennett Rd., graded earth, 20 ft. wide. About $24,750.

Mo., Centerville—Reynolds Co. plans to build 32 mi. Jefferson City-Poplar Bluff Rd. and 15 mi. St. Louis-Poplar Bluff Rd., graded earth and gravel, 20 ft. wide, $64,000 and $37,500 respectively.

Mo., Charleston—Mississippi Co. plans to gravel surface 24 mi. Cairo-Poplar Bluff Rd., 16 ft. wide. About $241,075.

Mo., Columbia—Harg Special Rd. Dist., Boone Co. plans to gravel surface 5 mi. Natl. Old Trails Rd., 14 ft. wide. About $12,235.

Mo., Eldon—Eldon Special Rd. Dist., Miller Co., plans to build 16 mi. Tuscumbia-Versailles Rd., graded earth, 20 ft. wide. About $10,000.

Mo., Greenville—Wayne Co. plans to build 16 mi. Gads' Hill-Leeper Rd., graded earth, 20 ft. wide. About $20,480.

Mo., Harrisonville—Cass Co. plans to improve 8 mi. Southern Highway from Pleasant Hill Twp. through Straburg to Johnson Co. line. About $64,000.

Mo., Hartville—Wright Co. plans to build 32 mi. Ozark Highway, graded earth, 24 ft. wide. About $32,000.

Mo., Hillsboro—Jefferson Co. plans to gravel surface 9.4 mi. Kings Trace Highway, 16 ft. wide, cost $47,630; 9 mi. De Soto-Farmington Rd., 16 ft. wide, $81,012; slag surface 2.7 mi. Kings Trace Highway, 18 ft. wide, $22,771.

Mo., Huntsville—Randolph Co. plans to build 8 mi. Hannibal-Kansas City Rd., graded earth, 24 ft. wide. About $12,000.

Mo., Iberia—Iberia Special Rd. Dist., Miller Co., plans to build 12 mi. Tuscumbia-Waynesville Rd., graded earth, 20 ft. wide. About $10,400.

Mo., Joplin—Joplin Special Rd. Dist., Jasper Co., plans to pave 6.3 mi. Joplin-Carl Junction Rd., concrete, 18 ft. wide. About $125,000.

Mo., Lebanon—Laclede Co. plans to build 40 mi. St. Louis-Springfield Rd., graded earth, 24 ft. wide. About $40,000.

Mo., Liberty—Clay Co. plans to pave 22.5 mi. Jefferson Highway, bituminous macadam, 16 ft. wide. About $355,157.

Mo., Marshall—Comrs. Marshall Spl. Rd. Dist., Saline Co., plan to pave 8 mi. Natl. Old Trails Rd. asphalt macadam, 16 ft. wide. About $144,000.

Mo., Mexico—Audrian Co. plans to build 16.5 mi. North State Highway, graded earth, 24 ft. wide. About $26,000.

Mo., Millersburg—Comrs. Millersburg Special Rd. Dist., Callaway Co., plan to gravel surface 7.6 mi. Natl. Old Trails Rd., 9 ft. wide. About $45,700.

Mo., Monticello—Lewis Co. plans to build 26 mi. Canton-Edina Rd., graded earth, 24 ft. wide. About $12,000.

Mo., New Madrid—New Madrid Co. plans to gravel surface 19.5 mi. Kingshighway Rd., 16 ft. wide, cost $129,173; 20 mi. Malden-New Madrid Rd., 9 ft. wide, $80,300.

Mo., Palmyra—Marion Co. plans to gravel surface 21 mi. Hannibal-St. Joseph Rd., 16 ft. wide. About $168,000.

Mo., Potosi—Washington Co. plans to gravel surface 12.5 mi. Potosi-De Soto Rd., 16 ft. wide. About $41,500.

Mo., Rolla—Phelps Co. plans to build 34 mi. St. Louis-Springfield Rd., graded earth and gravel, 24 ft. wide. About $52,700.

Mo., Sedalia—Pettis Co. plans to build 16 mi. Sedalia and Windsor Rds., graded earth and gravel, 16 ft. wide. About $22,000.

Mo., Van Buren—Carter Co. plans to gravel surface 30 mi. Jefferson City North-South Rd., 16 ft. wide. About $60,000.

Mo., Versailles—Morgan Co. plans to build 10 mi. Versailles-Tipton Rd., gravel surface, 9 ft. wide. About $21,000.

Mo., Warrensburg—Capital Highway Bd., Johnson Co., plans to build 18 mi. Leeton-Warrensburg Rd., graded earth, 24 ft. wide. About $14,400.

Mo., Westplains—Howell Co. plans to build 30 mi. South Missouri Cross State Highway, graded earth. About $30,000.

Ark., Harrisburg—Comrs. Poinsett Co. receive bids about Mar. 19, building 17 mi. graded earth roads with necessary drainage structures in Rd. Impvt. Dist. No. 2, 22 ft. wide, involving 96,800 cu.yd grading, 118 cu.yd. concrete culverts, 1250 ft. 18 and 24 in. corrugated pipes, 2 acres clearing and 25 acres clearing and grubbing. About $50,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. Noted Sept. 5.

Ark., Harrisburg—Poinsett Co. had plans prepared by Morgan Eng. Co., engrs., Goodwyn Institute, Memphis, Tenn., grading and building 11 mi. road in Trumann-Marked Tree Rd. Dist., 9 ft. concrete, 13 ft. earth, involving 59,300 sq.yd. 6 in. concrete, 97,200 cu.yd. grading, 190 cu.yd. concrete culverts, 1500 ft. 18 and 24 in. corrugated pipes, 35 acres clearing and 16 acres clearing and grubbing.

Tex., Anahuac—Comrs. Chambers Co. plan to build 30 mi. road. About $90,000.

Tex., Ballinger—Comrs. Runnels Co. plan to issue $25,000 bonds to build road through Winters Twp. O. L. Parish, co. judge.

Tex., Centerville—Comrs. Leon Co. plan to build East Branch Exall Highway. Cost, $146,000; about $70,000 available. Federal Government will appropriate toward cost.

Tex., Dallas—City plans to hard-surface 20 mi. highway on Turtle Creek Blvd. G. D. Fairtrace, city engr.

Tex., Wichita Falls—City election Feb. 15 to vote on $75,000 bonds to improve streets. L. C. Hinckley, city engr.

Okla., Oklahoma — City plans to pave East Reno St. from present pavement to Missouri-Kansas-Texas Ry. tracks; also 41st St. from Classen Blvd. to Military Ave., asphaltic concrete. B. M. Hart, city engr.

Idaho, Twin Falls—Twin Falls Highway Dist. plans to issue between $1,000,000 and $1,500,000 bonds to hard surface main highways. W. L. Johnson, Twin Falls, engr.

Ariz., Phoenix—Comrs. Maricopa Co. plan election to vote on $2,000,000 bonds to build highways. E. S. Hackett, Phoenix, comr.

Ore., Eugene—Lane Co. appropriated $120,000 to build branch of McKenzie River Rd. from Cascade Mt. summit to Blue River; $30,000 has been appropriated to build other branch of McKenzie Rd. from Cascade Mt. summit to Three Sisters Mts.

Ore., Pendleton—Umatilla Co. petitioned to improve 6½ mi. gravel road from Milton Twp. to power plant on South Fork River.

Ore., Pendleton—Umatilla Co. plans election to vote on $1,050,000 bonds to build and improve roads.

Ore., Portland—City soon lets contract grading sidewalks and curbs on East 8th, East 44th, East 45th, East Davis, Richmond and Ellis Aves., Hassam Class "A" concrete. O. L. Aurgaard, city engr.

Cal., Colusa — Bd. Supervs. Colusa Co. plans to build 115 mi. roads throughout county. J. B. DeJarnatt, chn. good roads com.

Cal., Los Angeles—Bd. Supervs., Los Angeles plans to build 10 mi. mountain road through San Gabriel canyon, Azusa Twp., R. H. Charlton, superv. Los Angeles Forest Reserve, Federal Bldg., has about $127,000 of Government fund available, but county must provide like sum. F. H. Jones, Hall of Records, co. rd. engr.

Cal., Martinez—City retained P. Farley, engr., to prepare plans for improving various streets, mostly concrete pavement. About $300,000. Noted Jan. 23.

Streets and Roads (Continued)

Cal., Merced—Merced Co. sold $1,250,000 bonds for grading and paving county highways with concrete also building bridges and culverts. Noted Nov. 21.

Cal., San Bernardino—City having plans prepared paving 3rd St. from F St. to Arrowhead Ave., 6 in. concrete pavement, 5th St. from I St. to Mt. Vernon Ave., 5 in. concrete pavement, Arrowhead Ave. from 16th St. to north city limits, H St. from 8th to 9th Sts., E St. from 3rd to 4th Sts., 10th St. from A to B Sts., 4 in. concrete pavement. Plans include building cement curbs, cement sidewalks and installing sewers, etc. C. E. Johnson, city engr.

Ont., Bucke—Town receives bids in spring building various roads. About $18,000. R. Matheson, Haileybury, engr.

Ont., Guelph—Wellington Co. plans to issue $25,000 bonds to build and repair County Road No. 13.

Ont., L'Original—Russell and Prescott Counties will receive bids in spring building various roads during year. About $200,000. F. H. Senecal, clk.

Ont., Ottawa—Bd. Control receives bids in March repaving approach to Bank St. Subway. About $35,000. A. F. McCallum, City Hall, engr.

Ont., Owen Sound—Grey Co. plans to expend $96,000 for building various roads.

Ont., Renfrew—Renfrew Co. receives bids in spring building various roads in county. About $29,000.

BIDS DESIRED

Pa., Phila.—Until Feb. 18, by Dept. Pub. Wks., City Hall, for following street improvements: Schedule "A," repaving over openings in asphalt paved streets on cement concrete base; Schedule "B," repaving over openings in granite, vitr. and wood block paved streets on cement concrete base, Schedule "C," building portion of Parkway from Cherry St. to east of 18th St. and all work incidental thereto.

Virginia—Until Feb. 17, by State Highway Comn., Richmond, building 3½ mi. Richmond-Petersburg Turnpike from Chesterfield city limits to Falling Creek, Chesterfield Co., concrete, 16 ft. wide, $69,000; 3½ mi. soil road from Ridgeway, to North Carolina line, Henry Co., 20 ft. wide, $33,000; 8½ mi. gravel road from Franklin to Courtland, South Hampton Co., $67,900. E. L. von Gemmingen, engr.

La., Shreveport—Until Mar. 1, by Caddo Parish Police Jury, for resurfacing 15 mi. gravel highway. About $12,000. Noted Jan. 30.

O., Columbus—Until Feb. 25, by G. E. Borden, dir. pub. serv., grading, draining, curbing, paving and laying water mains in Main St. from Allen Ave. to Alum Creek, 10,040 ft. long, 54 ft. wide; 4th St. from Naghten St. to Livingston Ave., 5002 ft. long, 44 ft. wide; Carpenter St. from Columbus to Schiller St., 650 ft. long, 24 ft. wide; also grading, draining, curbing and repaving ½ mi. Broad St. from Ansin to Sandusky St., 22 ft. wide all asphalt; grading, draining and paving Gilbert St. from Columbus to Schiller St., 650 ft. long, 24 ft. wide, asphalt or brick. H. A. Maetzel, city engr. About $730,000.

Minn., Marshall—Until Mar. 3, by city for 15,982 sq.yd. rein. con. pavement 80 ft. wide. About $15,000. L. P. Wolff, Guardian Life Bldg., St. Paul, engr.

Minn., St. Paul—Until Feb. 17, by city, grading and improving 120 ft. north side East 4th St. from Johnson Pkway; Seminary St. from Lexington to Chatsworth Sts.; Sue St. from Goodrich to Princeton Sts.; La Crosse St. from White Bear to Hazel Sts.; Lawson St. from Dale to Kent Sts.; Loeb St. from Lawson to Cook Sts.; Hammond Ave. from Nebraska to Hoyt Aves. H. W. Austin, purch. agt. Noted Jan. 2.

Kan., Oswego—Until Feb. 24, by E. A. Milliken, clk. Labette Co., building 19.3 mi. Sect. A and B, Federal Aid Project No. 2, 18 ft. wide, involving 90,379 sq.yd. earth shoulders, 54,322 cu.yd. earth excav., 36,985 cu.yd. earth borrow, 181,524 cu.yd. gravel pavement, 175.6 cu.yd. Class "A" concrete, 752 cu.yd. Class "C" concrete, 15,138 lb. reinforcing steel and 3008 lin.ft. 15-30 in. concrete pipe. W. J. King, co. engr.

Mo., St. Louis—Until Mar. 4, by Bd. Pub. Serv., paving Winnebago St. from Gravois to Oak Hill Aves., cost $19,400; Bingham Ave. from Gravois Ave. to Morgan Ford Rd., $31,300; Phillips Ave. from Gravois to Oak Hill Aves., $12,250; Dock St. from Hall St. to point east of 2nd St., all brick, $5100; Clarence Ave. from Ashland to Natural Bridge Aves., $12,100; Kossuth Ave. from Obear to Prairie Aves., $14,050; Bingham Ave. from Grand Ave. to west line of Cleveland subdivision, $30,100; Kings Highway from Easton to St. Louis Aves., $132,950; Kings Highway from St. Louis to Natural Bridge Aves., $72,800; Kossuth Ave. from Grand to Obear Aves., all asphalt, $5950; Union Blvd. from Delmar to Page Blvds., $79,150; Lucas Ave. from 11th to High Sts., $6750; McPherson Ave. from center line Walton Ave. to Euclid Ave., all wood block, $6800; Kennerly Ave. from Clara to Goodfellow Aves., $22,800; Ruskin Ave. from West Florissant to Thekla Aves., all bitulithic, $25,900; Cupples Pl. from Euclid Ave. eastwardly for distance of 410 ft., $7050; Allemania St. from Helvetia St. to Grand Ave., $7700; Juniata St. from Louisiana to Arkansas Aves., $6500; Lafayette Ave. from west line of Shaw's Vandeventer Ave. addition to Vandeventer Ave., all bituminous macadam, $4300; 19th St. from Newhouse Ave. to Angelica St., bituminous macadam with telford base and concrete curb, $6800; also resurfacing Newstead Ave., from Olive St. to Page Blvd., asphalt, $32,900. W. W. Horner, city engr. Noted Jan. 30.

Cal., Los Angeles—Until Feb. 24, by Bd. Supervs. Los Angeles Co., for grading and building concrete and corrugated culverts in Lakeshore Dr. northwest of Pasadena. About $12,000.

Cal., Santa Barbara—Until Feb. 20, by S. B. Taggert, city clk., paving Alameda, Padre and Serra Sts. with 5 in. concrete pavement. A. B. Cook, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Northport—Village let contract for 18,400 sq.yd. cement concrete pavement, to C. D. Schlemmer, Islip, $45,448.

★Miss., Clarksdale—Bd. Superv. Coahoma Co. let contract grading and graveling 38 mi. road, 9 ft. wide, earth shoulders, to McTigue & Hughey Co., Memphis, Tenn. About $5000 per mi. Work involves 90,000 cu.yd. grading and 90.800 tons gravel. Noted Jan. 30.

★Louisiana—State Highway Comn., New Orleans, let contract building 5 mi. Jefferson Highway in Avoyelles Parish, to A. M. Wilkes, Alexandria. About $35,644. Noted Jan. 16.

★Ohio—State Highway Comn., Columbus, let contract building roads as follows:

Ashtabula Co., Sect. "N," "O" and "P," Cleveland-Buffalo Rd., monolithic brick, 11.92 mi. to F. P. Fitzgerald, Ashtabula, $421,419.

Guernsey Co., Sect. "A," McConnelsville-Spencer Rd., 1.36 mi. waterbound macadam, to O. C. Shafer, Caldwell, $22,159.

Highland Co., Sect. "I" and "K," Milford-Hillsboro Rd., 2.79 and 4.63 mi., bituminous macadam, to J. M. Snouffer, Columbus, $49,087 and $84,964 respectively. Noted Feb. 6.

★Tex., Cisco—City let contract improving various streets, involving 40,000 sq.yd. pavement, to Municipal Paving Co., 2111 Elm St., Dallas. About $54,000. Noted Jan. 30.

★Tex., Galveston—Comrs. Galveston Co. let contract furnishing and placing 8600 cu.yd. shell and scarifying 5.5 mi. Dickinson-League City Rd., 16 ft. wide, to J. C. Kelso, 2522 F St., $2.12 per cu.yd. for shell and $125.00 per mi. for scarifying.

★Okla., Oklahoma—City let contract paving Park Pl. from Blackwelder to Kentucky Sts., McKinley Ave. from Linwood to 10th Sts., and 11th St. from McKinley Ave. to Kentucky St., to Western Paving Co., 518-19 Terminal Bldg., $71,416.

★Nevada—State Highway Comn., State Printing Office Bldg., Carson City, let contract building 4.16 mi. road between Bulkhead and Hudson Aurora Rd., Route 3, Lyon Co., (grading and structure only) to Niedt & Gavin, Reno. About $24,815. Noted Jan. 9.

★Ariz., Mesa—City let contract building McDonald St., to Southwestern Contg. Co., 13th Ave. and Lincoln St., Phoenix. Work involves 12,333 sq.yd. 4 in. concrete pavement with bitulithic surface, at $2.84 per sq.yd., 3223 lin.ft. combination cement curb and gutter, $1.30 per lin.ft., 495 lin.ft. cement curb, $.95 per lin.ft., 635 lin.ft., valley gutter, $1.20 per lin.ft., 948 lin.ft., 14 in. concrete pipe, $1.95 per lin.ft., 456 lin.ft., 12 in. concrete pipe, $1.75 per lin.ft., 2206 lin.ft., 4 in. vitr. pipe, $.45 per lin.ft. and 2 storm water manholes, $400.

Cal., San Diego—City received only bid paving Park Blvd., involving 178,140 sq.ft. 4 in. concrete pavement with 1½ in. asphalt surface, 5248 lin.ft. cement curb and 26,525 sq.ft. cement sidewalks. from G. R. Daley, McNeece Bldg., $58,889. Noted Feb. 6.

Railways

PROPOSED WORK

Massachusetts—State Legislature, Boston, petitioned to authorize incorporation of Metropolitan Belt Line R. R. to build belt line railroad around Boston to be owned and controlled by state.

Connecticut—Waterbury & Milldale Tramway Co., Meridan Rd., Waterbury, plans to extend lines to connect with lines of Connecticut Co. at Dickerman Corners, Milldale Twp.

Missouri—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, plans to build 38 mi. line from Mexico to Carrollton. A. W. Newton, ch. engr

Oregon—See "Miscellaneous" under Astoria.

Oregon—A. Paddock, Klamath Falls, and W. Strahorn, 515 Prescott St., Portland, plan to build 7 mi. spur from Darary to Bonanza to be known as Strahorn R.R.

Excavation and Dredging

PROPOSED WORK

Mass., Lowell—Excavation—State Legislature, Boston, petitioned to lower Hales Brook level and improve meadows in and near here. About $172,000.

Pa., Johnstown—Excavation—See "Streets and Roads."

Pa., New Castle—Excavation—City plans to widen Neshannock Creek and build wall About $100,000. C. E. Brown, clk.

Fla., Hastings—Drainage—Hastings D. D. plans to widen and deepen Deep Creek from river to Yelvington and Roy, involving 22,400 acres.

Miss., Carrollton—Excavation—Patacocowa Creek D. D., Avalon, soon receives bids for excavating drainage channels, 90 ft. base in Carroll and Grenada Counties Work invloves 461,500 cu.yd. dragline excavation and 6 acres clearing. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. About $70,000. E. Giles, secy.

Mo., Poplar Bluff—Excavation—Inter River D. D. of Missouri, Butler Co., receives bids in spring for 206 mi. open ditch, 12-55 ft. wide at base, 8-10.5 ft. deep. Works involves 8,000,000 cu.yd. floating dredge work or dry land machine work, 17 mi levee embankment, etc. Morgan Eng. Co. Goodwyn Institute, Memphis, Tenn., engrs.

Ore., Astoria—Dredging—See "Miscellaneous."

Cal., Holtville—Drainage—Imperial Water Co., No. 7 plans to build adequate drainage system, cost $49,731; drainage work to meet immediate needs, $28,035; building concrete outfall drain to Alamo River, cost, $8850; drains in saturated areas will be built with dredger and dragline equipment. others with Fresno scrapers and teams J. C. Allison, Van Nuys Bldg., Los Angeles, engr.

BIDS DESIRED

Miss., Hollandale—Excavation—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ia., Jefferson—Drain—Comrs. Greene Co. let contract for labor for building drain No. 128, involving 114,080 ft. 6-42 in. tile and 46 ft. sewer pipe, to W. Coudon, Jefferson, $43,670; material, to Jefferson Cement & Product Co., Jefferson, $65,354. Noted Feb. 6.

Industrial Works

PROPOSED WORK

Mass., Worcester—M. Barsky, 21 Green St., plans to build 1 story, 200 x 280 ft. machine shop. About $50,000.

R. I., Providence—Maine Creamery Co., 69 Bway., plans to alter present creamery and build 1 story, 35 x 150 ft. and 30 x 60 ft. brick and timber additions, rein.-con. flooring and concrete foundation on Bath St. to be used for garage, stable, office etc. About $45,000. B. S. D. Martin, 86 Weybosset St., archt.

N. Y., Buffalo—A. L. Vincent, c/o H. C. Lincoln, archt., 15 West Eagle St., had plans prepared altering and converting building at 253 Ellicott St., into garage About $35,000.

N. Y., Massena—Aluminum Co. of America plans extensive improvements and additions to present plant.

Industrial Works (Continued)

N. Y., New York — Horowitz-Matzoths Co., 371 East 4th St., having preliminary plans prepared by J. Fisher, archt., 25 Ave. A. for 2½-story, 70 x 150 ft., rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, foot East 3rd St. About $55,000.

N. Y., New York—Pictorial Review Co., 222 West 39th St., plans to build 12-story, 107 x 117 ft., brick and steel printing plant, 7th Ave. and 39th St. About $1,000,000.

N. Y., Poughkeepsie—Korn & Stein, 10 North Cherry St., having plans prepared by D. Carpenter, archt., 45 Market St., for 3-story, 30 x 90 ft., brick factory. About $30,000.

N. J., Bayonne—Southern Cotton Oil Co., 160 East 22nd St., plans to build barrel factory to replace one destroyed by fire. About $75,000.

N. J., Hoboken—See "Miscellaneous."

Pa., Phila.—H. C. Derby, 423 Fairmont Ave., soon lets contract building 2-story, 20 x 95 ft. steel, brick and rein.-con. addition to packing plant, rein.-con. flooring, concrete foundation. About $30,000. A. E. Bump, 39 Milville Ave, Boston, engr.

Pa., Phila.—Miller-North Broad St. Storage Co., 2709-21 North Broad St., plans to build 6-story, 54 x 138 ft. storage warehouse at 5301-03 Germantown Ave. About $100,000.

W. Va., Huntington—J. B. Stevenson, 1661 Fifth Ave., plans to build 2-story, 60 x 160 ft. garage. Meaner & Handloser, 917 Robinson Prichard Bldg., archts.

S. C., Rock Hill—Anderson Motor Co. plans to build garage. About $75,000.

Mich., Detroit—Dept. Motor Trucks plans to build garage at western yards on 19th St. and Michigan Ave. About $75,000.

Mich., Detroit—J. G. Kastler, archt., 523 Chamber of Commerce Bldg., preparing plans for 2-story, 50 x 180 ft. brick, concrete and steel garage, rein.-con. flooring and concrete foundation on Chene St. and East Grand Blvd. Owners name withheld.

Mich., Detroit—Smith, Hinchman & Grylls, archts., 710 Washington Arcade, soon let contract building 2-story, 40 x 115 ft. and 40 x 130 ft. brick, steel and rein.-con. factory, rein.-con. and plank flooring, concrete foundation, on Pine and 5th Sts., for Monroe Sheet Metal & Roofing Co., 563 Myrtle St.

Ill., Chicago—Bankers Supply Co., 2251 South Park Ave., soon receives bids building 1 story, 100 x 370 ft. brick and timber printing plant, concrete foundation on State St. near 59th St. About $120,000. R. E. Pingree, 209 South La Salle St., archt. Noted Jan. 16.

Ill., Chicago—Ilg. Electric Ventilating Co., 154 Whiting St., purchased 325 x 1333 ft. site on Crawford Ave. and George St. and plans to build plant. First unit to cost about $250,000.

Ill., Chicago—Krasberg Mfg. Co., 536 Lake Shore Drive, purchased 20,000 sq.ft. site on Ohio St. near lake front and plans to build 7 story brick and concrete plant. About $275,000. A. S. Alschuler, 28 East Jackson St., archt.

Ill., Chicago—Ohio Match Co., Wadsworth, O., plans to build 3-story, 100 x 124 ft. brick, steel and rein.-con. warehouse, rein.-con. flooring and concrete foundation, here. About $200,000. R. H. Hindsale, 527 Erie Bldg., Cleveland, O., archt.

Ill., Chicago—Seng Co., 1450 Dayton St., purchased 290 x 1146 ft. site on Diversey and Crawford Ave., and plans to build plant. About $500,000.

Wis., La Crosse—Armour & Co., Union Stock Yards, Chicago, plans to build 4 story, 81 x 154 ft. warehouse on Front and Mt. Vernon Sts. About $150,000.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St., receives bids in March building 7 story, 185 x 310 ft., rein. con., brick and steel bakery, rein. con. flooring, concrete foundation, on 24th St. and National Ave. for R. A. Johnston Co., 270 Florida St.

Wis., Milwaukee—Milwaukee Paper Box Co., 400 Florida St., soon receives bids building 5 story, 120 x 145 ft., rein. con., brick and steel factory, rein. con. flooring, concrete foundation on South Pierce and Muskego Sts. About $225,000. Schnetzky & Son, 105 Wells St., archts. Noted May 30.

Ia., Cedar Rapids—Iowa Radiator Co., 1210 South 12th St., W., plans to build addition to factory. Cost between $35,000 and $50,000. W. H. Dunshee, pres.

Ia., Sioux City—Sioux City Tire & Repair Co., 205 4th St., plans to build brick and stone factory on 5th and Plymouth Sts. About $100,000. W. L. Steele, 502 United Bank Bldg., archt.

Ia., Sioux City—See "Buildings."

Minn., Tyler—See "Water-Works."

Colo., Denver—Jackson Compressor Co., 235 South Cherokee St., soon receives bids building 1-story plant on Alameda Ave. and Cherokee St. About $225,000. Montjoy, French & Frewen, Chamber Commerce Bldg., archts.

Colo., Greely—Hackett & Walters Co., 708 7th St., plans to build 37 x 115 ft. modern plant on 7th St.

N. M., Albuquerque—Central Milling Co. plans to build flour mill. About $35,000.

Ore., Astoria—See "Miscellaneous."

Ore., Astoria—Standard Oil Co. plans to build distributing plant. About $200,000.

Cal., Oxnard—City plans election to vote on $140,000 bonds to build gas plant. Estimates have been made and plans are being prepared by Olmsted & Gillelen and J. M. Berkley, engrs., 1112 Hollingsworth Bldg., Los Angeles.

Cal., Sacramento—R. Carstensen, 35th St. and 5th Ave., purchased site on R. St. between 16th and 17th Sts. and plans to build ice manufacturing and cold storage plant. About $225,000.

Ont., Oshawa—F. McCullough, Ritson Rd., plans to build 2 story factory. About $60,000.

BIDS DESIRED

N. Y., Buffalo—J. Dold Packing Co., 723 William St., is receiving bids for 5 story, 60 x 70 ft., rein.-con. addition to plant. A. Robb, purch. agt.

Ill., Chicago—Henschien & McLaren, archts., Old Colony Bldg., receiving bids building 4 story 25 x 50 ft. and 86 x 145 ft., brick and rein.-con. packing plant, rein.-con. flooring and concrete foundation at 925 West 37th Pl., for Illinois Packing Co., 3940 Normal Ave. About $175,000. Noted Jan. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★**R. I., Providence**—Revere Rubber Co., 355 Valley St., let contract building 1 story, 52 x 90 ft. brick and concrete boiler house, rein.-con. flooring and concrete foundation, on Hemlock St., to Cruise & Smiley Constr. Co., 12 East Ave., Pawtucket. About $30,000.

★**N. Y., New York**—H. Birdsal, 182 West St., let contract building 2-story, 71 x 100 ft., steel and brick garage, rein.-con. flooring, brick foundation, at 221-225 Thompson St., to J. C. Mack, 31 Liberty St. About $40,000.

★**N. Y., New York**—M. A. Schuman, 36 East 12th St., will build 1-story, 100 x 185 ft., steel and brick garage, rein.-con. flooring, concrete foundation, 99th St. near 1st Ave. About $35,000. Work will be done by day labor.

★**Pa., Phila.**—W. Sellers Co., 16th and Hamilton Sts., let contract building 5-story, 52 x 108 ft., rein.-con., brick and steel machine shop, to Barclay, White & Co., 1713 Sansom St. About $100,000. Noted Dec. 26.

★**Pa., Reading**—W. I. Luden Co., 216 North 8th St., plans to build 4-story, 100 x 156 brick building, wooden flooring, on North 8th St. About $75,000. Work will be done by day labor.

★**W. Va., Glasgow**—Travis Glass Co. let contract building 1-story, 100 x 200 ft. factory, to H. L. Dixon, Rosslyn Rd.

★**Ill., Granite City**—Natl. Enameling & Stamping Co. let steel contract for 1-story, 60 x 75 ft. turbine plant, to Stupp Bros. Bridge & Iron Co., Frisco Bldg., St. Louis, Mo. About $50,000. Brick work to be done by day labor. Noted Aug. 29.

★**Wis., Memasha**—Graef Wire & Mfg. Co., 501 East Forest Ave., Neenah, let contract building brick and mill construction plant to include 1 story, 110 x 150 ft. machine shop, 30 x 40 ft. boiler room and 2 story, 50 x 100 ft. warehouse, to Appleton Constr. Co., Appleton. About $50,000. Noted Aug. 1.

Buildings

PROPOSED WORK

Mass., Cambridge—Hospital—City had plans prepared by E. T. P. Graham, archt., 20 Beacon St., Boston, building 2 story on Cambridge Ave. About $100,000. Noted Jan. 16.

Mass., Chicopee—Theatre—J. Bonetakis, 60 Springfield St., plans to alter and build addition to existing building on Center St., to be used as motion picture theatre. About $100,000.

Mass., Springfield—School—Bd. Educ. plans to build 12 room addition to Homer St school. About $120,000.

R. I., Providence—Library—City having plans prepared by Clarke & Howe, archts., 1304 Turk Heads Bldg., for 3 story on Fountain and Empire Sts. About $400,000. Noted Jan. 23.

Conn., Derby—High School—Bd. Educ. Minerva St., plans to build high school. About $200,000.

Conn., Hartford—Auditorium—D. B. Hillyer, 108 Gillett St., having plans prepared by Helmle & Corbett, archts., 190 Montague St., Brooklyn, N. Y., for auditorium on Trinity St., to be known as Bushnell Memorial. About $500,000. Noted Feb. 6.

Conn., Litchfield—Church, etc.—Episcopal congregation plans to build stone church and brick parish house. About $150,000.

Conn., New Britain—Schools—State Legislature, Hartford, petitioned to appropriate $500,000 to build additional state normal schools here. Address State Bd. Educ., Hartford.

Conn., New Haven (Hamden)—Church—F. A. Wells, pastor, Hamden Plains Methodist Episcopal congregation receives bids about Feb. 20, for 57 x 115 ft., brick and concrete, concrete foundation on Dixwell Ave. and Church St. R. W. Foote, 185 Church St., archt. Noted Sept. 26.

Conn., Waterbury—Armory—State Legislature, Hartford, petitioned to appropriate $400,000 to build state armory here.

N. Y., Buffalo—Laboratory—University of Buffalo, 24 High St., considering plans for chemical laboratory on Main St. About $150,000 available.

N. Y., Utica—School—Bd. Educ. plans to build 3 new schools.

N. Y., Watertown—Hotel—F. Dudley of United Hotels Co., Buffalo, plans to build 6 story, concrete and brick hotel on Washington St. and 3 story garage on Goodale St. About $500,000.

N. J., Trenton—Theatre—Hildinger Enterprise, Inc., 135 East Hanover St., plans to build on East State St. About $150,000.

Pa., Phila.—Restaurant—Cheri Inc., c/o J. G. Patton, 15th and Chestnut Sts., plans to alter and build 4-story addition to restaurant at 1604 Chestnut St. About $50,000. C. E. Oelschager, 1615 Sansom St., archt.

Md., Baltimore—Bank—Citizens Natl. Bank, Hanover and Pratt Sts., plans to alter existing building and construct 2-story, 25 x 80 ft., steel, brick and concrete addition. Cost between $75,000 and $100,000. A. D. Graham, pres.

Md., Baltimore—Church—Seventh Baptist congregation, North Ave. and St. Paul St., having plans prepared by C. N. Friz, archt., 1523 Munsey Bldg., for 50 x 150 ft., marble. About $100,000. C. H. Pinchbeck, pastor. Noted Jan. 16.

Md., Baltimore—School—Bd. Estimates authorized purchase of block bounded by Poplar Grove St., Franklin Rd., Lafayette Ave. and Lanvale Sts. and plans to build school. Cost between $200,000 and $250,000. Address J. F. Thrift, secy.

Md., Baltimore—Synagogue and School—Chizuk Amuno congregation purchased site on Eutaw Pl. and Chauncey Lane, and plans to build granite or marble and steel, concrete foundation. About $100,000. W. Levy 2352 Eutaw Pl., acting pres.

Md., Cumberland—Labor Temple—Allegany Trades Council plans to build 3 story, 40 x 100 ft., steel and brick, rock and concrete foundation. Plans include auditorium, dance hall, store and lodge rooms, etc. About $50,000. J. V. Fisher, secy.

Md., Hagerstown—Schools—Bd. Educ. Washington Co., plans to build three 2 story and 3 story, concrete, steel and brick schools, rock foundation, 1 at north end of city, addition to 1 on Antietam St. and 1 at Halfway. About $200,000. A. K. Klinkhart, 27 West Washington St., archt.

Md., Halfway—Schools—See "Hagerstown."

W. Va., St. Mary's—Court House—Pleasants Co. election Mar. 11, to vote on $150,000 bonds to build new court house.

Buildings (Continued)

N. C., Ayden—Administration and Dormitory—Trustees Free Will Baptist Seminary plans to issue $50,000 bonds to construct administration building and dormitory.

S. C., Timmonsville—Bank—People's Bank plans to build on Main St. About $65,000. J. B. Dansbury, pres.

Ga., Atlanta—Museum—City election Mar. 5 to vote on $100,000 bonds to build in Grant Park. H. L. Collier, city engr.

Ala., Mobile—Library—City plans to build library. About $100,000.

O., Cleveland—Theater and Office—B. F. Keith Theater Co., Hippodrome Bldg., plans to build brick, steel and rein.-con., rein.-con. flooring and concrete foundation. J. H. Royal, mgr.

O., Columbus—Schools—Bd. Educ. plans to vote on $1,500,000 bonds to construct 12 to 15 elementary schools.

Mich., Detroit—Schools—Bd. Educ. plans to build new schools and additions and improvements to existing buildings, all included in 1919 budget as follows:

High School, Boston Blvd. and 12th St., cost $1,000,000, completing Nordstrom High School, Fort and Waterman Sts., $750,000.

Addition to Longfellow School, Indiandale and 12th Sts., $120,000.

Addition to Moore School, Alger and Cameron Aves., $200,000.

Addition to Farrand School, Harper Ave. and John R. St., $130,000.

New school, Forest Ave. and Antoine St., $200,000.

New school, Brooklyn Ave. and Locust St., $200,000.

Addition to Dwyer School, Caniff and Rosedale Court, $200,000.

Addition to A. L. Holmes School, $120,000.

Addition to Philip School, $120,000.

New School, Fenkell Ave., $80,000.

Addition to Capron School, Maple and Riopelle Sts., $20,000.

New school in lieu of present Ternane School, $80,000.

New school in lieu of present Everett School Fort and Hastings Sts., $240,000.

New school in lieu of Burton and Clay Schools, Pitcher St. and Cass Ave., $200,000.

New school on Ferry and Joseph Campau Aves., $160,000.

New school in lieu of Irving School, Willis and Woodward Aves., $280,000.

New school in lieu of Logan School, Clippert and Michigan Aves., $200,000.

Addition to Nichols School, Burns and Goethe Aves., $160,000.

New school, Milwaukee Ave. E., and Blvd., $160,000.

New school, Adelaide and Antoine Sts., $240,000.

New school, Canfield and Mt. Elliott Aves., $160,000.

Addition to Condon Junior High School, Vinewood Ave. and Grand Blvd., $130,000.

Addition to Joyce Junior High School, Sylvester and Seneca Aves., $75,000.

Auditorium and gymnasium in Field School, Field and Agnes Aves., $80,000.

Auditorium and gymnasium in Ellis School, Junction and Rich Aves., $70,000.

New school, G. P. Lodd Athletic Field, $20,000.

New school, Goldberg Athletic Field, on 12th and Piquette Sts., $20,000.

Open Air school, Waterman and Lafayette Aves., $25,000.

Open Air school, Brooklyn Ave. and Locust St., $25,000.

Open Air school, Martin and Michigan Aves., $25,000.

Open Air school, Davison and Joseph Campau Aves., $25,000.

Open Air school in vicinity of Maybee School, $25,000; also developing and equipping 4th floor laboratory of Central High School, Cass and Warren Aves., $49,660.

Ill., Chicago—Bank and Office—H. L. Newhouse, archt., 4630 Prairie Ave., receives bids about May 1, building 3 story, 65 x 120 ft. brick and concrete, concrete foundation on 12th St. and Kedzie Ave. for Independence State Bank, 1215 South Kedzie Ave. About $125,000.

Ill., Chicago—Hotel—W. L. Park, 120 South Michigan Blvd., plans to build 8 story apartment hotel on 73rd St. and South Shore Drive. About $1,000,000.

Wis., Janesville—High School—City plans to build school to include gymnasium and auditorium. About $500,000.

Wis., Superior—School—City receives bids in spring building 2 story, 117 x 155 ft. About $125,000. F. E. Johnson, Wisconsin Bldg., archt.

Ia., Sioux City—Home—Comrs. Woodbury Co. having plans prepared by W. Steele, archt., 502 United Bank Bldg., building 2 story, 60 x 180 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Bronson Rd. About $100,000.

Ia., Sioux City—Office—Shoborg Motor Co., 610 Pierce St., plans to build 4 story, 75 x 150 ft. brick, stone and rein.-con. office and garage on 14th and Pierce Sts. About $50,000.

Minn., Cloquet—Fire Hall—City soon lets contract building 2 story, 50 x 100 ft. Holstead & Sullivan, 410 Palladio Bldg., Duluth, archts.

Minn., Duluth—School—Bd. Educ., Lonsdale Bldg., receives bids about Mar. 15, building 1-story, 75 x 175 ft. rein.-con., steel and brick, rein.-con. flooring, concrete and brick foundation, on Minnesota Ave. About $70,000. C. A. Bronson, clk. Croft & Boerner, Lonsdale Bldg., archts.

Minn., Greenbush—School—School Dist. No. 66, Roseau Co., receives bids about Mar. 15, building 2-story, 75 x 100 ft. stone and brick. About $55,000.

Minn., Virginia—City Hall and Public Auditorium—City plans to build 3-story, rein.-con. and brick. About $200,000. A. E. Bickford, city clk.

S. D., Huron—Church—Methodist Episcopal congregation plans to build on site of old church. About $75,000.

N. D., Bismarck—Memorial—State plans to build liberty memorial building on Capitol Grounds. About $200,000.

Mont., Columbus—Court House—Stillwater Co. had plans prepared for 3-story, brick court house. Election soon to vote on $100,000 bonds for project. N. W. Dedrick, Babcock-Selvidge Bldg., Billings, archt.

Mont., Hardin—High School—Bd. Educ. voted $100,000 bonds to build high school. W. Dedrick, Babcock-Selvidge Bldg., Billings, archt.

Mo., St. Louis—Bank—Federal Reserve Bank, Bway. and Pine St., purchased site on 4th and Locust Sts. and plans to build 72 x 150 ft. bank. Address D. C. Biggs, c/o owner.

Mo., St. Louis—Office and Store—Provident Realty & Investment Co., Central Natl. Bank Bldg., having preliminary sketches prepared by T. P. Barnett Co., archts., Central Natl. Bank Bldg., for 5-story, 100 x 105 ft., on Laclede and Euclid Aves. T. P. Barnett, pres.

Mo., St. Louis — Store — P. McCarthy, engr., c/o Grand Leader, soon receives bids tearing down present building and constructing 8-story, 90 x 166 ft. department store on northeast corner 7th and Washington Ave., for Stix, Baer & Fuller Drygoods Co. About $1,000,000.

Tex., San Marcus—Administration, etc.—Trustees San Marcus Baptist Academy plan to construct administration building to include class rooms, auditorium, library, laboratories, etc. About $100,000.

Okla., Chickasha—Courthouse and Jail—Grady Co. plans election to vote on $250,000 bonds to build courthouse and jail. R. S. Cox, co. clk.

Okla., Drumright — High School — Bd. Educ. having plans prepared by Stewart & Lambert, archts., 1213 State Bank Bldg., for 1-story, brick and stone. About $235,000. D. Frye, pres.

Okla., Yale—High and Ward Schools—Bd. Educ. having plans prepared by Tonini & Bramblet, archts., 417 Terminal Bldg., Oklahoma, for brick and stone. About $75,000 and $250,000 respectively. J. U. Joy, clk.

Colo., Center—School—Bd. Ed. receives bids about Feb. 15, building 2 story, 60 x 275 ft. brick and concrete, rein.-con. flooring, concrete and brick foundation. About $82,000 Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Colo., Ordway—School—Bd. Ed. receives bids about Feb. 15, building brick and concrete cottage school, rein.-con. flooring, concrete and brick foundation. About $80,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Ariz., Morenci—Schools—School Trustees plan election Feb. 24 to vote on $150,000 bonds to build 2 grade schools and addition to Manual Training School. Address J. O. Hodgson.

Ore., Salem—Penitentiary—State Legislature petitioned to appropriate $500,000 to build penitentiary group.

Cal., Fairfield—Hospital—Solano Co. having plans prepared by C. E. Perry, Jr. archt., 1209 Sutter St., Vallejo, for 1 story 100 x 300 ft., brick and frame. About $100,000.

Cal., Quincy—Courthouse and Jail—Plumas Co. having plans prepared by G. C. Sellon & Co., archts., 1005 8th Ave., Sacramento, for 3-story, rein.-con. About $100,000.

Ont., Ottawa—Theatre—Loew Circuit, 432 St. Catherine St., W., Montreal, receives bids in spring building here on Queen St. between O'Conor and Bank Sts. About $250,000.

Ont., Windsor—School—City plans election to vote on $110,000 debentures to build school on East Side.

B. C., South Vancouver—High School—City plans to build 12-room high school About $150,000. A. Gillespie, comr.

BIDS DESIRED

N. Y., Far Rockaway—Theater—Until Feb. 15, by T. W. Lamb, archt., 644-8th Ave., New York City, building 1 story, 44 x 250 ft., steel and brick, concrete foundation, on Central Ave., here, for Far Rockaway Strand Theater Co., 47th St. and Bway., New York City. About $100,000.

N. Y., Utica—Laboratory, etc.—Until Mar. 4, by State Hospital Comn., Albany, building 2 story, 44 x 60 ft., rein.-con., steel and brick laboratory and mortuary, rein.-con. flooring, concrete foundation, at State Institution here. About $50,000. F. L. Pilcher, Capitol, Albany, archt. Noted Jan. 16.

N. Y., Wards Island—Dining Room—Until Mar. 4, by State Hospital Comn., Albany, building 3 story, 22 x 114 ft., brick, steel and rein.-con., rein.-con. flooring, concrete foundation, at State Hospital here. About $100,000. F. L. Pilcher, Capitol, Albany, state archt.

O., Cleveland—School—Until Feb. 24, by W. R. McCormack, archt., East 6th St. and Rockwell Ave., building 1 story brick, steel and rein.-con. school, rein.-con. flooring and concrete foundation, on East 146th St., near Kinsman Rd. About $200,000. Noted Apr. 25.

Ill., Chicago—Grade School—Until Feb 19, by Bd. Educ. building 3 story, 100 x 166 ft. brick and steel addition, rein.-con. or asphalt flooring and concrete foundation on Sacramento St. and 39th Pl. About $275,000. A. F. Hussander, 7 South Dearborn St., archt. Noted Dec. 12.

Minn., Cloquet—School—Until Mar. 1, by E. W. Spoor, secy. bd. educ., building 2-story, 62 x 80 ft. rein.-con., steel and brick, rein.-con. flooring, concrete foundation, on Main St. About $50,000. Kelly & Shefelick, Alworth Bldg., archt.

Minn., Duluth—School—Until Mar. 15, by C. A. Bronson, secy. bd. educ., Lonsdale Bldg., for 2-story, 55 x 75 ft. rein.-con. and brick addition to school on 7th St., E., rein.-con. flooring, concrete and rock foundation. About $70,000. Croft & Boerner, Lonsdale Bldg., archt.

Minn., Magnolia—School—Until Feb. 20 by Bd. Educ., Consolidated Dist. No. 5, Rock Co., building here. F. B. Pettengill, clk. G. Pass & Son, Mankato, archts.

Mo., St. Louis—Bank—Until Feb. 25, by L. Haeger, archt., 3844 Utah St., for 2-story, 60 x 100 ft. brick and concrete, on Grand and Hartford Aves., for Tower Grove Bank, Grand and Juniata Aves. About $60,000.

Ont., London—Office—Until Feb. 20, by Watt & Blackwell, archts., Bank of Toronto Bldg., constructing stone and steel for Huron & Erie Mortgage Corp. About $70,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Linden**—School—Bd. Educ. let contract building 2-story, 50 x 100 ft., brick and stone addition to P. S. No. 3, Wood Ave., to A. W. Crone & Son, 500 Central Ave., Jersey City. About $60,000. Noted Jan. 23.

Buildings (Continued)

Pa., Phila.—Fire and Police Stations, etc., Dept. Public Safety, received bids Jan. 28 building and completing 1- and 2½-story, 96 x 98 ft. and 46 x 103 ft. fire house, police station and stable on 24th and Ritner Sts., from F. G. Stewart & Co., 1619 Sansom St., $289,000; W. Linker Co., 831 Cherry St., $290,000. Noted Jan. 23.

O., Cleveland—Hall—City received bids building concrete and steel public hall, 95 ft high on East 6th St. and Lakeside Ave., from Cleveland Fireproof Constr. Co., 1116 Anisfield Bldg. $80,285; Kelly-Demarest & Co., Amer. Trust Bldg., $83,150.

★Okla., Oklahoma—Schools, etc.—Bd. Educ. let contract, to Lisle Dunning Constr. Co., 917 Colcord Bldg., Oklahoma, building 2 story, 60 x 110 ft., rein.-con. and brick, 22nd and Walker Sts., cost $60,000; 2 story, 30 x 85 ft., rein.-con. and brick addition to Culbertson School, East 12th St., $29,000; 2 story, 60 x 70 ft., rein.-con. and brick administration building. 3rd and Walker Sts., $30,000.

Ariz., Phoenix—School—Trustees Phoenix School Dist. holding bids received Jan. 30, building 2-story, 80 x 120 ft., brick school, concrete foundation, under advisement for 60 days; same being in excess of appropriation Noted Jan. 2.

Federal Government Work

PROPOSED WORK

Mass., Hingham—Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 2 officers' quarters; Spec. 3804. About $24,000.

R. I., Newport—Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build emergency hospital. About $500,000.

Pa., Phila. — Wood Block Floor — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build in smithery extension; Spec. 3802. About $17,000. Bids will be received at local navy yard.

Va., Norfolk—Timber Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3801. About $55,000.

Ill., Rock Island—Steel Building—U. S. Government plans to construct three 1 story 240 x 500 ft. steel buildings at Rock Island Arsenal.

Tex., North Ft. Worth—Argon Production Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to fully develop argon production plant. Plans include construction of buildings, water system, etc.; Spec. 3800. About $2,000,000.

BIDS DESIRED

Pa., Ft. Mifflin—Railroad Extension—Until Mar. 10 (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3727. About $20,000; $10 deposit required for plans and spec. Noted Jan. 30.

Pa., Phila.—Dredging—Until Mar. 11, by U. S. Eng. Office, Witherspoon Bldg., dredging in Delaware River, Philadelphia Harbor and New Castle, Reedy, Baker and Liston Lighthouse ranges; advertised in this issue. Noted Feb. 13.

Md., Baltimore—Hospital—Until Mar. 3, by J. A. Wetmore, superv. archt., treas. dept. Wash., D. C., building hospital unit A, special hospital unit B-1, attendents quarters, extensions and alterations to kitchen and mess hall, etc., at U. S. Hospital here.

W. Va., Martinsburg—Post Office—Until Feb. 27, by J A. Wetmore, superv. archt., treas. dept., Wash., D. C., building here.

N. D., Wahpeton—School and Assembly Hall—Until Mar. 7, by C. Sells, comr. Indian affairs, Wash., D. C., building at Wahpeton School here.

N. M., Shiprock—Lavatory Annexes—Until Mar. 7, by C. Sells, comr. Indian affairs, Wash., D. C., building 2 lavatory annexes at San Juan School here.

Cal., San Diego—Barracks—Until Mar. 3, by Bureau Yards & Docks, Navy Dept., Wash. D. C., building 7 rein.-con. and hollow tile barracks, concrete flooring and foundation consisting of barracks A, 2-story, 42 x 319 ft. with 1-story, 41 x 66 ft. dormitory wings, 1-story, 29 x 43 ft. kitchen wing, barrack C, 154 x 182 ft. ell shaped, with 41 x 82 ft. and 41 x 73 ft. dormitory wings, 14 ft. connecting arcade, etc.; Spec. 3733. About $1,350,000. Noted Jan. 23.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., New Haven—Repairing Yale Boat House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Larkin & Carey Co., 166 Brewery St., $3297 (30 days). Noted Jan. 16.

★N. Y., Montauk—Completion of Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract completing building under Contr. No. 2975, to Williams-Gerstle Eng. Co., 198 Bway., New York City, $10,231 (30 days).

★Pa., Phila.—Water Tower Pump and Tank House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Grays Ferry Rd., to J. McCloskey, Jr., 1620 Thompson St., $15,567 (90 days). Noted Feb. 6.

★D. C., Anacostia—Heating Hangar—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract heating hangar at Naval Air Sta., to L. E. Breuninger, Colorado Bldg., Wash., D. C., $10,625 (75 days). Noted Feb. 6.

★Fla., Key West—Dredging—U. S. Eng. Office, Jacksonville, let contract dredging in Key West Harbor, involving 174,926 cu. yd. to Bowers Southern Derdging Co., 914 Amer. Natl. Insurance Bldg., Galveston, Tex., $1.38 per cu.yd. Noted Feb. 6.

★Fla., Pensacola — Fence and Gates — Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract building around ammunition depot, Naval Air Sta., to Cyclone Fence Co., 715 Woodward Bldg., Wash., D. C., $6829. Noted Feb. 6.

Miscellaneous

PROPOSED WORK

Park—Bridgeport, Conn.—City appropriated $10,000 to develop Beechwood Park to include new trees, shrubbery, flowers, etc. J. A. McElroy, city engr.

Retaining Wall — Tonawanda, N. Y. — State Legislature, Albany, petitioned to appropriate $25,500 to build retaining wall over canalized Ellicott Creek here.

Dry Dock, etc.—Hoboken, N. J.—W. and A. Fletcher Co., 1301 Hudson St., plans to build large floating dry dock and 50 x 150 ft. concrete and steel plate shop. About $1,500,000.

Wall—New Castle, Pa.—See "Excavation and Dredging."

Waterfront Development—Baltimore, Md.—City Harbor Bd. petitioned Congress to increase appropriation for improving Spring Gardens channel of Patapsco River from $200,000 to $700,000; also enlarging anchorage in Patapsco River opposite Ft. McHenry.

Slip and Pier—Tampa, Fla.—City plans to build on west side of estuary. About $180,000 available. R. D. Martin, city engr.

Elevator Equipment—Kingsport, Tenn.—City plans to install elevator equipment for raising crushed stone, slag, coal, etc., from hoppers under railway tracks to elevated loading bins, sufficiently equipped for operating 4 bins of 50 cu.yd. capacity. W. R. Pouder, city mgr.

Tunnels—Detroit, Mich.—City Council instructed Corporation Counsel to prepare proper legislation to enable city and Ecorse Twp. to build tunnels at West Jefferson Ave. and at Fort St. under River Rouge. About $3,000,000. C. W. Hubbell, city engr.

Subway—Fargo, N. D.—Northern Pacific Ry. had plans prepared building concrete subway under tracks on 10th St. About $20,000. H. E. Stevens, St. Paul, Minn., ch. engr.

Protection Dike—Red Lodge, Mont.—State Highway Comn., Helena, applied to U. S. Government for aid in constructing dike, in connection with Sect. 1, Carbon Co., Billings-Cody Way Federal Aid Project Work involves 5500 cu.yd. earth dike and 1200 yd. hand placed riprap. Northern Pacific R.R. will appropriate toward cost.

Baseball Park—Oklahoma, Okla.—Oklahoma Baseball Club having plans prepared by L. Bailey, archt., 1117 South Robinson St., Oklahoma, for baseball park and grand stand to seat about 4000 people. About $20,000.

Scenic Railroad—Flagstaff, Ariz.—F. McCabe secured lease from Federal Government and plans to build 14 mi. scenic railroad from here to top of San Francisco Mountain.

Fill and Bulkhead—Astoria, Ore.—Sanitary & Recl. Comn. will consider passage of resolutions for construction of sand fill, cost, $200,000, and bulkhead, $200,000, in 3rd Recl. Dist.

Port Improvements—Astoria, Ore.—Port of Astoria plans to sell $750,000 bonds for various improvements at port including 1 mi. belt line extension, building export and import pier and warehouse, dredging Skipanon River to depth of 20 ft., providing space for 25 mi. side tracks at port terminals, enlarging power plants for city, etc.

Coal Bunkers — Portland, Ore. — West Coast Coal & Dock Co., recently incorporated, plans to build south of Harriman bridge. A. H. Edelfsen, 301 Oak St., mgr.

Dam—Newcastle, N. B.—Town Council plans to build power dam with fishway, on Sevogle River. About $50,000. Bocker & McKechnie, Davidson Bldg., Halifax, N. S., engrs.

Pipe—Ottawa, Ont.—Bd. Control receives bids in March, furnishing cement, tile, iron and lead pipe and brass fittings. About $100,000. A. F. McCallum, City Hall, engr.

Weigh Scales and Houses—Ottawa, Ont.—Bd. Control receives bids in spring for building, altering and improving weigh scales and houses. About $20,000. A. F. McCallum, engr.

Machinery—Owen Sound, Ont.—Grey Co. authorized expenditure of $24,000 for road machinery.

BIDS DESIRED

Gasoline—New York, N. Y.—Until Feb. 19, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 40,000 gal. gasoline.

Truck, Tractor, etc.—New York, N. Y.—Until Feb. 18, by C. D. Van Name, pres. Richmond Boro., furnishing and delivering 2½ ton automobile truck, 3 ton automobile tractor, and a semi-trailer.

Oiling—Baltimore, Md.—Until Feb. 20, by State Rds. Comn., 601 Garrett Bldg., oiling 37.95 mi. road, Dorchester, Somerset, Wicomico and Worcester Counties, involving 69,103 gal. oil; 81.61 mi. road Cecil, Kent, Queen Annes, Talbot and Caroline Counties, involving 165,796 gal. oil; 53.3 mi. road Montgomery, George and Charles Counties, involving 169,188 gal. oil; 147.33 mi. road Baltimore, Harford and Anne Arundel Counties, involving 299,376 gal. oil.; 147.89 mi. road, Carroll, Frederick, Howard, Montgomery and Baltimore Counties, involving 300,939 gal. oil and 161.65 mi. road, Garrett, Allegheny, Washington and Frederick Counties, involving 326,262 gal. oil; advertised in this issue.

Pumping House and Dam—Hollandale, Miss.—Until Apr. 8, by Black Bayou D. D., Washington Co. (Greenville) building 1-story, pumping plant house, foundations for machinery, and concrete dam in by pass channel, near here. Work involves 100 cu. yd. concrete in dam, 3.5 tons steel, 30,000 ft. B. M. (Martinez Type) sheet piling, 3000 cu.yd. excav., and 8000 ft. B. M. timber for building and screen in by pass, etc. About $17,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Sheet Steel Rivets, etc.—Los Angeles, Cal.—J. P. Vrooman, secy. dept. pub. wks., 645 South Olive St., let contract furnishing sheet steel rivets and pipe sections for penstock for powerhouse No. 2, San Francisquito canyon, to Western Pipe & Steel Co., 1758 North Bway., $92,000. Noted Jan. 2.

Cement in New York

On Jan. 18 the New York cement price to contractors, for 1000-bbl. lots, at dock, dropped from $4 to $3.45, including bags, as noted in our issue of Jan. 30. This decline was purely local, even the Jersey City price remaining unchanged.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Feb. 18 & 19.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, February 18, 1919, at which place and hour they will be publicly opened and read, for the improvement of the State canals as authorized by Chapter 147 of the Laws of 1903 and amendatory laws, and Chapter 391 of the Laws of 1909; and for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, as follows:

TERMINAL CONTRACT NO. 57

For constructing certain parts of an approach from Court Street and South Avenue to the Barge canal terminal at Rochester.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 69

For protecting the shore of Erie Basin between Lake Street and Slip No. 1, at Buffalo.

Contract plans, sheets 1 and 2.

TERMINAL CONTRACT NO. 107

For installing electric wiring, lighting, power and battery charging equipment for the canal terminal at Erie Basin, Buffalo.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 223

For constructing a Barge canal terminal freight-shed at Greenpoint, Brooklyn, New York City.

Contract plans, sheets 1 to 11 inclusive.

And until twelve o'clock noon of Wednesday, February 19, 1919, for the following pieces of work:

CONTRACT NO. 200

Erie Canal—Sections 9 and 10

For driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

CONTRACT NO. 201

Erie Canal—Section 9

For completing the concrete prism lining at Cartersville and constructing a stream entrance near Knapp's bridge.

Sheets 1 to 3 inclusive.

CONTRACT Q

Cayuga and Seneca Canal—Section 1

For constructing pile dolphins for aids to navigation on Cayuga and Seneca lakes.

Sheets 1 to 5 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at the office of the State Engineer and Surveyor.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20%) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

January 15, 1919.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed "Proposal for Water Main Under Hackensack and Passaic Rivers," directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

Dated: City Clerk's Office.

FRANK A. DOLAN, City Clerk.

Jersey City, January 24, 1919.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

Proposals for Jetty Work—U. S. Engineer Office, Dallas, Tex.—Sealed proposals will be received here until 11 a. m., Feb. 25, 1919, and then opened, for jetty work at Sabine Pass, Tex. Further information on application.

Waterworks (Continued)

Md., Hyattsville—Washington Suburban Sanitary Dist having plans prepared by R. B. Morse, engr., 324 North Charles St., Baltimore, for impounding waters of Patuxent, Little Patuxent and Middle Patuxent Rivers to develop water supply. Project includes construction rapid sand filtration plant, laying conduit and pipe lines for delivery by gravity flow to both gravity and first high service zones of Dist. of Columbia, Laurel Twp., Camp Meade and Washington Suburban Sanitary Dist., including Hyattsville, Riverdale, Brentwood, Mt. Rainer and Bladensburg Twps. About $2,500,000.

Md., Myersville—Company will be organized here to build water system, to include standpipe with 40,000 gal. daily capacity. Address Mayor.

Minn., Foley—City election about Mar. 1 to vote on $40,000 bonds to build water and sewerage systems, to include 65,000 gal. steel tank and 1000 gal. pump and motor. Chute & Bradley, St. Cloud, engrs.

Mont., Baker—City having preliminary plans and surveys made by Burns & McDonnell, engrs., 400 Interstate Bldg., Kansas City, Mo., for improving water-works and sewerage systems.

Mo., Carrollton—Water, Light & Transit Co. plans to install modern water filtering system and make other improvements to property. S. J. Jones, Carroll Exch. Bank Bldg., pres.

Okla., Ada—City plans election soon to vote on $85,000 bonds to extend waterworks. Former election defeated. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engr. Noted Feb. 13.

Okla., Altus—City had plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, for extensions to water system, including construction of storage reservoir and main by-pass dams with 6 mi. earth canal. About $100,000.

Okla., Carnegie—City defeated $12,000 bonds to improve and extend water-works. Noted Jan. 30.

Okla., Cement—City voted $20,000 bonds to build water-works.

Okla., Enid—City plans election to vote on $350,000 bonds to build water and sewer systems. Black & Veatch, 507 Interstate Bldg., Kansas City, Mo., engrs.

Okla., Guthrie—City having preliminary plans prepared by Black & Veatch, engrs., 507 Interstate Bldg., Kansas City, Mo., building complete water-works system. About $250,000 available for project.

Okla., Henrietta—City having plans and surveys made by Burns & McDonnell, engrs., 400 Interstate Bldg., Kansas City, Mo., for improving water-works system. About $250,000.

Okla., ~~Madill~~—City having plans prepared by Benham Eng. Co., engrs., Colcord Bldg., Oklahoma, for improvements to water-works. Bonds for $60,000 voted for project.

Okla., Pauls Valley—City having plans prepared for extension to water-works and sewerage system. About $25,000. W. E. Moore, 1006 Campbell Bldg., Oklahoma, engr.

Okla., Perry—City plans to expend $100,000 to improve water-works and electric light plant.

Okla., Poteau—City rejected bids building water-works system. Work will be readvertised. About $95,000. A. W. Lindsey, clk. Noted Dec. 20.

Okla., Tusla — City soon receives bids building 150 ft. rein.-con. stack, also installing boilers and 12,000,000 gal. pump and new water supply intake system. R. E. Cuvian, comr. water-works.

Colo., Denver — See "Excavation and Dredging."

Ariz., Florence—Town voted $60,000 bonds for water-works system and $20,000 for electric power plant. Noted Jan. 30.

N. B., St. John—City plans to install additional water works at Lake Fitzgerald. About $15,000.

Ont., Ottawa—City solicitor recommended that Bd. Control extend water facilities to all householders. About $20,000. A. F. McCallum, City Hall, engr.

Alta., Edmonton—Waterworks Dept., petitioned City Comrs. to appropriate $69,250 to install 4 steel filters and new water basin.

B. C., Vancouver—City having preliminary surveys made to determine best location for providing water storage in Seymour Valley for supplying Vancouver water-works system. About $10,000. F. L. Fellowes, city engr.

BIDS DESIRED

N. J., Jersey City—Until Mar. 25, by city, furnishing and laying 39,590 ft. 72 in. riveted steel pipe line between Boonton Reservoir and west entrance of Watchung Tunnel. About $1,500,000. C. Potts, 30 Church St., New York City, consultg. engr.

O., Akron — Until Feb. 28, by H. S. Morse, dir. pub. serv., Delaware Bldg., furnishing 2 horizontal steam turbine driven, direct connected, centrifugal boiler feed water pumps, normal capacity 65 to 75 g.p.m. against total head 462 ft.; steam to be supplied at approximately 175 lb. pressure and 100 degrees F. superheat; advertised in this issue.

Mich., Wyandotte—Until Mar. 18, by E. C. Bryan, city clk., furnishing and installing 2 low lift motor driven centrifugal pumping units (one 2100 gal. per minute and other 4200 gal.); also for steam driven pumping unit, 5,000,000 gal. capacity; horizontal, cross compound crank and fly wheel pumping engine. R. W. Pratt, Hippodrome Bldg., Cleveland, O., engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Poughkeepsie—State Hospital Comn., Capitol, Albany, received bids, Feb. 11, building intake crib in Hudson River, thence to filters, installing new filter, changing water main and reservoir at Hudson River State Hospital here, from C. R. Simpson, 90 West St., $57,888; H. E. Fox Constr. Co., 81 East 125th St., $58,000; New York Sewage Disposal Co., 37 East 28th St., $62,997. All contractors of New York City. Noted Jan. 30.

★O., Maple Heights—Village let contract building water pipe line in Dunham Rd. and Orchard Ave., to W. B. Smith, 10933 Detroit Ave., Cleveland; $5381. Work involves 2600 ft. 6 in. steel pipe. Noted Jan. 16.

★Mich., Detroit—City let contract furnishing 2000 tons 48 in. c.i. water pipe, to U. S. Cast Iron Pipe Co., 122 South Michigan Blvd., Chicago, $61.60 per ton; also 6 48 in. gate valves, to Flower Valve Co., Clayton and Parkinson Sts., $2625 each. Noted Feb. 13.

★Mich., Detroit—City let contract furnishing 1000 tons 6 in. c.i. pipe and 1000 tons 8 in. c.i. pipe, to J. B. Clow & Son, Harrison St. Bridge, Chicago, $61.60 per ton. Noted Jan. 23.

★Cal., Los Angeles—E. Firth, 346 South Bway., will install pump and wood tank and lay 3 mi. 2-6 in. O. D. pipe in tract at 99th, 108th, Main and Figueroa Sts. Work will be done by day labor.

Sewers

PROPOSED WORK

Mass., Reading—State Legislature, Boston, petitioned to build sewerage system here. Cost between $300,000 and $500,000.

Conn., New Haven—See "Miscellaneous."

N. J., Butler—Town having preliminary plans prepared installing sewerage system.

N. J., Montclair—City plans to build storm sewer in Norwood Ave. Cost between $32,000 and $35,000.

Pa., Blairsville—See "Buildings."

Pa., Pittsburgh—Council passed ordinance to rebuild old and build new 9, 12 and 15 in. vitr. sewers, in Methy, Jackson and Wyandotte Sts., Parody Way and Soho Playgrounds. About $30,000. N. S. Sprague, city engr.

Wis., Chilton—City having plans prepared by J. Donahue, engr., Sheboygan, building 3000 ft. 6 in. sewer mains and 3000 ft. ¾ in. water connections.

Wis., La Crosse—City plans to build 2 mi. trunk sewer during year. About $50,000. G. P. Bradish, City Hall, engr.

Wis., West Allis—City soon receives bids laying sewers in Pullen Ave. from 64th Ave. to Fair Grounds, 74th Ave. from Jersey St. to Honey Creek, Jersey St. from 54th to 57th Ave., Burnham St. from 54th to 57th Ave., South Burnham St. from 60th to 150th Ave. W., thence across railway tracks through alley west of 60th Ave. to Mitchell St., thence east on Mitchell St. to 60th Ave. Work involves 5501 ft. 10-42 in. pipe, 215 ft. 12 in. and 644 ft. 10 in. laterals, 13 manholes and 34 catchbasins. E. G. Orbert, city hall, engr.

Ia., Malvern—City receives bids about Apr. 1, installing 16,000-18,000 ft. 8 and 10 in. sanitary sewers. Archer & Stevens, 609 New England Bldg., Kansas City, Mo., engrs.

Ia., Iowa City—City having plans prepared for trunk sewer along west bank of Iowa River. About $20,000. C. T. Day, Iowa City, engr. Noted Dec. 19.

Mont., Baker—See "Water-works."

Tex., Denton—City election Mar. 4 to vote on $100,000 bonds to extend sewers.

Okla., Ada—City defeated $10,000 bond issue to extend sewers. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs. Noted Jan. 2.

Okla., Cement—City voted $25,000 bonds to build sewerage system.

Idaho, Nampa—City plans to build 8—15 in. mains and submains in 85 blocks of streets in North and South side of city, 1800 ft. 15 in. vitr. pipe trunkline mains, also 700,000 gal. disposal plant. Work involves flush tanks, manholes and pump to handle 200,000 gal. per min. L. R. Cook, City Hall, engr. Noted Feb. 6.

Okla., Enid—See "Water-Works."

Ariz., Phoenix—City will ask State Legislature to enact law permitting tile drainage system to be substituted for proposed pumping drainage system; $100,000 bonds have been sold for project. L. B. Hitchcock, city engr.

Wash., Spokane—City postponed project building down town intercepting sewer in Main Ave. from Lincoln to Stevens Sts., Stevens St. from Main to 1st Aves., 1st Ave. from Stevens to Howards Sts., Riverside Ave. from Stevens to Bernard Sts., Bernar St. from Riverside to Sprague Aves., Washington St. from Riverside to Sprague Aves., etc. About $250,000. A. D. Butler, city engr. Noted Jan. 23.

Ore., Hillsboro — City plans to install sewerage and drainage systems in northern and eastern sections of city.

Ont., Simcoe—See "Streets & Roads."

B. C., Vancouver—City plans to build following sewers: Beach Ave. extension, cost $25,000; 25th Ave. lateral sewer, $6720; outfall sewer for serving Hastings, Pender, Carrall and Columbia Sts., $5120; St. Georges St., from 15th to 16th Aves., $1660; Raymour Ave. sewer from Clark Dr. to Union St., $140,000; branch sewer in Cassiar St., Hastings Townsite, to relieve area between Renfrew and Slocan Sts., as far as Hastings St., $103,000; diversion of sewage from Commercial Dr. at Powell St. to connect with Clark Dr. interceptor, $28,000. F. L. Fellowes, city engr.

BIDS DESIRED

Mich., Detroit—Until Feb. 27, by J. A. Martin, comr. dept. purchases & supplies, Real Estate Exch. Bldg., furnishing and delivering f.o.b. cars on sidings to be designated by Dept. of Purchases & Supplies, vitr. sewer crocks, elbows and Y's of various sizes.

Cal., Seal Beach—Until Feb. 27, by A. Dyson, city clk., building sewerage system, involving 49,000 ft. 6-18 in. pipe, 76 manholes, Imhoff tank, 3 pumps, etc. About $40,000. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs.

Ont., Hamilton—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Syracuse—Syracuse Intercepting Sewer Bd. let contract building Divs. 3, 4 and 5 of Onondaga Creek Impvt. and main intercepting sewer, to J. Young, Bastable Blk., $543,327. Project includes 2 mi. creek improvement and 1.3 mi. intercepting sewer and involves 111,500 cu.yd. excav. and 18,000 cu.yd. concrete. Noted Feb. 13.

O., Akron—Dept. Pub. Serv. received bids building main trunk sewer in Sewer Dist. No. 4; lowest 3 were F. A. Downs Constr. Co., vitr. segmental block, $180,943; monolithic concrete, $185,901; rein.-con. pipe, $187,772; brick pipe, $189,312; Donnelly, McKeon & Stevens, vitr. segmental block, $182,172; brick, $208,442; W. McDowell & Sons Co., vitr. segmental block, $185,284; brick, $193,987.

Sewers (Continued)

Mich., Ford (Wyandotte P. O.)—G. K. Molino, village clk., received bids Feb. 6 extending sewerage system and replacing present outlet, from G. R. Cooke, Penobscot Bldg., Detroit, $101,887; T. C. Brooks & Son, Jackson, $110,386; G. Pontarelli, Chicago, $114,449. Work involves trenching, laying pipe and backfilling complete sewerage system, involving 2022 ft. 24—33 in. concrete pipe, 49,663 ft. 8—22 in. vitr. pipe and 400 ft. 12 in. concrete outlet pipe to replace present outlet, 154 manholes, 212 catch basins, 7 lamp holes, 290 ft. c. i. pipe. Noted Jan. 30.

Bridges

PROPOSED WORK

Mass., Springfield—Springfield Special Bridge Comn., will soon submit plans for bridge over Connecticut River to connect Springfield and West Springfield. About $2,000,000; cost to be borne by city, Hampden Co. and West Springfield Twp.

N. J., Newark—Essex Co. (Newark) and Hudson Co. (Jersey City) plan to paint bridges over Passaic and Hackensack Rivers. About $40,000. F. A. Reimer, engr.

N. J., Newark—Essex Co., (Newark), and Hudson Co., (Jersey City), plan joint appropriation for preliminary surveys, estimates, etc., for construction of bridge over Newark Bay between here and Bayonne. F. P. Reimer, co. engr. of former county and J. J. Wasser, engr. of latter.

N. J., Newark—Essex Co., (Newark), and Morris Co., (Morristown), having plans prepared rebuilding Columbus and Hanover Cook bridges over Passaic River. About $70,000. F. P. Reimer, Court House, Newark, co. engr.

Md., Cumberland—Comrs. Allegany Co., plan to build 2 steel span bridges, concrete sub-structure, on 2 road crossings over Town Creek. About $12,000. D. P. La Fevre, 3rd National Bank Bldg., engr.

W. Va., Parkersburg—Comrs. Wood Co. (Parkersburg), and Pleasant Co. (St. Marys), plan to build 65 ft. concrete bridge over Bull Creek between 2 counties. Cost between $20,000 and $40,000. J. W. Alexander, Parkersburg, engr.

O., Sharon—See "Railways."

Wis., Oshkosh—City having plans prepared by C. E. Parsons, engr., Jefferson, building concrete span bridge over Fox River on Washington St. About $100,000.

Wis., Reedsbury—City plans to build 2 span, rein.-con. bridge. About $25,000. H. E. French, City Hall, Baraboo, engr.

Wis., Superior—Comrs. Douglas Co. receive bids in May for following concrete bridges; Hanson Bridge over American River, five 20 ft. rein.-con. spans, cost, $18,000; Little Amnicon Bridge on Uncon St., one 24 ft. rein.-con span, $5000; pile bent bridge and several wooden bridges over ravines and timber trestles, $13,000.

Ia., Ft. Dodge—City plans to build concrete viaduct over Des Moines River. W. O. Tang, city clk.

Ia., Iowa City—Hardin Co. having plans prepared by B. Gardener, engr., building rein. con. bridge over Elk Run. C. Boylan, aud.

Mont., Butte—City plans to build 90 ft. rein.-con. bridge, 25 ft. wide, over Silver Bow Creek. About $10,000. W. H. Ellis, city engr.

Idaho, Nampa Ferry—State Highway Comn., Boise, soon receives bids building steel bridge over Snake River in Canyon Co. About $65,000.

Ore., Hood River—Hood River Co. having surveys made building bridge 150 ft. long over Indian Creek on Brookside Dr., and one 250 ft. long over Rail Creek, East Barrett Dist., also widening Neal Creek Rd. Total cost, $15,000. A. Crublshand, co. engr.

Ore., The Dalles—See "Streets & Roads."

B. C., Fernie—Dept. Pub. Wks., Victoria, soon lets contract building 250 ft. wooden highway bridge, 16 ft. wide, over Elk River consisting of 3 pile foundations, and 3 timber piers to carry one 119 ft. and one 102 ft. Howe truss spans, and involves 2000 lin.ft. wooden piling, 83,000 ft. B. M. fir, and 7 tons iron castings. About $15,000. A. E. Forman, Victoria, engr.

BIDS DESIRED

Conn., New Canaan—Until Feb. 28, by C. J. Bennett, comr. state highway dept., building 3 span rein.-con. T beam bridge over Blackberry River on Canaan-Lakeville Rd.

Conn., Thomaston—Until Feb. 28, by C. J. Bennett, comr., state highway dept., Hartford, building rein.-con. T beam bridge over Naugatuck River on Morris Rd.

W. Va., Lewisburg—Until Mar. 4, by Greenbrier Co., building concrete bridge over Wades Creek, on James River and Kanawha Pike, 1 mi. east of White Sulphur Springs. F. K. Rader, co. engr.; advertised in this issue.

N. D., Grand Forks—Until Feb. 25, by H. Anderson, aud. Grand Forks Co., building several wood, steel, and concrete bridges during 1919. About $40,000.

Okla., Holdenville—Until March 5th, by Hughes Co., building bridges in Dustin Twp. W. L. Bartlett, co. clk.

Cal., Eureka—Until Feb. 24, by State Highway Comn., Forum Bldg., Sacramento, building timber drawbridge, 712 ft. long, 21 ft. wide, with concrete trestle approaches, including movable span, tower and fenders complete, etc., over Eureka Slough, Humboldt Co. Work involves 902 cu.yd. rein.-con. for trestle deck, 112 cu.yd. concrete in abutments, 101.9 tons steel, 3360 lin.ft. concrete piling, etc. A. B. Fletcher, engr. Noted Jan. 23.

Ont., Ottawa—Until Apr. 16, by Dept. Pub. Wks., building steel highway bridge over Ottawa River, between Ottawa and Hull, Que., 234 ft. long, 41 ft. wide, having double track car line with 7 ft. sidewalk on each side. Work involves about 1000 cu.yd. concrete, 250 tons steel and 400 cu. yd. stone. About $150,000. D. Laphew, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Laceyville—Supt. Pub. Grounds & Bldgs., Harrisburg, let contract building bridge here, to Whitaker & Diehl, Union Trust Bldg., Harrisburg. Work involves 1 new pier, facing pier No. 2 and abutments, ripraping new pier and also Piers 2 and 3, new bridge seats to be placed on new pier and abutments, etc.; pier is 25 ft. to foundation and involves 850 cu.yd. rein.-con. and 12½ tons steel. About $36,715.

★Pa., Selinsgrove—Snyder Co. (Middleburg), let contract building 190 ft. bridge over Penn's Creek, near here, 18 ft. wide, consisting of two 82 ft. spans, solid barrel arch with special precast rail, involving 1300 cu.yd. rein. con., 25 tons steel, 1000 cu.yd. fill and 3 cofferdams, to Whittaker & Diehl, Union Trust Bldg., Harrisburg. About $32,895.

★Ky., Louisville—Comrs. Jefferson Co. let contract building steel frame with creosoted wood block floor bridge over Salt River to Capitol Constr. Co., Ruggery Bldg., Columbus, O. About $38,000.

★Wis., Oshkosh—City let contract building bascule bridge over Fox River, on Light St., 200 to 300 ft. long, to Scherzer Rolling Lift Bridge Co., 5454 Everett Ave., Chicago. About $200,000. Noted Jan. 16.

★Minn., Duluth—Comrs. St. Louis Co. let contract building 30 steel bridges, I-beam type, 22 ft. span, 16 ft. roadway, to Wausau Iron & Bridge Co., Wausau, Wis.

Structural Steel

PROPOSED WORK

O., Sharon—See "Railways."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—See "Industrial Works."

Reinforced Concrete

PROPOSED WORK

Md., Cumberland—See "Industrial Works."

S. C., Charleston—See "Industrial Works."

O., Sharon—See "Railways."

Ill., Chicago—See "Buildings."

Okla., Tulsa—See "Waterworks."

Cal., Los Angeles—See "Buildings."

BIDS DESIRED

Cal., Eureka—See "Bridges."

Cal., Quincy—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—See "Industrial Works."

★N. J., Elizabeth—See "Industrial Works."

★Md., Canton (Baltimore P. O.)—See "Miscellaneous."

Streets and Roads

PROPOSED WORK

Mass., Boston—City had plans prepared widening Centre St. from South to Spring Sts., grading and laying asphalt and bituminous pavement, concrete base, 6300 ft. long, 80 ft. wide. About $250,000. A. F. Bates, engr. highway division.

Mass., Medford (Boston P. O.)—State Legislature, Boston, petitioned to authorize Metropolitan Park Comn., 18 Tremont St., Boston, to build road to connect Middlesex Falls Parkway and Mystic Valley Parkway in Medford and Winchester Twps. Cost to exceed $10,000.

Mass., Norton—State Legislature, Boston, petitioned to authorize State Highway Comn., to complete 4 mi. of Main St. in Norton and Easton Twps., to join state road going through Stoughton and Brockton Twps.

Mass., Revere (Boston P. O.)—State Legislature, Boston, petitioned to direct Metropolitan Park Comn., 18 Tremont St., Boston, to acquire lands to extend Winthrop P'kway to junction of Revere St. and Sewall Ave., Revere and Winthrop Twps., Winthrop Twp. to construct seawall and roadway over land now owned by state at same point and to expend $310,000 for same. A. Walsworth, mayor.

Mass., Salem—Comrs. Essex Co. applied to State Legislature, Boston, for authority to build highway from Turk's Head Inn, Rockland, (Plymouth Co.) over Marshes to Atlantic Rd., Gloucester. Cost to exceed $10,000.

Conn., Milford—City plans to build Beach Rd. from railroad station to Walnut Beach, concrete, 10,000 ft. long. About $40,000.

Conn., New Haven—City plans to issue $300,000 bonds to construct permanent pavements on various streets. F. L. Ford, city engr.

Conn., New Haven—City soon lets contract improving various streets, involving 33,000 sq.ft. tar and cement sidewalks, 2800 sq.ft. driveways, 15 cu.yd. concrete coping, 11,000 sq.ft sidewalk (top dress) and 1100 sq.ft. driveway (top dress.) F. L. Ford, city engr.

Conn., Waterbury—City plans to issue $500,000 bonds to pave various streets. R. A. Cairns, city engr.

N. Y., Jordan—Village plans to build 1 mi. tarvia macadam street, 16 ft. wide. About $17,500. C. L. Meech, pres.

N. Y., Oswego—City plans to issue $150,000 bonds to improve Mitchell St. Rd., Bridge and Erie Sts. J. F. Flanigan, city engr.

New Jersey—State Highway Dept., State House, Trenton, appropriated $275,000 for road work in Middlesex Co., $150,000 for work in Morris Co. and $75,000 for work in Monmouth Co. W. G. Thompson, engr.

N. J., Bridgeton—Comrs. Cumberland Co. receive bids in March, grading and surfacing with gravel, 2.3 mi. Port Norris-Mauricetown Rd., 30 ft. wide, involving 9000 cu.yd. gravel and 8500 cu.yd. sand and loam. About $25,000. W. M. Sharp, engr.

N. J., Burlington—Burlington Co. plans to grade and pave 3½ mi. Burlington-Florence Rd., 18 ft. wide. About $36,000. Work involves 15,870 sq.yd waterbound macadam, 6 in. deep and 2600 cu.yd. excav. J. Logan, Mt. Holly, engr.

Streets and Roads (Continued)

N. J., Hoboken—City having revised plans prepared paving 4th St. from Hudson to River Sts., 11th St. from Clinton to Madison Sts., 14th St. from Madison to Jackson Sts. About $100,000. J. O. Whittemore, city engr.

N. J., Long Branch—City soon receives bids paving Ocean Ave., probably brick. E. E. Throckmorton, city engr.

N. J., Newark—Rd. Com. will ask Bd. Freeholders Essex Co. to issue $605,000 bonds to improve roads. F. A. Reimer, co. engr.

N. J., Newark—Bd. Comrs. considering paving Clinton Ave. from West Newark branch of Pennsylvania R. R. to Chadwick Ave., Springfield Ave. from Morris Ave. to city line, South St. from Pacific St. to New Jersey R. R. Ave., South Orange Ave. from Springfield Ave. to South 9th St., Wilson Ave. from Ferry to London Sts., Sussex Ave. from High to Summit Sts. M. R. Sherrard, city engr.

N. J., Newark—City plans to open portion of Haynes Ave. from Meadow Rd., northerly, to East Peddie St. M. R. Sherrard, city engr.

N. J., Trenton—Mercer Co. (Trenton), and Monmouth Co. (Freehold), having surveys made by H. F. Harris, engr., Trenton, and G. D. Cooper, engr., Red Bank, for regrading and surfacing with gravel, 4½ mi. Old York Rd. from Allentown to Heightstown, 30 ft. wide.

Md., Baltimore—Bd. Awards soon receives bids repaving, recurbing and regrading 6260 ft. Lanvale St. from Payson St. to Druid Hill Ave., 750 ft. Payson St. from Lanvale to Mosher Sts., 790 ft. Lafayette Ave. from Fulton Ave. to Payson St., 690 ft. Edmondson Ave. from Fremont to Clinton Aves., 660 ft. Brune St. from Franklin to Harlem Aves., 1520 ft. Clinton Ave. from Franklin to Myrtle Aves., 1465 ft. Argyle Ave. from Lanvale to Sewell Sts., 785 ft. McElderry St. from Milton to Linwood Aves., 1200 ft. McElderry St. from Wolfe to Chester Sts., 1180 ft. Madison St. from Patterson Park Ave. to Luzerne St., 1700 ft. Collington Ave. from Ashland Ave. to Biddle St., 1700 ft. Lakewood Ave. from Baltimore to Monument Sts., 650 ft. Jefferson St. from Milton to Lakewood Aves., 650 ft. Orleans St. from Milton to Lakewood Aves., 2250 ft. Randall St. from Hanover to Covington Sts., 680 ft. William St. from Clement to Randall Sts., 740 ft. Battery Ave. from Gittings to Randall Sts., 1460 ft. Covington St. from Fort Ave. to Wells St., 530 ft. Covington St. from Gittings to Falsum Sts., 430 ft. Clement St. from Light to Williams Sts., 960 ft. Grindall St. from William to Covington Sts., 1163 ft. Clement St. from Riverside Ave. to Key Highway, 350 ft. Poultney St. from Light to Patapsco Sts., 325 ft. Barclay St. from Chase to Biddle Sts., 1190 ft. Forrest St. from Monument to Eager Sts., 325 ft. Forrest St. from Chase to Biddle Sts., 970 ft. Ashland Ave. from McKim to Aisquith Sts., 1515 ft. Somerset St. from Madison to Biddle Sts., 40 ft. wide, sheet asphalt on 6 in. concrete base with armored concrete curbing; also 3000 ft. Jordan Alley, from Biddle St. to North Ave., 1520 ft. Camel Alley from Madison to Cathedral Sts., 220 ft. Brexton St. from Eager to Cathedral Sts., 15-20 ft. wide, cement and concrete. R. K. Compton, ch. engr.

Md., Baltimore—City having plans prepared by Carrere & Hastings, consulting engrs., 52 Vanderbilt Ave., New York City, extending North Howard St. 4 blocks to Mt. Royal Sta., 1600 ft. long, 66 ft. wide, 40 ft. from curb to curb. Plans include grading, concrete curbing and paving with sheet asphalt on concrete foundation.

Md., Baltimore—City Comrs. for Opening Sts. plan to extend Mosher St. from Payson St. to Gwynns Falls Pkway., 4320 ft long, 40 ft. wide, including grading, armored concrete curbing and sheet asphalt pavement on 6 in. concrete base; project also involves lowering bed of Pennsylvania R.R. tracks (Baltimore & Potomac Div.) and building overhead crossing. City will pay $10,000 and railroad between $15,000 and $20,000. R. M. Cooksey, city engr.; G. R. Sinnickson, supt. railroad, Baltimore Div.

Md., Baltimore—City Comn. for Opening Sts. plans to resurface Woodbrook Ave. from Fulton to North Aves., Druid Hill Ave. from Fulton to North Aves., Francis St. from Fulton to North Aves., Lynbrook Ave. from Pennsylvania to Woodbrook Aves., Ruskin Ave. from Pennsylvania Ave. to Evergreen Terrace, Avalon Ave. from Parkwood Ave. to Evergreen Terrace, Edgemont Ave. from Parkwood Ave. to Evergreen Terrace, Clifton Ave. from Pennsylvania Ave. to Francis St., Falls Rd. from 36th St. to point 600 ft. south, Wellington Ave. from Chestnut St. to Elm Ave., 34th St. from Chestnut St. to Cedar Ave., 35th St. from Chestnut St. to Elm Ave., Barclay St. from North Ave. to 25th St., sheet asphalt over cobbles. J. M. McCummings, engr.

Md., Baltimore—City Paving Comn. having plans prepared by R. K. Compton, ch. engr., repaving Lancaster St. from President St. to Bway., Dock St. from Block to Caroline Sts., Point St. from Philpot to Docks Sts., Fairmount Ave. from Wolfe to Lakewood Sts., brick or re-cut granite blocks; Columbia Ave. from Greene to Fremont Sts., Lexington St. from Guilford to Calvert Sts., Charles St. from Read to Chase Sts., Bway. from Fleet to Thames Sts., Madison Ave. from Orchard to North Aves., Winder St. from Hanover to Light Sts., Light St. from Cross to Wells Sts., Pratt St. from Parkin to Carey Sts., Exeter St. from Lombard St. to Eastern Ave., Stiles St. from East Falls to Central Aves. and Little Gough St. from Central Ave. to Granby St., sheet asphalt on 6 in. concrete base.

Md., Cumberland—Comrs. Allegany Co. receive bids in March or April, paving and grading 4 mi. Cresaptown Rd. from here to Cresaptown, 20 ft. wide with 5 ft. dirt shoulders, concrete pavement on concrete base, topping 8 in. center, 6 in. edges. About $175,000. Cost to be borne by county with state aid. D. P. LaFevre, 3rd Natl. Bank Bldg., engr.

Md., Frederick—Comrs. Frederick Co. soon let contract rebuilding 1.99 mi. Harmony Rd. between Middletown and Harmony, 14 ft. wide, with 5 ft. dirt shoulders, macadam or concrete pavement on concrete base. About $50,000. J. N. Mackell, 601 Garrett Bldg., Baltimore, engr.

W. Va., Bluefield—City plans to pave Price St. from Bluefield Ave. to Rogers St., concrete. B. G. Scott, city engr.

W. Va., Clarksburg—Harrison Co. plans to pave Northwestern Turnpike from Wolf Summit to Ten Mile Dist. line, Clarksburg-Fairmont Pike, Clarksburg Western Pike and Johnson Fork Rd., total length 9½ mi., 20 ft. wide G. M. Harbert, co. engr.

W. Va., Martinsburg—City soon receives bids paving about 20 blocks with asphalt macadam. Cost $70,000. G. Sparrow, engr.

W. Va., Morgantown—Monongalia Co., Cass Dist., will vote Mar. 29, on $300,000 bonds for road improvements. W. S. Downs, co. engr.

N. C., East Spencer—City plans to issue $50,000 bonds for improving streets and schools.

S. C., Spartanburg—Comrs. Spartanburg Co. soon let contract paving 2 mi. Appalachian Highway, 1.9 mi. Cedar Springs Rd., asphaltic concrete, brick or concrete; also grading and top soiling 9.5 mi. Blackstone Rd., 7 mi. Buncombe Rd. and 3 mi. Woodruff Bridge Rd. P. F. Patton, co. highway engr.

Ala., Attalia—City plans to build 1½ mi. pavement on sections of 3rd, 4th and 5th Sts.

Miss., Meadville—Franklin Co. plans to issue $100,000 bonds to build roads.

Miss., Moss Point—City plans to repair or rebuild 4 mi. hard surfaced streets. C. M. Farley, clk.

Miss., Senatobin—Tate Co. plans to issue $150,000 bonds to build 60 mi. gravel roads.

La., Abbeville—Police Jury Vermillion Parish plans election to vote on $300,000 bonds to build gravel roads in 8th Ward.

Ky., La Grange—Oldham Co. soon lets contract grading and ditching 2½ mi. road, 12 ft. wide, water bound macadam. About $18,000. P. Neal, La Grange, engr.

Ky., Louisville—Comrs. Jefferson Co. plan to build 3 mi. road, 16 ft. wide, rock asphalt and macadam. About $36,000. M. Deane, co. engr.

Ky., Shelbyville—City receives bids in spring paving about 1000 ft. Main St. from 6th to 8th Sts., 36 ft. wide, rein.-con., involving 3600 sq.yd. concrete 8 in. in center and 6 in. at curb, excavating present macadam street, etc. Cost, $12,000.

O., Bellaire—City plans to curb, pave and build sidewalks on 6000 ft. West 23rd St. 20 ft. wide, crushed slag. About $21,000. W. J. McClain, engr.

O., Cincinnati—Comrs. Hamilton Co. plan to repair Cleves and Warsaw Pike; Hillside Ave., Asbury Rd., Blue Rock Pike, Union Cemetery Rd., Hamilton-Cleves Pike, Princeton Pike, Camargo Pike and Springdale Rd., brick and macadam. About $60,000.

O., Columbus—City plans to grade, drain, curb and pave ¾ mi. High St. from Oakland Ave. to northern corporation limits, asphalt, 60 ft. wide, and ¼ mi. Bellevue Ave. from Hawkes to Glenwood Ave., 32 ft. wide, asphalt or brick. H. A. Maetzel, city engr.

O., Columbus—City plans to pave Chestnut St. from High to 4th Sts., Elmwood Ave. from Donaldson St. to Livingston Ave., Stanley Ave. from Parsons Ave. to 22nd St., and alley north of Bryden Rd. from Fairwood Ave. to Rhoades St. H. Maetzel, city engr.

O., Van Wert—Comrs. Van Wert Co. plan to build 3 mi. road between Van Wert and Delphos on route of Lincoln Highway. About $300,000.

Ind., Evansville—City having plans prepared by J. D. Saunders, city engr., for improving Bray Ave. from Lincoln Ave. to Williams St.; Adams Ave. from Grand to Kentucky Aves.; Willard Ave. from Blackford to Powell Aves.; 7th St. from Locust to Gum Sts.

Ind., Indianapolis—Comrs. Marion Co. plan to grade and pave 2.74 mi. Hensley Rd., Franklin Twp., 14 ft. wide, involving 22,504 sq.yd. waterbound macadam and 11,000 cu.yd. earth excav. About $31,610; also 3 mi. Brookville Rd., 2.58 mi. English Ave., 0.75 mi. Southeastern Ave., 1 mi. Prospect St., 3 mi. 30th St. and 3 mi., Keystone Ave., concrete or brick. J. Griffith, co. engr.

Ind., Indianapolis—Marion Co. plans to grade, pave and bridge 7 mi. Allisonville Pike (3 sections); 2.35 mi. Michigan Rd., south of here; 2.25 mi. 38th St. E. all brick or concrete; grade, pave and construct culverts on 1.12 mi. Churchman Pike, 18 ft. wide, involving 11,827 sq.yd. concrete and 11,450 cu.yd. earth excav., cost $37,675; 2 mi. Washington-Pike 14 ft. wide, involving 16,427 sq.yd. gravel, and 9750 cu.yd. earth excav., $15,100. J. Griffith, co. engr.

Michigan—State will hold election Apr. 6, to vote on $50,000,000 bonds to build trunk highways throughout state. Address Highway Comn., Lansing.

Mich., Detroit—City soon lets contract paving:

St. Aubin Ave. from end of paving north of Newton Ave. to Euclid Ave., sheet asphalt, 28 ft. wide, involving 3320 cu.yd. excav., 2509 lin.ft. curbstone, 3975.5 sq.yd. sheet asphalt on 6 in. concrete base, 67.6 cu.yd. concrete under and behind curb and 143 lin.ft. retaining stone;

Blaine Ave. from west line of Dexter Blvd. to east line of Radford Ave., asphaltic concrete, 26 ft. wide, involving 2023 cu.yd. excav., 2436 lin.ft. curbstone, 3789 sq.yd. asphaltic concrete on 6 in. concrete base, 70 cu.yd. concrete under and behind curb and 194 lin.ft. retaining stone;

"T" alley between 2nd, Woodward, Bethune and Pallister Aves., 20 ft. wide, involving 596 cu.yd. excav., 1977.8 sq.yd. 1-course concrete and 797 lin.ft. 2 x 6 ft. retaining plank;

5th alley between Wilson, Byron, Hazelwood and Taylor Aves., 18 ft. wide, involving 677 cu.yd. excav., 1656.4 sq.yd. 1 course concrete, 1532 lin.ft. 2 x 6 ft. retaining plank and 34 lin.ft. retaining stone;

"East and West" alley between 12th St., Holden Ave., Ferry Park and West Grand Blvd., 18 ft. wide, involving 346 cu.yd. excav., 1073 sq.yd. 1 course concrete, 1055 lin.ft. 2 x 6 ft. retaining plank and 18 lin. ft. retaining stone;

"North and South" alley first west of Woodward Ave. from 4th to Hancock Sts., 15 ft. wide, involving 191 cu.yd. excav., 590 sq.yd. 1 course concrete, 589 lin.ft. 2 x 6 ft. retaining plank and 20 lin.ft. retaining stone;

"North and South" alley between Hamilton Blvd., 3rd St., Virginia Park and Seward Ave., 20 ft. wide, involving 535 cu. yd. excav., 1765.7 sq.yd. 1-course concrete and 1333 lin.ft. 2 x 6 ft. retaining plank;

Streets and Roads (Continued)

"North and South" alley between 2nd, 3rd Sts., Glynn Court and Calvert Ave., 19 ft. wide, involving 507 cu.yd. excav., 1731.2 sq.yd. 1-course concrete and 1617 lin.ft. 2 x 6 ft. retaining plank;

"L" alley between Byron Ave., Hamilton Blvd., Taylor and Clairmont Aves., 18 ft. wide, involving 347 cu.yd. excav., 1151.3 sq.yd. 1-course concrete and 1087 lin.ft. 2 x 6 ft. retaining plank;

"East and West" alley between 2nd, 3rd, Colburn and Antoinette Sts., 20 ft. wide, involving 310 cu.yd. excav., 915.5 sq.yd. 1-course concrete and 796 lin. ft. 2 x 6 ft. retaining plank;

Alley between Orleans, Dequindre Sts., Lafayette Blvd. and Monroe Ave., 15 and 20 ft. wide, involving 216 cu.yd. excav., 574 sq.yd. 1 course concrete and 418 lin.ft. 2 x 6 ft. retaining plank;

Alley between Brush St., Oakland Ave., Josephine and Owen Aves., 17.5 ft. wide, involving 528 cu.yd. excav., 1607.3 sq.yd. 1-course concrete and 1612 lin.ft. 2 x 6 ft. retaining plank. C. E. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving and curbing Linwood Ave., from Joy to Calvert Aves., 30 and 35 ft. wide, less single track; about $53,570; Charlevoix St., from Beniteau St. to Detroit Terminal R.R., 26 ft. wide, $27,824; Roby St. from end of present pavement to Medbury Ave., 26 ft. wide, $3900; David Ave. from Crane to Rohns Aves., 26 ft. wide, $5610; Crane Ave., from Forest Ave. to Moffat St., 26 ft. wide, $24,700; Burnett Ave., from Van Dyke to Maxwell Aves., 26 ft. wide, $7640; Linden St., from alley west of Harrison Ave. to Vermont St., 26 ft. wide, $7650; Delmar Ave., from Lynn to Caniff Sts., 26 ft. wide, $9660; Beals Ave., from Charlevoix to Mack Aves., 22 ft wide, $19,930; Newport Ave., from Waterloo to Charlevoix St., 26 ft. wide, $12,970; Tireman Ave., from Epworth Blvd. to Livernois Ave., 26 ft. wide, $20,020; Sheridan Ave., from Frederick St. to Harper Ave., 26 ft. wide, $53,590; Laura Ave., from McClellan to Pennsylvania Aves., 26 ft. wide, $9430; Navahoe and Algonquin Aves., from Avondale to Essex Aves., 26 ft. wide, $11,520 and $12,480 respectively; Barker St., from McClellan to Cooper Sts., 26 ft. wide, 5940; Elsa Ave., from McClellan St. to Pennsylvania Ave., 26 ft. wide, $9200; Canfield Ave., from Van Dyke to Maxwell Aves., 26 ft. wide, $7850; Davidson Ave. from Herman to 12th Sts., 24 ft. wide, $15,870; all sheet asphalt on concrete foundation. Also paving following alleys: "L" alley between Byron, Hamilton, Taylor and Clairmont Aves.; between Brush St., Oakland, Josephine and Owen Aves.; "T" alley between Duboise and Chene Sts., Lyman and Milwaukee Ave., $6700; "T" alley between Sheridan, Townsend, Kercheval and Waterloo Aves.; "T" alley between 14th St., Wabash Ave., Magnolia and Linden Sts.; "T" alley between Rivard, Russell and Hancock Sts. and Warren Ave.; "T" alley between Beechwood, Firwood and Seebaldt Aves. and Allendale St.; "T" alley between Ironwood, Beechwood, Oregon and Vancouver Aves.; "T" alley between Vinewood, Taft, Scovel and Grand River Aves.; "T" alley between Commonwealth, Trumbull, Calumet and Canfield Aves.; "T" alley between 14th, 15th, Poplar and Buchanan Sts.; "T" alley between Commonwealth, Trumbull, Putnam and Merrick Aves.; "T" alley between Riopelle, Orleans, Clinton and Mullett Sts.; east and west alley between 12th, 14th St., Delaware and Seward Aves.; all alleys between Linwood, La Salle and La Mothe Aves. and La Salle Gardens, S.; 1st alley north of and parallel to Standley Ave. from 6th St. easterly to North South alley; between Grand River, Winslow and McGraw Aves.: "L" alley between Dunedin and 12th St., Bethune Ave. and La Salle Gardens, S.: "L" alley between Commonwealth, Trumbull, Kirby and Hudson Aves.; "L" alley between Trumbull and Lincoln Aves., Brainard and Selden Sts.; "L" alley between 3rd St., Hamilton, Gladstone and Hazlewood Aves.; "T" alley between 2nd and Cass Aves., Charlotte and Peterboro Sts.; "T" alley between Commonwealth, Trumbull, Hudson and Stanley Aves.; "H" alley between National and Trumbull Aves., Elm and Ash Sts.; east and west alley between Beechwood, Grand River, Spokane and Maplewood Aves.; north and south alley between 1st alley west of Woodward from Forest to Hancock Aves.; north and south alley between Vinewood Ave., West Grand Blvd., E St. and Michigan Ave.; north and south alley between Garland Ave., St. Clair St., Charlevoix and Goethe Aves.; north and south alley between Avery, Commonwealth, Forest and Hancock Aves.; north and south alley between John R. and Brush Sts., Baltimore and Milwaukee Aves.; north and south alley, east of Chene St., between Chene St., Grandy, Piquette and Trombley Aves., also east and west alley, $3100; 1st alley west of and parallel to Avery Ave., from Hancock to Warren Ave.; north and south alley between Cameron and Richmond Aves. from 330 ft. south of Custer to Custer St., $2250, 1 course concrete, 18-20 ft. wide. H. H. Esselstyn, comr.

Mich., Port Huron—D. D. Worcester, mgr. bd. rd. comrs., St. Clair Co., Port Huron, soon lets contract grading, draining and surfacing 8 mi. Assessment Rd. No. 8, gravel, and 10½ mi. Rd. No. 10, gravel, concrete, brick or penetration road, 16 ft. wide.

Ill., East St. Louis—Bd. Local Impvts. soon lets contract paving 1500 ft. State St. from 33rd to 37th Sts., concrete, 42 ft. wide. About $32,000. E. F. Harper, city engr.

Ill., Moline—City plans to pave streets and alleys near Government tract here, about 1400 ft. long, 60 ft. wide. L. Paten, city engr.

Wis., Kenosha—City plans to pave Middle, Ridge, Division, Charles, North Fremont, Julius and Wisconsin Sts., South Hownand, South Howland, Durkee and Howe Aves., South Sheridan Rd. and Park Row. P. J. Hurtgen, city engr.

Wis., Lancaster—Comrs. Grant Co. plan to grade, drain, surface and build culverts on Trunk Highway No. 28, Dubuque Rd. About $27,000. F. W. Balsley, Madison, engr.

Wis., Plymouth—City plans to pave South, Reed, Selma and Main Sts., and Western and Hein Aves.

Wis., Racine—City plans to pave following streets: Carlisle St. from St. Patrick St. to Rapids Dr., cost, $26,175, sheet asphalt; Osborne St. from Kinzie to Graceland Sts., $18,855; Grange St. from Wright St. to St. Paul Ry., $26,430; Prospect St. from Erie to Marquette Sts., $13,760; 17th St. from Wisconsin to Holborn Sts., $18,242; Albert St. from Forest to Summit Sts., $20,430; Yout St. from Michigan to La Salle Sts., $27,109, Yout St. from La Salle to Douglas Sts., $20,363; Milwaukee St. from State to High Sts., $41,592; Asylum St. from 20th St. to West Blvd., $45,174; Lake Ave. from 2nd to 5th Sts., $15,993, all brick on concrete; 10th St. from Wisconsin to Center Sts., $11,134; Pearl St. from 10th to 11th Sts., $3893; 11th St. from Pearl to Washington Sts., $1613; Hilker Pl. from 10th to 11th Sts., $4128; 8th St. from Lake Ave. to Center St., $18,314; 9th St. from Lake Ave. to Center St., $16,424, all asphalt concrete; Howland St. from West 6th to Clayton Sts., $9995, asphalt macadam; 7th St. from Main to Grand Sts., $9840, brick on macadam. P. H. Conolly, engr.

Wis., Superior—City plans to pave Weeks Ave. between 18th and 21st Sts., concrete. M. G. Buckley, clk.

Wis., Superior—City soon lets contract paving 7 blocks Lamborn Ave. between 3rd and Main Sts. W. B. Banks, City Hall, engr.

Wis., Superior—City soon receives bids paving Tower Ave. between 28th and 58th Sts., concrete. W. B. Banks, City Hall, engr.

Wis., Superior—Comrs. Douglas Co. will receive bids in May for following road work: Central State Rd., at Solon Springs, 4940 cu.yd. excav., 8 cu.yd. concrete culverts, 2000 cu.yd. gravel surfacing; Dobie Rd., Hawthorne Twp., 4946 cu.yd. excav., 600 lin.ft. 4 in. tile; Spaulding Ave., Parkland Twp., 6715 cu.yd. excav., 110 cu.yd. concrete culverts, 1260 ft. guard rail; Brule Rd., Brule Twp., 1120 cu.yd. gravel surface, 845 cu.yd. trench excav.; Ashland Rd., Brule Twp., 1200 cu.yd. gravel surface, 563 cu.yd. trench excav., 2120 cu.yd. gravel; Rossiter Ave., South Range Twp., 955 cu.yd. trench excav., 7955 sq.yd. waterbound macadam; Lakeside Rd., Lakeside Twp., 8915 cu.yd. excav., 19 cu.yd. concrete culverts; Highland Rd., Brule Twp., 3000 cu.yd. excav., 16 cu.yd., concrete culverts; Black River Rd., Superior Twp., 9000 cu.yd. excav., 35 cu.yd. concrete culverts, 400 lin.ft. guard fence, 500 ft. 4 in. tile. Total cost, including bridges, $85,000.

Ia., Elliott—City receives bids about latter part of March for 30,000 sq.yd. paving and 12,500 ft. curb and gutter. T. S. De Lay, Creston, engr.

Ia., Malvern—City receives bids about Apr. 1 paving approximately 50 blocks, brick. Archer & Stevens, 609 New England Bldg., Kansas City, Mo., engrs.

Minn., Duluth—City plans to expend $2,000,000 for paving, curbing and guttering various streets during year. Bids will be received about Apr. 1. B. Farrell, st. comr. L. A. Ayres, City Hall, engr.

Minn., Grand Rapids—City plans to expend $40,000 for repaving streets. G. Wagner, City Hall, engr.

Minn., Marshall—City had surveys made for 2½ mi. paving to be laid this season. O. H. Sterk, engr.

Kan., Wichita—Sedgwick Co. receives bids about May 1, paving 12½ mi. South Lawrence Rd., brick. M. Roseberry, co. engr.

Neb., Fairbury—City plans to pave 4th, D and E Sts. and alleys, total length 6000 ft., 26-40 ft. wide. About $75,000.

Neb., Lexington—City soon lets contract paving with 3 in. brick, asphalt filler, blocks Main St., 50 ft. wide. About $80,000. Work involves 20,200 sq.yd. vertical fibre brick on 5 in. gravel concrete base. J. C McNamara, North Platte, engr.

Neb., Lincoln—City soon receives bids repaving 27th St., asphaltic concrete over old brick; paving Worthington Ave., sheet asphalt; Starr and 33rd Sts., asphaltic concrete; repaving Dist. No. 66; paving Dists. Nos. 405, 403 and 409, 25-40 ft. wide. About $36,000. Work involves 850 sq.yd. asphalt, 215 sq.yd. concrete, 15,800 sq.yd. asphaltic concrete, 8600 sq.yd. 5 in. concrete base, 275 lin.ft. concrete curbing and 5660 lin.ft. concrete curb and gutter. T. H. Berb, clk.

Montana—State Highway Comn., Helena, plans to grade 30 mi. Skalkaho Project in Ravalli, Granite and Deer Lodge Counties. About $105,000. Cost will be borne by Ravalli and Deer Lodge Counties, State Highway Comn. and U. S. Forest Service. P. D. Pratt, state highway engr.

Mont., Billings—City plans to pave 15,800 sq.yd. streets in Dist. No. 160, cost about $48,000; 8700 sq.yd. in Dist. No. 161, $29,000; also 5500 lin.ft. concrete curbing and 31,600 sq.ft. concrete sidewalk in new district not yet formed. E. M. Sneckenberger, Billings, engr.

Mont., Bozeman—City plans to build ½ mi. bitulithic road, 36 ft. wide; about $26,000. C. Widener, engr.

Mont., Butte—City plans to repave 3250 sq.yd. of Quartz St. About $10,000. W. H. Ellis, city engr.

Mont., Livingston—Comrs. Park Co. plan election about Apr. 14, to vote on $200,000 bond issue to build roads. Work to be done under state and Federal cooperation.

Tex., Denton—City election Mar. 4 to vote on $100,000 bonds to improve streets.

Tex., El Paso—City soon lets contract paving Davis St. from end of pavement to Union Depot to Overland St. C. Davis, mayor.

Tex., Fairfield—Comrs. Freestone Co. soon let contract surfacing and building drainage structures on 17.22 mi. Exall Highway from Fairfield to Streetman. J. J. White, Tyler, engr.

Tex., McKinney—City plans to build asphalt streets. About $120,000. Election will be held Mar. 12 to vote on $50,000 bonds to finance part of project. C. Schulf, engr.

Tex., Wichita Falls—City soon lets contract paving 12 blocks Elizabeth, Brook and Denver Aves., concrete. Work involves 9304 cu.yd. excav., 11,134 lin.ft. 6 in. concrete curb and 20,526 yds. concrete paving. L. C. Hinkley, city engr.

Okla., Frederick — City plans to build 1½ mi. road, crushed rock and asphalt. About $20,000 available for work. H. N. Naylor, secy., chamber commerce.

Streets and Roads (Continued)

Okla., Oklahoma—City passed resolution to pave Dewey Ave. from 19th to 23rd Sts.; Chickasaw Ave. from Bway. to Santa Fe tracks; Philips Ave. from 10th St. to Park Pl. and alley in block 52, University Addition. B. M. Hart, engr.

Okla., Stratford—City soon lets contract building roads and bridges. About $85,000. W. E. Moore, 1006 Exch. Bldg., Oklahoma, engr.

Okla., Wewoka—Comrs. Seminole Co. plan to build roads and bridges in Econtuchka Twp. to cost $50,000; Wolf Twp., $25,000; Konawa Twp., $25,000; Red Mound Twp., $38,000. W. E. Moore, 1006 Exch. Bldg., Oklahoma, engr.

Ariz., Tucson—Supervs. Pima Co., has accepted $15,000 loan to build road from Pinal Co. line to Dailys Camp, provided similar loan is granted to build road from Three C Ranch to county line. W. C. Goetz, engr.

Washington—State Senate, Olympia, appropriated $50,000 for widening, grading and improving portion of Olympia Highway between Duckabush and Brinnon.

Wash., Seattle—Bd. Pub. Wks. soon receives bids grading ¼ mi. Holyoke Way, et al. 40 ft. wide. About $23,500. Work involves 30,000 cu.yd. grading. A. H. Dimock, city engr.

Wash., Seattle—Bd. Pub. Wks. plans to grade, fill and pave 1 mi. West Spokane St., et al. 34 ft. wide, brick, to cost $180,000 or concrete, $152,000. Work involves 150,000 cu.yd. fill and 22,300 sq.yd. paving. A. H. Dimock, city engr.

Wash., Waterville—Comrs. Douglas Co. receive bids in April improving 6½ mi. road between Withrow and Sunset Highway. About $30,000.

Wash., Yakima—City plans to pave South 3rd Ave. and portion of Bway. to city limits. About $46,000. W. C. Mainn, city engr.

Ore., Astoria—City plans to improve and build retaining wall and earth fills in Exchange St. from 13th to 14th Sts., grade, pave, curb and build side walks on Niagara Ave. from 8th to 11th Sts., redress pavement on 16th St. from Duane to Irving Sts., brick pavement from Grand to Irving Sts., pave Franklin St. from 2nd to 5th Sts., grade and pave 3rd St. from Klaskanine to Lexington Sts., 45th St. from Astor St. to public landing and 2nd St. from Niagara to Klatkanie Sts. G. T. McClean, city engr.

Ore., Marshfield—City considering paving Sherman Ave. from Washington to Delaware Sts., 52 ft. wide; also building sewer in Sherman Ave. E. K. Burton, city engr.

Ore., Oregon City—Clackamas Co. appropriated $40,000 to grade portion West Side Highway from Multnomah Co. line to West Linn. State Highway Comn. will pave road when graded and sufficiently settled.

Ore., Roseburg—Douglas Co. plans to build road, 60 ft. wide, in Dists. 20, 22 and 34, and one in Dists. 23 and 24; also open new road in Dist. 51. M. B. Germond, co. engr.

Ore., St. Helens—State Highway Comn., Yeon Bldg., Portland, retained several engineers to cross section Columbia Highway between Deer Island and Scappoose, Columbia Co., to obtain data preparatory to calling for bids on project. Noted Jan. 23.

Ore., Salem—Marion Co. plans to build hard surface roads through county beginning at point opposite Newberg, to Donald, Aurora, St. Paul, West Woodburn, Scotts Mills, Mt. Angel, Turner, Silverton, Stayton, Marion, Sublimity, Wheatland, Rosedale and Macleay. About $1,000,000.

Ore., The Dalles—City plans to pave Liberty, Union, 7th and 9th Sts.; also build bridge on 9th St. J. A. Garron, Northwestern Bank Bldg., Portland, city engr.

California—Representatives of various Chambers of Commerce, Automobile Clubs, Hotels, etc., will meet in Fresno, Feb. 28, to plan construction of 70 mi. highway from Merced to El Portal to provide new road into Yosemite Valley. Project includes grading, paving, building bridges, culverts, etc. About $1,700,000.

Cal., Bakersfield—Bd. Supervs. Kern Co., has $350,000 available as its share toward building section of valley to coast road from Lost Hills via Cholame Pass. Plans include concrete paving, concrete bridges, culverts, etc.

Cal., Bakersfield—City receives bids about Mar. 1, grading, paving, draining, etc., 3 mi. in 17th, Q and Cedar Sts., including concrete pavement with bitulithic surface on ½-in. concrete base, concrete curbing, cement sidewalks, concrete gutters, etc. About $75,000. Noted Jan. 2.

Cal., Fresno—Fresno Co. plans election in March to vote on $5,000,000 bonds to pave and grade 270 mi. concrete road throughout country. D. M. Barnwell, clk. Noted Dec. 26.

Cal., Fresno—C. Dillon, city clk., receives bids in April, grading, paving, draining, etc., Mariposa St. from M to Divisadera Sts., Franklin Ave., from Van Ness to Coast Aves., P St. from Tulare St. to Southern Pacific Ry. and Mono St. from P St. to Santa Fé Ry., 4 in. concrete pavement with 1½ in. bitulithic surface, concrete gutters, cement curbs, artificial stone sidewalks, etc. C. Murray, city engr.

Cal., Los Angeles—Bd .Supervs. Los Angeles Co. plan to pave 5½ mi. concrete road from Castiac to Ventura Co. line, 18 ft. wide. About $60,000. Work will be started after July 1. F. H. Joyner, Hall of Records, co. engr.

Cal., Madera—Bd. Superv. Madera Co. considering proposal made by owners United Farm Lands, Chowchilla Twp. About $225,000; $150,000 to be borne by land owners if county will pay remainder to build 20 mi. concrete road from Chowchilla to Pachea Pass Rd. thence 3 mi. through Merced Co. to Robertson Blvd.

Cal., Merced—City receives bids in March improving Alameda St., 2 blocks J St. and about 18 blocks of alleys, 4 in. concrete pavement, grading, concrete guttering, cement curbing, cement sidewalks, draining, etc. About $60,000. C. D. Martin, city engr.

Cal., Merced—Merced Co. having plans prepared building 14.2 mi. concrete highway from Merced to Madera Co. line and 8.98 mi. from Livingston via Center Camp Rd. Blewett Rd., etc. About $1,250,000 will be expended on road work in county. A. E. Crowell, co. surv. Noted Feb. 13.

Cal., Sacramento—City receives bids in March paving 13th St. from R to X Sts., 1½ in. asphalt on 4 in. concrete base, involving 1283 cu.yd. excav., 113,951 sq.ft. pavement; 14th St. from Q to X Sts., 1215 cu.yd. excav., 117,696 sq.ft. pavement; 16th St. from Q to X Sts., 582 cu.yd. excav., 117,696 sq.ft. pavement; P St. from 38th to 39th Sts., 384 cu.yd. excav., 11,954 sq.ft. pavement, 1276 sq.ft. sidewalk, 597 lin.ft. curbing and guttering; P St., from 2nd to 7th Sts., 180 cu.yd. excav., 61,280 sq.ft. pavement. F. C. Miller, city engr.

Cal., San Bernardino—Bd. Supervs. San Bernardino Co. directed county surveyor to prepare estimate for grading 2½ mi. road from Mohave to Seely Flat.

Cal., Santa Barbara—F. B. Taggart, city clk., receives bids in March paving, guttering, curbing and draining Yanonali St. between State and Anacapa Sts., 6-in. concrete pavement with 1½-in. Warranite surface, etc. A. B. Cook, city engr.

Ont., Barrie—Simcoe Co. Council plans to expend about $150,000 to build roads.

Ont., Brockville—Leeds and Grenville Counties receive bids in spring building various roads through counties. About $50,000. Address W. Richards, Brockville.

Ont., Cornwall—Glengarry, Stomont and Dundas Counties receive bids in spring repairing about 433 mi. county roads. About $250,000. Address A. I. McDonnel, Cornwall.

Ont., Perth—Lanark Co. receives bids in spring building various roads in county. About $100,000. W. A. Moore, clk.

Ont., Simcoe—Town plans to pave streets and build sewers. About $20,000. W. McCall, clk.

B. C., Vancouver—City plans to grade and rock 260 ft. roadway on Coal Harbor Causeway, 16 ft. wide, water bound macadam. About $12,000. F. L. Fellowes, City Hall, engr.

B. C., Vancouver—City plans to grade and rock various streets and lanes, cost about $267,000; repair rocked streets, $40,000; replace planked streets with rock, $208,000. F. L. Fellowes, City Hall, engr. Noted Sept. 5.

BIDS DESIRED

Connecticut—Until Feb. 28, by C. J. Bennett, comr., state highway dept., Hartford, building River Rd. from Avon to Farmington, 9938 ft. long, native stone; Groton-Poquonic Bridge Rd. Groton Twp., 13,933 ft. long, native stone; 7300 ft. Barnum Ave., hassam concrete, Warrenite, topeka or asphalt, Stratford Twp.; Waterbury-Thomaston Rd., 7258 ft. long, concrete or topeka on 6 in. concrete base; Clintonville Rd., North Haven Twp., 2950 ft. long, native stone.

N. Y., New York—Until Feb. 25, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving 4th Ave., from 32d to 34th Sts and from Lexington to 4th Aves., 2nd hand granite block on sand foundation.

Md., Baltimore—Until Feb. 26, by Bd. Awards, resurfacing and curbing 1 block each of Boone St., Homewood, Oak Hill and Cecil Aves., between North Ave. and 20th St., sheet asphalt on cobbles, 40 ft. wide, each block 350 ft. long, cost, $35,000; also paving and curbing 1 block each, of Hillsdale, Norfolk, Ulman and Rock Rose Aves., between Reisterstown Rd. and Towanda Lane; Towanda Lane (16 ft. wide), from Hillsdale to Rock Rose Ave., Tioga Pl. from Liberty Heights Ave. to Reisterstown Rd., all 30 ft. wide, except Towanda Lane, sheet asphalt on 6 in. concrete base, 1½ in. binder and topping, placing armored concrete curbing, etc.; cost, $75,000. J. M. McCummings, engr. Noted Feb. 13.

Va., Portsmouth—Until Mar. 3, by Norfolk Co., building 2 mi. concrete road and 1 mi. macadam road from Ocean View to Willoughby Spit. About $40,000. R. B. Preston, Norfolk, engr.

Ga., Augusta—Until Mar. 4, by Comrs. Richmond Co., furnishing labor and materials for paving about 2 mi. road beginning at city limits. W. W. Hunter, engr.; advertised in this issue.

Ala., Moulton—Until Apr. 7 (change of date), by Comrs. Lawrence Co., grading, draining and surfacing 7.38 mi. Decatur and Sheffield Rd., chert or gravel. Work involves 26,331 cu.yd. earth excav., 13,300 cu.yd. surfacing, 278 cu.yd. concrete and 525 lin.ft. vitr. pipe. Noted Jan. 16.

Miss., Charleston—Until Mar. 3, by Comrs. Tallahatchie Co., Beats 4 and 5, graveling and surfacing 21 mi. road with bituminous material, involving 35,000 cu. yd. pit run gravel, 2750 cu.yd. screenings and 101,000 gals. road oil. D. S. Henderson, Sumner, clk. H. L. French, 11 South 2nd St., Memphis, Tenn., engr.

Miss., De Kalb—Until Mar. 4, by Supervs. Kemper Co., De Kalb, grading, graveling and draining roads in Dists. Nos. 1 and 2, Federal Aid Project No. 9, between Electric Mills and Porterville, total length 5.8 mi., involving 3,600 cu.yd. grading, 7400 cu.yd. gravel, 400 lin.ft. culvert pipe. X. A. Kramer, Magnolia, engr.

Miss., Starkville—Until Feb. 28, by Supervs. Oktibbeha Co., grading and graveling roads in Dist. No. 2. About $60,000. E. C. Thomas, Starkville, engr.

La., New Iberia—Until Mar. 10, by H. S. Sealy, mayor, paving Main St. and Railroad Ave. About $150,000. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr. Noted Jan. 23.

Ohio—Until Feb. 28, by State Highway Comn., Columbus, building roads as follows:
Athens Co., Sect. "K-2," Logan-Athens Rd., 1.496 mi., brick on rolled stone base, cost $52,511.
Brown Co., Sect. "N," Cincinnati-West Union Rd., 2.8 mi., waterbound macadam, $54,378.
Butler Co., Sect. "A-1," Eaton-Middletown Rd., .625 mi., brick or wood block, $35,770.
Carroll Co., Sect. "G," Canton-Steubenville Rd., 2.34 mi. waterbound macadam, $40,576.
Clermont Co., Sect. "K-1," Cincinnati-Chillicothe Rd., 2.04 mi., waterbound macadam, $37,611.
Sect. "I-1," Cincinnati-West Union Rd., .5 mi., waterbound macadam, $9,979.
Sect. "J," Bethel-Chile Rd., .78 mi., waterbound macadam, $11,081.
Clinton Co., Sect. "A," Wilmington-Xenia Rd., 3.93 mi., resurfacing with waterbound macadam, $27,609.
Fayette Co., Sect. "K," Springfield-Washington Rd., 2.6 mi., water-bound macadam, $26,194.

Streets and Roads (Continued)

Lake Co., Sect. "J" and "2," Cleveland-Buffalo Rd., 7.715 mi. and 5.433 mi. monolithic brick or concrete, $251,739 and $173,111, respectively.

Sect. "B," Euclid-Chardon Rd., 2.25 mi., concrete, $48,340.

Mahoning Co., Sect. "N-1," North Lima-East Palestine Rd., 1.67 mi., waterbound macadam, $40,600.

Marion Co., Sect. "I," Marion-Upper Sandusky Rd., 5.13 mi., waterbound macadam or bituminous macadam, $117,572.

Sect. "G," Marion-Galion Rd., 1.5 mi. waterbound macadam or bituminous macadam, $34,085.

Muskingum Co., Sect. "L-2," Zanesville-Cincinnati Rd., .445 mi., tarbound macadam, $16,487.

Sect. "M-2," Zanesville-Dresden Rd., 595 mi., concrete, $16,430.

Preble Co., Sect. "G," Eaton-Greenville Rd, 2.25 mi., bituminous macadam, $53,188.

Vinton Co., Sect. "J-2," Chillicothe-McArthur Rd., 1.4 mi., two course concrete, $44,426.

Ind., Indianapolis—Until Feb. 26, by Comrs. Marion Co., grading and paving 1.91 mi Orchard Ave., 18 to 24 ft. wide, involving 22,780 sq.yd. concrete, 3700 lin.ft. concrete curbing and 14,000 cu.yd. earth excav. About $58,480. J. Griffith, co. engr.

Ind., Indianapolis—Until Feb. 26 by Comrs. Marion Co., paving 3 mi. 21st St., 18 ft. wide, involving 31,740 sq.yd. vitr. brick on 5 in. concrete base and 9000 cu.yd. earth excav. About $78,915. J. Griffith, co. engr.

Ill., Eldorado—Uitil Mar. 7, by P. T. Choisser, city clk., for 11,429 sq.yd. concrete paving an necessary grading, storm sewers, pipe inlets, brick manholes, etc. F. L. Wilcox, Syndicate Trust Bldg., St. Louis, Mo., engr.; advertised in this issue.

Ia., Ft. Dodge—Until Feb. 25, by city, paving North 3rd St. viaduct, creosoted wood blocks. W. L. Tank, clk.

Mo., St. Louis—Until Mar. 18, by Bd. Pub. Serv., building 5 brick and 9 concrete alleys, total length 2 mi. About $70,000. W. W. Horner, city engr.

Ark., Harrisburg—Until Feb. 28, by Rd. Impvt. Dist. No. 3, Poinsett Co., Marked Tree, grading, clearing, grubbing and draining 25 mi. road, 22 ft. wide, involving 185,000 cu.yd. grading, 25 acres clearing and grubbing, 20 acres grubbing, one 80 ft. bridge, two 60 ft. bridges, two 25 ft. bridges, and 95 cu.yd. concrete culverts. Pride & Fairley, Osceola, engrs. Noted Nov. 7.

Tex., Abilene—Until Feb. 25, by Comrs. Taylor Co., building 11.61 mi. gravel surfaced road, State Highway No. 1, from Tye to Trent, including concrete drainage structures. H. E. Elrod Co., 505 Interurban Bldg., Dallas, engrs.

Tex., Dallas—Until Feb. 24, by Comrs. Dallas Co., building section Millers Ferry Rd., State Highway No. 14, water-bound macadam with asphalt surface. J. E. Witt, co. engr.

Wash., Cathlamet—Until Mar. 3, by Comrs. Wahkiakum Co., rocking and improving Permanent Highway No. 2. Project involves 1290 cu.yd. crushed rock and reshaping 1 mi. road bed.

California—Until Feb. 24, by State Highway Comn., Forum Bldg., grading, graveling and draining 8.9 mi. road from point near Shandon Pumping Sta. to east San Lois Obispo Co. line, 24 ft. wide. Work involves 78,200 cu.yd. earth excav., 465 cu.yd. concrete culverts, 3500 cu.yd. gravel surface, 1000 lin.ft. guard rail and 2710 lin.ft. 12-36 in. corrugated metal pipe. A. B. Fletcher, engr.

Cal., San Diego—Until Feb. 24 (change of date) by city, paving 3½ mi. Cass and Turquoise Sts. and LaJolla Blvd., asphaltic oil and stone screening surface on 5 in. concrete base. About $79,500. Noted Feb. 6.

Cal., San Diego—Until Mar. 5, by Bd. Supervs. San Diego Co., relocating and grading 2 sections highway near Bernardo.

Ont., Cornwall—Until Feb. 28, by Road Com., paving and draining about 58 mi. roads in Stormont, Dundas and Glengary Counties, crushed stone, also building one 25 ft. span rein.-con. bridge. J. G. Cameron, Finch, clk.

Ont., Hamilton—"See Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. C., Charlotte—City let contract paving 2000 ft. 2nd, 3rd, College and 11th Sts., 28 to 40 ft. wide, involving 5000 sq.yd. asphalt on 5 in. concrete base, 800 lin.ft. granite curb and 850 cu.yd. earth excav., to Noll Constr. Co., 8 East 6th St., Chattanooga, Tenn. About $15,000.

N. C., Wilmington—City received bids paving Water St., from J. L. McGehee Contg. Co., $2.25 per sq.yd. furnishing material for base and laying brick (using own working force and machinery), $2.05 for laying concrete base; Austin-Bennett Construction Co., $0.50 for laying brick and $1.70 for concrete base. Total cost $40,000, § of which will be borne by Atlantic Coast Line.

★Florida—State Highway Dept., Tallahassee, let contract building 5.6 mi. State Road No. 1 in Madison Co., between Jefferson Co. line and town of Greenville, 16 ft. wide, involving 5 acres clearing and grubbing, 22,048 cu.yd. earth excav., 570 ft. 15-18 in. vitr. pipe, 30½ cu.yd. class "B" concrete, 650 lb. steel, 500 lin.ft. piling, etc., to W. H. Thomas, Monticello, cost. $19,528.

★Fla., Miami—City let contract filling in and building streets through subdivision, south of Deering Estate fronting Biscayne Bay, 750 ft. long, 650 ft. wide, to Bowers Southern Dredging Co., Miami. About $50,000. Project includes sea wall.

★Fla., Moore Haven—City let contract paving various streets and installing sewers in same, to Freedlund Constr. Co., 8th St. and River, Miami. About $30,000 available for project. Noted Jan. 2.

★Fla., Tallahassee—State College for Women let contract paving 1500 lin.ft. driveway, to Dawkins Constr. Co., Florida Life Bldg., Jacksonville. About $13,800. Noted Jan. 2.

★Miss., Jackson—City plans to resurface about 15,000 sq.yd. brick and asphalt pavements with asphalt. Work will be done by day labor.

★O., Cleveland—City let contract to Baldwin Bros., 560 Rose Bldg., paving and grading East 103rd St., involving 42,440-4 in. brick block, cost $28,200; Woodside Ave., 46,500-4 in. brick block, $30,792; Korman Ave., 20,220-5 in. brick block, $12,002; to A. M. Pepa Co., East 140th St., 38,815-4 in. brick block, $25,941; East 103rd St. from Union to Eliot Aves., 27,490-4 in. brick block, $18,363; to Roehl Bros., Clark Ave. and West 25th St., Poe Ave., 20,350-4 in. brick block, $12,690; West 91st St., 54,746-4 in. brick block, $34,771; West 90th St., 37,970-5 in. brick block, ,$18,508. Rieley Bros., 348 the Arcade, East 102nd St., 38,970-5 in. brick block, $18,508.

★O., Cleveland—City let contract grading and paving 75,000 sq.yd. Denison Ave., 5 in. brick block on 5 in. concrete base, to Freshwater Constr. Co., 9703 Madison Ave., $51,345; 20,000 sq.yd. Roehl Ave., 4 in. brick block on 4 in. concrete base, to Roehl Bros., West 25th St. and Clark Ave., $9080. Also paving and curbing 15,600 sq.yd. Flora Ave., 5 in. brick block on 5 in. concrete base, involving 1100 cu.ft. Berea sandstone curbing, to Rieley Bros., 384 Arcade, $7069; paving 20,000 sq.yd. Aetna Rd., 4 in. brick block on 6 in. concrete base, to Enterprise Paving Co., 8436 Bway., $10,564; repairing 16,400 sq.yd. East 128th St., 5 in. brick block on 6 in. concrete base, to Gould & Maybach, 823 East 150th St. Noted Feb. 6.

★Ind., Indianapolis—Comrs. Marion Co., let contract grading, paving and building bridges on 13,640 ft. McAlpin Rd., 20 ft. wide, involving 30,310 sq.yd. 7 in. concrete and 28,000 cu.yd. earth excav., to M. Sapirie Co., Indianapolis Ave. About $106,245.

Mich., Detroit—Dept. Pub. Wks. received bids paving and curbing:

(a) Gilbert Ave. from north line Michigan Ave. to south line Wagner St., 26 ft. wide, involving 5642 cu.yd. earth excav., 7702 lin.ft. Amherst curbing, 13,312 sq.yd. asphalt, 6 in. concrete base, 246 cu.yd. concrete under and behind curb, 1625 lin.ft. retaining stone.

(b) Anderson Ave. from north line Kercheval Ave. to south line Charlevoix Ave., 26 ft. wide, involving 3190 cu.yd. earth excav., 3236 lin.ft. Amherst curbing, 4944 sq.yd. asphaltic concrete, 6 in. concrete base, 92 cu.yd. concrete under and behind curb, 166 lin.ft. retaining stone.

(c) Trenton Ave. from north line Ferndale to south line Woodmere Aves., 26 ft. wide, involving 1784 cu.yd. earth excav., 2734 lin.ft. Amherst curbing, 4182 sq.yd. asphaltic concrete, 6 in. concrete base, 79 cu.yd. concrete under and behind curb, 228 lin.ft. retaining stone.

(d) Oregon Ave. from present pavement to east line Colfax Ave., 26 ft. wide, involving 2041 cu.yd. earth excav., 2056 lin.ft. Amherst curbing, 3053 sq.yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 78 lin.ft. retaining stone.

(e) Petoskey Ave. from north curb Joy Ave. to north line Graham Ave., 26 ft. wide, involving 1787 cu.yd. earth excav., 1965 lin.ft. Amherst curbing, 3038 sq.yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 210 lin.ft. retaining stone.

(f) Boxwood Ave. from north line Moore to south line Tireman Aves., 26 ft. wide, involving 1080 cu.yd. earth excav., 1424 lin.ft. Amherst curbing, 2178 sq.yd. asphaltic concrete, 6 in. concrete base, 41 cu.yd. concrete under and behind curb, 108 lin.ft. retaining stone.

(g) White St. from north line Jefferson Ave. to south line Harbaugh St., 20 ft. wide, involving 800 cu.yd. earth excav., 1564 lin.ft. Amherst curbing, 1866 sq.yd. asphaltic concrete, 6 in. concrete base, 46 cu.yd. concrete under and behind curb, 156 lin.ft. retaining stone.

(h) Wilson Ave. from north line Virginia Park to south line Euclid Ave., 26 ft. wide, involving 754 cu.yd. earth excav., 674 lin.ft. Berea curbing, 1058 sq.yd. asphaltic concrete, 6 in. concrete base, 19 cu.yd. concrete under and behind curb, 65 lin.ft. retaining stone.

(i) Wilson Ave. from north line Bethune to south line Pallister Aves., 26 ft. wide, involving 520 cu.yd. earth excav., 588 lin.ft. Berea curbing, 827 sq.yd. asphaltic concrete, 6 in. concrete base, 16 cu.yd. concrete under and behind curb.

(j) Wilson Ave. from north line Clairmont to south line Atkinson Aves., 26 ft. wide, involving 597 cu.yd. earth excav., 533 lin.ft. Berea curbing, 892 sq.yd. asphaltic concrete, 6 in. concrete base, 17 cu.yd. concrete under and behind curb, 104 lin.ft. retaining stone.

From the Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $55,674; (b) $21,241; (c) $17,523; (d) $13,759; (e) $13,480; (f) $9320; (g) $8389; (h) $5428; (i) $4114; (j) $4389.

W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $56,910; (b) $22,039; (c) $17,523; (d) $13,580; (e) $13,304; (f) $9368; (g) $8512; (h) $5331; (i) $4055; (j) $4436.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $57,061; (b) $22,365; (c) $17,713; (d) $13,858; (e) $13,422; (f) $9583; (g) $8558; (h) $5234; (i) $3976; (j) $4258. Noted Feb. 6.

Mich., Detroit—Dept. Pub. Wks. received bids paving, grading and curbing:

(a) Corbin Ave. from Herman to 12th Sts., 24 ft. wide, involving 3431 sq.yd. asphalt, 6 in. concrete base, 2439 lin.ft. Berea or Amherst curbing, 1609 cu.yd. earth excav., 70 cu.yd. concrete, under and behind curb, 192 lin.ft. retaining stone.

(b) Army St. from Beard to Green Sts., 26 ft. wide, involving 2059 sq.yd. asphalt 6 in. concrete base, 1454 lin.ft. Berea or Amherst curbing, 924 cu.yd. earth excav., 40 cu.yd. concrete under and behind curb 26 lin.ft. retaining stone.

(c) St. Hedwig Ave. from Lockwood St. to Junction Ave., 26 ft. wide, involving 1755 sq.yd. asphalt, 6 in. concrete base, 1064 lin.ft. Berea or Amherst curbing, 910 cu.yd. earth excav., 33 cu.yd. concrete under and behind curb, 180 lin.ft. retaining stone.

(d) Putnam Ave. from Lawton to Maybury Aves., 26 ft. wide, involving 233

Streets and Roads (Continued)

sq.yd. asphalt, 6 in. concrete base, 866 lin.ft. Berea or Amherst curbing, 690 cu.yd. earth excav., 25 cu.yd. concrete under and behind curbs, 70 lin.ft. retaining stone.

(e) Greusel Ave. from Otis to Kulic Sts., 26 ft. wide, involving 1843 sq.yd. asphalt, 6 in. concrete base, 1172 lin.ft. Berea or Amherst curbing, 995 cu.yd. earth excav., 24 cu.yd. concrete under and behind curb, 04 lin.ft. retaining stone.

(f) Wendall Ave. from Ferndale to Woodmere Aves., 26 ft. wide, involving 4834 sq. yd asphalt, 6 in. concrete base, 3183 lin.ft. Berea or Amherst curbing, 2007 cu.yd. earth excav., 91 cu.yd. concrete under and behind curb, 227 lin.ft. retaining stone.

(g) Rathborne St. from Springwells to Lawndale Sts., 26 ft. wide, involving 4919 sq.yd. asphalt, 6 in. concrete base, 3323 lin.ft. Berea or Medina curbing, 2443 cu.yd. earth excav., 92 cu.yd. concrete under and behind curb, 124 lin.ft. retaining stone.

(h) Covin St., from Fort to Krupp Sts.

From Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $15,179; (b) $8714; (c) $7831; (d) $6373; (e) $8138; (f) $20,284; (g) $21,034; (h) $10,446.

W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $15,468; (b) $9104; (c) $8203; (d) $6798; (e) $8527; (f) $21,068; (g) $22,261; (h) $10,912.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $14,820; (b) $8906; (c) $8057; (d) $6683; (e) $8382; (f) $20,707; (g) $21,369; (h) $10,642. Noted Jan. 30.

★Neb., Grand Island—City let contract curbing and paving with sheet asphalt 7568 ft. Koenig, Lincoln and Cleburn Sts., 36 ft. wide, to Watts Constr. Co., Concordia, Kan. About $86,250. Noted Jan. 30.

★Mont., Kalispell—Comrs. Flathead Co. plan to regrade and shape 250 mi. road, also gravel, scarify and regrade 20 mi. and expend $15,000 for gravel surfacing. F. P. Scott, Kalispell, engr. Work will be done by day labor.

★Tex., El Paso—City let contract building Alamogordo-Newman Rd., to El Paso Bitulithic Co., Alameda Ave. and Texas St. About $30,000.

★Tex., San Antonio—City let contract to Uvalde Rock Asphalt Co., Swearingen Bldg., for fine grading and surfacing with 2 in. bituminous trap rock, rock asphalt or bitulithic 5500 ft. New Braunfels Ave. from Van Ness to Commerce St., 30 ft. wide, $1.25 per sq.yd. (10 yr. maintenance). $.25 per sq.yd. for grading, total $36,300; preparing macadam foundation, resetting some old curb, putting in new curb, guttering and surfacing with 2 in. asphalt, 3000 ft. Foch Highway from Cincinnati to North Flores, 39 ft. wide, involving 900 sq.yd. asphalt, $1.25 per sq.yd., total, $11,250, 9000 sq.yd. foundation, $.40 per sq. yd., $3600, 3500 ft. new curb and gutter, $.65 per ft., $2275; 300 ft. resetting old curb, $.50 per ft., $150, (10 yr. maintenance), total $18,275. Noted Jan. 30.

Idaho—State Highway Comn., Boise, let contract grading, graveling and surfacing 4 mi. road from Declo to Albion, Cassia Co., to J. J. Carroll & Salmon, Burley, $29,948. Work involves 14,830 cu.yd. grading, 3380 cu.yd. rock and 6400 cu.yd. gravel surfacing. Noted Jan. 30.

★Wash., Yakima—Yakima Co. let contract hard surfacing 7½ mi. road into Naches Valley, to R. M. Hardy, Seaboard Bldg., Seattle. About $214,897. Noted Jan. 9.

★Oregon—State Highway Comn., Yeon Bldg., Portland, let contract paving West Side highway from Corvallis to Polk Co. line, type "F," to O. Huber, Sherlock Bldg., Portland, $224,260; grading 5.1 mi. road in Douglas Co., using concrete pipe, to H. J. Hildeburn, Portland; paving 11.3 mi. road, concrete on gravel, from Hillsboro to Multnomah Co. line, to A. Guthrie & Co., Sherlock Bldg., Portland, $248,935; paving 6.1 mi. road, type "D," Josephine Co., to S. S. Schell, Grants Pass, $118,717; building rein.-con. viaduct at Divide, to A. Anderson, Grants Pass, Ore., $6256; grading 2.1 mi. road in Douglas Co. through State Coach Pass, using concrete pipe, to J. Hampshire, Grants Pass, $53,220; grading 4 mi. Yamhill-Nestucca Rd., macadam, using corrugated iron pipe, to Elliott & Scoggins, McKay Bldg., Portland, $57,918. Noted Jan. 30.

Oregon—State Highway Comn., Yeon Bldg., Portland, received bids Feb. 4, grading and graveling Columbia Highway, (a) bank gravel, (b) screen gravel, from Genl. Const. Co., cost plus 12½%; A. D. Kern, (a) $238,109, (b) $241,234; Porter & Conley, (a) $226,020, (b) $226,020. Noted Jan. 30.

★Ore., Astoria—Clatsop Co. let contract grading and paving remaining section Smiths Point Rd., 16 ft. wide, 1.5 in. asphaltic concrete surface on 6 in. concrete base, to J. H. Tillman Co., Astoria, $28,582.

California—State Highway Comn., Forum Bldg., Sacramento, received only bids Feb. 17, grading 15.1 mi. and paving 11.4 mi. road, 12 ft. wide on 4 in base, between Tecade Divide and San Diego Co., from O. G. Ritchie, Niles, $233,273. Work involves 66,000 cu.yd. excav., 11,140 cu.yd. concrete pavement, 390 cu.yd. concrete culvert, 2949 ft. 18-30 in. corrugated pipe, etc. Noted Jan. 30.

★Cal., Glendale—City let contract grading, paving, building cement sidewalks, etc. on East B'way, from Glendale Ave. to Verdugo Rd., 7400 ft. long, 16½ ft. wide, to G. R. Curtis, 2440 East 26th St., Los Angeles. About $43,794. Work involves 189,850 sq.ft. 5 in. concrete pavement, including grading, 22,000 sq.ft. cement sidewalks, 6810 lin.ft. cement curbs, 8500 sq.ft. grading and oiling, 926 ft. 2 in. pipe conduits, corrugated iron concrete culverts, etc. Noted Jan. 23.

★Cal., Los Angeles—E. Firth, 346 Bway., let contract curbing, guttering and building sidewalks on streets in Tract No. 3064, west of Main St. between 99th and 108th Sts., to W. F. Peck, 4568 Finley Ave. About $20,000. Plans involve 6 x 12 x 28 in. cement curbs, $.52 per lin.ft., 6 x 9 x 15 in. curbs, $.26; 3 in. sidewalks, $.10 per sq.ft.; 4 in. gutters, $.12 per sq.ft., curbs on radius, $.39 per lin.ft.

Cal., San Jose—Santa Clara Co. received bids paving 5.2 mi. Almaden Rd., concrete, and building bridge over Guadalupe Creek; lowest 3 were J. R. Doyle, San Jose, $68,449; F. R. Ritchie, Chronicle Bldg., San Francisco, $69,750; Raisch Impvt. Co., 46 Kearny St., San Francisco, $72,900.

★B. C., Vancouver—City plans to grade and rock with water bound macadam various streets and lanes. Work will be done by day labor. About $25,000.

Railways

PROPOSED WORK

Ohio—Cleveland, Cincinnati, Chicago & St. Louis Ry. Big Four Bldg., Cincinnati, acquired 17 acres at Sharon adjoining its present classification yards and plans to build gravity and classification yard for east and west traffic, to include 20,000 ft. trackage, also new eastern classification yard with 30,000 to 40,000 ft. trackage, three 20 ft. span concrete bridge, steel truss viaduct with concrete approaches, rearranging existing yards and filling and excavation work. Total cost, $750,000. C. A. Paquette, Cincinnati, ch. engr.

Texas—Dallas Ry. Co., Interurban Bldg., Dallas, plans to expend $200,000 for improvements to various street car lines in city. R. Merriwither, genl. mgr.

Excavation and Dredging

PROPOSED WORK

Mass., Fall River—Dredging—State Legislature, Boston, petitioned to appropriate $100,000 to dredge Taunton River from here to Weir Village, Taunton Twp., to improve navigation, dredged material to be deposited in adjoining land and flats.

Mass., Lynn—Dredging—State Legislature, Boston, petitioned to dredge Lynn Harbor and develop adjacent lands and to direct Metropolitan Park Comn., 18 Tremont St., Boston, to build wharf to cost $25,000; also to direct Comn. Waterways & Pub. Lands to dredge flats contiguous to northeast of main ship channel and southeast anchorage basin in Lynn Harbor and deposit dredged material on lands and flats in harbor, cost to exceed $10,000

Mass., Revere (Boston P. O.)—Excavation—State Legislature, Boston, petitioned to authorize Comn. Waterways & Pub. Lands to excavate Belle Isle inlet, to provide free passage of small boats, also to make survey of inlet preparatory to other improvements. Cost to exceed $10,000.

Ind., Indianapolis — Excavation — See "Streets and Roads."

Wis., Superior—Excavation—See "Streets & Roads."

Ia., Onawa—Drainage—Comrs. Monona Co. rejected bids repairing cut-offs of Little Sioux River D. D. No. 1, requiring moving 434,000 cu.yd. material. J. J. Riddle, aud. Noted Feb. 6.

Ia., Oskaloosa—Excavation Bd. Supervs. Mahaska Co. will re-advertise work of straightening Skunk River, involving 300,000 cu.yd. excav. Address H. H. Sheriff, 101 High Ave.

Ia., Sac City—Drainage—Sac Co. having plans prepared by A. E. Holmes, engr., Sac City, building D. D. No. 71, to include 18,000 acres. Work involves 120,000 cu.yd. open ditch excav., 8 mi. 24-38 in. tile, 2 mi. smaller sizes, also partial filling 8 mi. open ditch and necessary intakes and headwalls.

Minn., Red Lake Falls—Dredging—City submitted bill to State Legislature asking for appropriation of $100,000 to widen and straighten Red Lake River between ranges 40 and 41, Twp. 153, to outlet of Red Lake.

Minn., Tyler—Ditch—Comrs. Lincoln Co. (Ivanhoe) plan to repair, deepen and enlarge Co. Ditch No. 8. G. Thorn, civil engr.

Mont., Whitehall—Irrigation—Whitehall Irrigation Dist. will sell $200,000 bonds Mar. 25, to build earth dam, to have capacity of 20,000 acre ft. water, also 40 mi. canals. G. Baker, Whitehall, ch. engr. Noted Aug. 15.

Ark., Lonoke—Excavation—Bayou Metropolitan D.D. No. 1, Lonoke Co., plans to clean and excavate with dredge and teams bayou; involving 51,700 cu.yd. dry earth excav., 3,046,850 cu. yd. floating dredge work and 850 acres clearing. Chapline & Beard, Lonoke, attorneys.

Colo., Denver—Ditch—Mutual Carey Irrigation Co., 520 Exch. Bldg., plans to build 38 mi. ditch and large reservoir in Las Animas Co. Cost to exceed $100,000. Whiting & Laird, 520 Exch. Bldg., engr.

Wash., Yakima—Drainage—Yakima Co. Comrs. considering construction of drainage system in Wide Hollow Dist. About $80,000.

Ore., Portland—Drainage—Multnomah D. D. No. 1, Multnomah Co., plans to build dyking and drainage system to cover 8000 acres in Columbia Slough. About $350,000.

Cal., Bakersfield—Irrigation—Land owners Kern Co. formed organization and plan to build system to impound waters of Kern River to irrigate several thousand acres land. J. A. Pickle, R. T. Waters and C. G. Smith, Rosedale, Com. R. Bennett, engr., Central Bldg., Los Angeles, completed preliminary surveys.

Cal., Modesto—Irrigation—Waterford Irrigation Dist. plans election soon to vote on $200,000 bonds; $170,000 to pay for water rights and $30,000 to extend and improve irrigation works. Pumping plant will probably be installed in Tuolumne River, to lift water 110 ft. for irrigating 13,866 acres. E. N. Bryan, Modesto, engr. Noted Nov. 28.

BIDS DESIRED

N. Y., Rochester—Barge Canal Work—Until Mar. 11, by W. W. Wotherspoon, supt. pub. Wks., Capitol, Albany, completing canal from Kings Bend to Lehigh Valley R.R. crossing here, Erie Canal, Sect. 9, Contr. No. 190, involving 61,000 cu.yd. excav., 20,000 cu.yd. forming embankment, 640 lin.ft. foundation piles, 875 cu.yd. 2nd class concrete, 420 lin.-ft. 12 in. vitr. pipe, building 1 storehouse, etc. About $284,752; advertised in this issue.

Fla., Hastings—Drainage—Until Feb. 26, by Hastings D. D., building 526,062 cu.yd. open ditch and concrete and wooden bridges in St. Johns, Putnam and Flagler Counties. C. W. Maltby, secy. Ellis, Curtis & Kooker, 211 Realty Bldg., Jacksonville, engrs. Noted Feb. 13.

Excavation and Dredging (Continued)

Ind., Indianapolis — Excavation — See "Streets and Roads."

Ill., Carthage—Earthwork—Until Mar. 19, by Secy. Mississippi River Comn., 1311 International Life Bldg., St. Louis, Mo., building 75,000 cu.yd. hydraulic fill in old borrow pits and 35,000 cu.yd. levee enlargement in Hunt D. D., Hancock Co.

Ill., Quincy—Levee—Until Mar. 19, by Secy. Mississippi River Comn., 1311 International Life Bldg., St. Louis, Mo., building 210,000 cu.yd. hydraulic fill in old borrow pits and 80,000 cu.yd. levee enlargement in Lima Lake D. D.

Ia., Garner—Drainage—Until Mar. 4, by Hancock Co., (Garner) and Kossuth Co., (Algona), improving Hancock-Kossuth Joint D. D. No. 5-87, consisting of one section tile work involving 86,570 ft. 6-26 in. tile; one section open work involving 17,300 ft. 12 ft. base and 51,900 ft. 8 ft. base, estimated at 450,000 cu.yd. and 3300 ft. estimated at 4026 cu.yd. to be cleaned; 57 intakes, 11 bulkheads and 95 corrugated ingot iron outlet pipes varying in size from 8 in. x 20 ft. to 15 in. x 40 ft. C. Jacobs, aud.

Minn., Fairmont—Ditch—Until Feb. 24, by H. C. Nolte, aud. Martin Co., building Co. Ditch No. 37, involving 5350 ft. 6-14 in. tile; Co. Ditch No. 82, 70,150 ft. 6-34 in. tile, 2 bulkheads and 27 storm water inlets.

Minn., Windom—Ditch—Until Feb. 28, by Comrs. Cottonwood Co., building Co. Ditch No. 11, involving 18,300 ft. 6—24 in. tile and 1079 cu.yd. open work. About $16,750. C. W. Gove, Windom, engr. Noted Nov. 14.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wis., South Byron—Ditch—Town let contract building 3 mi. ditch in Stettbacher D. D., to Wisconsin Drainage Co., Elkhorn.

★Ia., Onawa—Canal—Comrs. Menona Co. let contract repairing main canal, D. D. No. 1, involving moving 950,000 cu.yd. material in 19 mi. ditch, to Mulgrew-Boyce Co., Dubuque. Noted Feb. 6.

★Utah, Delta—Excavation—D. D. No. 3 Millard Co. let contract for 1,380,000 cu.yd. excav., to D. A. Foley, Aitkin, Minn. Noted Jan. 9.

Industrial Works

PROPOSED WORKS

Mass., Worcester—Cutting, Carleton & Cutting, archts., 44 Front St., receive bids about March, rebuilding lumber yards to include brick office, dry kiln and several lumber sheds, for W. H. Sawyer Lumber Co., 66 Lincoln St. About $50,000.

R. I., Providence—G. Lafidian, 261 Plain St., soon receives bids building 1 story, 47 x 80 ft. brick garage, concrete flooring, on Plain St. About $25,000.

R. I., Woonsocket—Narragansett Mills, recently organized, Sayles St., plans to build plant here.

Conn., Bridgeport—A. L. Clark, 1710 Main St., purchased 140 x 180 ft. site on Cannon St. and plans to build public garage.

Conn., Hartford—P. A. Frasse & Co., Inc., 45 Boulevard St., had plans prepared building 1 story, 50 x 145 ft., concrete and brick storage building, rein.-con. flooring, concrete foundation, on Forest St. About $40,000.

Conn., New Britain—City receives bids in April building brick addition to abattoir on Rocky Hill Ave. Cost to exceed $50,000.

Conn., New Haven—New England Iron Wks., Inc., 96 Commerce St., receives bids in March building 1 story, 60 x 150 ft., brick and steel plant, concrete flooring, concrete foundation, on Albert and Welton Sts. About $40,000.

Conn., Waterbury—E. E. Benedict, archt., 51 Leavenworth St., soon receives bids building 2 story, 44 x 100 ft., concrete and brick public garage, rein.-con. flooring, concrete foundation, on South Main St., for S. L. Gottlieb, 291 South Main St. About $35,000.

N. Y., Gouverneur—Local Dairymen's League plans to build milk condensary. About $30,000 available. Address Bldg. Com.

N. Y., New York—D. Auerbach, 638 11th Ave., having plans prepared by R. D. Kohn, archt., 56 West 45th St., for 11 story, steel and brick addition to factory, rein.-con. flooring, concrete foundation.

N. Y., New York—F. Holt, 165 B'way., had plans prepared by C. B. Meyers, archt., 1 Union Sq., for 3 story, 44 x 92 ft., steel and brick repair shop and show room, rein.-con. flooring, concrete foundation, at 240-242 East 20th St. About $35,000.

N. Y., Watertown—C. R. Robinson, H. Gurnee, Ives St. Rd., Watertown, and R. H. Ganter, formed committee to organize company to build milk plant and distributing station. About $40,000.

N. Y., Watertown—Weldon Sales Co., 483 Court St., plans to build concrete and steel garage on Factory St. Cost between $50,000 and $60,000. J. J. Weldon, pres.

N. J., Camden—J. Evanson & Son, Delaware Ave. and Pennsylvania R.R. plans to rebuild factory destroyed by fire, 6 story, 75 x 100 ft. brick and steel, rein.-con. flooring. About $150,000.

N. J., Newark—M. J. Nadel, archt., 15 Clinton St., receives bids about Apr. 1, building rein.-con. and brick, factory and loft building, rein.-con. flooring, concrete foundation, at 359-361 Plane St., for J. & H. Berkowitz, 93 South Orange Ave. About $50,000.

N. J., Newark—P. B. Taylor, engr., Essex Bldg., soon receives bids building 1 story rein.-con. and brick oil plant on Wilson Ave., rein.-con. flooring, concrete foundation, consisting of storage and office buildings, garage and stable, for Amer. Oil & Supply Co., 52 Lafayette St. About $100,000.

N. J., Newark—Warner Bros., 270-274 Jelliff Ave., receives bids about Apr. 1, building 2 story, 40 x 94 ft., addition to storage building. About $25,000. F. Grad, 245 Springfield Ave., archt.

N. J., Verona—Bd. Freeholders Essex Co., Newark, plans to build power plant. J. Green, 27 Clinton St., Newark, archt.

N. J., Verona—Bd. Freeholders Essex Co., Newark, having plans prepared by J. Green, archt., 27 Clinton St., Newark, for power plant here. Runyon & Carey, 843 Broad St., Newark, engrs.

N. J., Washington—H. Christine, mayor, O. Menkel, and associates, plan to build brick hosiery mill, here. About $75,000.

Pa., Chester—Chester Shipbuilding Co., Kerlin St., plans to build 2-story, 37 x 120 ft. shop. About $25,000.

Pa., Johnstown—See "Buildings."

Pa., McKees Rocks—Pittsburgh Ry. Co., 435 6th Ave., Pittsburgh, plans to build addition to power house here, also new station at Castle Shannon and new tracks at various points. F. Uhlenhart, ch. engr.

Pa., North Wales—North Wales Machine Co., Elm St., plans to rebuild machine shop recently destroyed by fire with a loss of $25,000.

Pa., Shamokin—H. McClow, 711 North Shamokin St., purchased site on Commerce St., and plans to build 3-story brick ice cream plant.

Pa., Sharon—Sharon Motor Co. plans to build garage on Shenago St., between Silver and Pitt Sts. About $40,000.

Md., Baltimore—Bartlett-Hayward Co., Scott and McHenry Sts., and F. A. Furst, 1515 Fidelity Bldg., having preliminary plans prepared by Norton, Bird & Whitman, engrs, 1320 Munsey Bldg, for large ship repairing plant to cover 100 acres fronting on Patapsco River Plans include dry docks, marine railway, machine shops, etc. Between $4,000,000 and $5,000,000 will be expended. H. Bruce, pres. of former company.

Md., Canton (Baltimore P. O.)—J. M Jones, 1621 Park Ave., Baltimore, and associates, acquired site on 5th Ave., and plan to build tin manufacturing plant. About $500,000.

Md., Cumberland—Kelly Springfield Tire Co., Cook St., Akron, O., plans to build rein.-con. factory, here, to consist of several buildings. Cost between $2,000,000 and $2,500,000. H. B. Blanchard, c/o company, engr.

Md., Middletown—Middletown Packing Co. plans to build 1 and 2 story, 40 x 200 ft. factory and 60 x 100 ft. warehouse, concrete, brick and timber, rock and concrete foundation. Cost between $25,000 and $30,000. M. F. Holter, pres.

S. C., Charleston—R. L. Riggs, 4 Broad St., having preliminary plans prepared by J. D. Newcomer, archt., 32 Broad St., for 3 story, 159 x 170 ft. rein.-con. garage, salesrooms, repair shops and storage building. About $100,000.

S. C., Charleston—Sattile Cadillac Co., 261 Meeting St., having plans drawn by J. D. Newcomer, archt., 32 Broad St., for 2 story, 100 x 120 ft., rein.-con. garage, show rooms, storage building and repair shop on Meeting St. About $50,000.

Ga., Abbeville—Lon Dickey Tobacco Warehouse Co. plans to build 160 x 200 ft warehouse here.

Ga., Atlanta—Murray Co., Southern R.R and Foster St., plans to build a 1 story, 110 x 200 ft. steel frame gray iron foundry. About $50,000. Lockwood, Greene & Co., Healy Bldg., engrs.

Fla., Miami—Magic City Lumber Co., Lemon St. and Ave. E, purchased site on Waddell St., and plans to build 3 story, concrete or tile building. About $75,000. F. C. Goodman, pres.

Ala., Mobile—O. P. McMeans, engr., McMeans and Tripp St., Indianapolis, Ind., soon lets contract building factory here, for Dixie Fruit Products Co., 510 Majestic Bldg. About $250,000.

O., Alliance—City election Mar. 18, to vote on $200,000 bond issue to build electric-light and power plant.

O., Cleveland—Beckman Co., Fulton Rd., having plans prepared by Lockwood, Greene & Co., archts., 38 South Dearborn St., Chicago, for 2 story brick and rein.-con factory, rein.-con. flooring and concrete foundation. About $175,000.

O., Tiffin—Hollis Tractor Co., Industrial St. and Riverside Ave., plans to remodel and build 1 story addition to present plant. About $30,000.

Mich., Flint—See "Buildings."

Ill., Decatur—Comet Automobile Co., 156 South Water St., plans to build power and heating station. About $35,000.

Ill., East St. Louis—J. Downey, archt., Stockyards, receives bids about Mar. 1, rebuilding fire damaged slaughterhouse for Morris & Co., Nat'l. Stockyards. About $35,000.

Ill., Rock Falls—Rock Falls Box Board Co. having plans prepared for 3 story, 120 x 135 ft., brick and rein.-con. factory, concrete foundation. About $130,000. J. L. Carey, 208 North Laramie Ave., Chicago. engr.

Ill., Rock Island—Universal Tractor Co., branch of Moline Plow Co., 1420 3rd Ave., Moline, having plans prepared by J. D. Clark, engr., c/o Moline Plow Co., building 2 story, 60 x 250 ft. plant on 42nd St. and 3rd Ave. About $250,000.

Wis., Janesville—Samson Tractor Co., division of General Motors Corp., 88 East Congress St., Detroit, Mich., plans to build 2nd unit of its plant here, 200 x 500 ft. J. A. Craig, genl. mgr.

Wis., Manitowac—Manitowac Plating Wks., 1022 South 10th St., having plans prepared by Pitz & Peltzein, engrs., 8th and Jay Sts., building 1 story, 50 x 100 ft. plant.

Wis., Oshkosh—Challoner Co., 29 Osceola St., plans to build 2 story, 70 x 220 ft., mill construction addition to its plant. About $75,000.

Wis., Washburn—Anchor Co. plans to build shipbuilding plant, to include 120 x 200 ft. machine shop, 160 x 300 ft. punch and blacksmith shops, and 55 x 270 ft. forge and foundry.

Wis., West Allis (Milwaukee P. O.)—Allis-Chalmers Mfg. Co., West Allis St., Milwaukee, had plans prepared building 110 x 320 ft. tractor plant.

Ia., Mason City—Nat. Clay Wks. had plans prepared rebuilding plant. About $100,000. A. J. Thompson, secy.

Ia., Sioux City—Terminal Grain Corp., Grain Exch., receives bids in March building 250,000 bu. rein.-con. terminal elevator, rein.-con. flooring, concrete foundation, on 14th St. along Great Northern Ry. tracks. About $140,000. Burrell Eng. & Constr. Co., 323 South La Salle St., Chicago, Ill., engrs.

Industrial Works (Continued)

Minn., Hibbing—City having preliminary plans prepared by Holstead & Sullivan, archts., 410 Palladia Bldg., Duluth, building 3 story, 100 x 150 ft. power plant. C. Foster, supt. water & light dept.

Neb., Omaha—Iten Biscuit Co., 12th and Capitol Ave., having plans prepared for 6-story, 120 x 132 ft., rein.-con. addition to bakery, 12th and Davenport Sts. O. H. Barmettler, genl. mgr.

Neb., Omaha—State Legislature plans to appropriate $120,000 for improvements to University of Nebraska, College of Medicine, 42nd St. and Dewey Ave., to be used as follows: $40,000 for electrical apparatus, laboratory equipment, assembly room with 400 chairs, elevator, etc.; $80,000 for erection of 1 story, 30 x 50 ft. brick heating plant; also pumps, pipe covering, 150 ft. chimney stack, water-tube boilers, etc. J. Latenser & Sons, No. 632 Bee Bldg., archts.

N. D., Fargo—City plans to build 3 garages to cost from $50,000 to $100,000 each. A. R. Watkins, aud.

Mo., St. Louis—Bridge & Beach Stove Co., 1st and Valentine St., having plans prepared by E. C. Klipstein, archt., Chemical Bldg., for factory near Union and Natural Bridge Sts. H. C. Hoener, vice pres. Noted Mar. 7.

Mo., St. Louis—McQuay-Norris Mfg. Co., 2808 Locust St., plans to build factory along Oak Hill R.R. and Cooper St.

Mo., St. Louis—Valier-Spies Milling Co., Pierce Bldg., plans to build grain elevator on Marcus and Euclid Aves. About $1,000,000. Address R. Valier.

Utah, Ogden—Utah Packing Corp., Eccles Bldg., plans to build packing plant. About $200,000. A. J. Hall, pres.

Ariz., Florence—See "Water-Works."

Ore., Astoria—Astoria Pulp & Paper Co. plans to build paper mill on 11th St. and Taylor Rd. About $250,000. Blake-McFall Co., 3rd and Ankeny Sts., Portland, interested.

Ore., Portland—Astoria Flour Mills, Astoria, plans to build flour mill here, 3000 bbl. capacity. L. C. McLeod, Astoria, mgr.

Cal., Fresno—San Joaquin Light & Power Co., H and Tulare Sts., plans to build 15,000 k.w. hydroelectric plant on San Joaquin River; also improve transmission line and distribution systems. About $3,000,000 will be expended for project. Noted Aug. 22.

Cal., Los Angeles—Killefer Mfg. Co., 2209 Santa Fe Ave., plans to build factory.

Cal., Santa Barbara—Union Mill & Lumber Co., Chapala St., plans to build planing mill on East Montecito St.

N. B., Fredericton—See "Buildings."

Que., Cap de la Madeleine—River Side Lumber Co. plans to build pulp mill. About $200,000. H. Bierman, mgr., Canadian-Belgo Pulp & Paper Co., River Side, Shawinigan, interested.

Que., Cap de la Madeline—St. Maurice Paper Co. plans to build addition to mills. About $375,000. R. Louthood, mgr.

Ont., Guelph—Guelph Worsted & Spinning Co., Neeve St., plans to build addition to plant. About $200,000.

Ont., Leamington—Erie Cooperative Co., Talbot St., plans to build warehouse. About $25,000. W. R. Dewar, mgr.

Ont., Watford—Andrews Wire Co., Wall St., plans to build addition to plant and install machinery. About $60,000.

Sask., Moosomin—Town having plans prepared for installing electric light plant. About $50,000.

B. C., Kaslo—Gibson Mining Co., Gibson, plans to build concentrator here. About $25,000. C. D. Empfield, secy. and treas.

B. C., Vancouver—Mainland Eng. Co., 422 Railway St., having plans prepared by Gardiner & Mercer, archts., 827 Birks Bldg., for 2 story, 50 x 60 ft. pattern shop, 54 x 125 ft. boiler and blacksmith shop, 60 x 100 ft. foundry, 60 x 100 ft. machine shop, 50 x 250 ft. marine ways of 2000 ton capacity, jetty and office building, timber on Georgia St., near Coal Harbor. About $70,000.

B. C., Vancouver—Pacific Electric Welder & Mfg. Co., 1018 1st Ave., Seattle, Wash., plans to build 1 story factory on Industrial Island. Cost between $60,000 and $70,000, including machinery.

BIDS DESIRED

N. Y., Brooklyn—Until Mar. 19, by H. J. Nurick, archt., 951 Bway., building 2-story, 120 x 160 ft., steel and brick garage, warehouse and workshop, rein.-con. flooring, concrete foundation, Varick Ave. and Meserole St., for J. H. Werbelovsky, 83 Meserole St. About $50,000. Noted Jan. 30.

N. Y., Brooklyn—Until Mar. 19, by H. J. Nurick, archt., 957 Bway., building 1-story, 100 x 165 ft., steel and brick warehouse, garage and workshop on Jefferson St., Flushing and Wyckoff Aves. About $50,000. Owners name withheld.

N. Y., Brooklyn—Until Feb. 24, by W. Goldstein, 1668 47th St., building 1 story, 100 x 100 ft., steel and brick garage, rein.-con. flooring, concrete foundation, 6th Ave. and 62nd St. About $25,000. M. A. Cantor, 373 Fulton St., archt. Noted Jan. 16.

N. Y., Woodhaven—Until Feb. 24, by W. T. McCarthy, archt., 16 Court St., Brooklyn, building 2-story, 50 x 95 ft., steel and brick factory, rein.-con, flooring, concrete foundation, Atlantic and Freedom Aves., for Amer. Tool & Dye Co., Lexington Ave., Brooklyn. About $25,000. Noted Feb. 6.

Pa., Johnstown—See "Buildings."

Md., Baltimore—Until Mar. 5, by J. Freund, Jr., archt., 16 East Biddle St., building 4 story, 58 x 143 ft., rein.-con., steel and brick addition to bakery, rein.-con. flooring, concrete and rock foundation, on North Gay St., for City Baking Co., 500 Equitable Bldg. About $50,000.

Mich., Detroit—Morgan & Wright Tire Co., Foot Bellevue St., receiving bids building 7 story, 140 x 215 ft., brick and rein.-con. warehouse, concrete foundation. About $75,000. Lockwood, Greene & Co., 38 South Dearborn St., Chicago, engrs. Noted Jan. 23.

Wis., La Crosse—Until Mar. 20, by Bentley & Merman, archts., Linker Bldg., building 2 story, 60 x 60 ft., rein.-con. brick and steel plant on Front and Main Sts., for Tri-State Ice Cream Co. About $60,000. Noted Jan. 30.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Millis—Cliquot Club Co. let contract building power house, new bottling building and removing and rebuilding storage building, to Aberthaw Constr. Co., 27 School St., Boston. About $150,000.

★R. I., Providence—Maine Creamery Co., 69 Bway., let contract altering present creamery and building 1 story, 35 x 150 ft. and 30 x 60 ft. brick and timber addition, rein.-con. flooring and concrete foundation, on Bath St., to be used for garage, stable and office, etc., to E. H. Bigney, 17 Custom House St. About $45,000. Noted Feb. 13.

★Conn., Rocky Hill—Connecticut Fdry. Co. let contract building 1 and 2 story, 100 x 160 ft., brick and steel foundry, rein.-con. flooring and concrete foundation, to J. H. Grozier Co., 721 Main St., Hartford. About $40,000.

★N. Y., Brooklyn—H. Aaron, 1205 Eastern Pkway., will build 2 story, 112 x 200 ft., steel and brick garage, rein.-con. flooring, concrete foundation, on Classon and Atlantic Aves. About $85,000. Work will be done by day labor.

★N. Y., Brooklyn—J. Kayser, 45 East 17th St., New York City, let contract building 1 story, 50 x 55 ft., steel and brick power house, rein.-con. flooring, concrete foundation, on Classon Ave., to Gaye-Hosford Constr. Co., 299 Bway., New York City. About $60,000. Noted Jan. 23.

★N. Y., Canajoharie—Beechnut Packing Co. let contract building 4 story, rein.-con. building for conserve department and two 1 story buildings for manufacture of ginger ale, etc., to Aberthaw Constr. Co., 27 School St., Boston, Mass. About $25,000.

★N. Y., New York—Allenby Realty Corp., 448 East 167th St., will build 1 story, 48 x 278 ft., steel and brick garage, concrete foundation, on Tremont Ave. and Boston Rd., Bronx Boro. About $40,000. Work will be done by day labor.

★N. Y., New York—Chapwin Realty Co., 32 Liberty St., will build 1 story, 18 x 200 ft., steel and brick storage building, rein.-con. flooring, concrete foundation, at 446 West 56th St., by day labor. About $75,000. 512 West 56th St. Corp., lessee.

★N. Y., New York—Kohler & Campbell, 11th Ave. and 50th St., let contract building 5 story, 50 x 300 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on 52nd St. and 12th Ave., to J. H Riker, 352 West 26th St. About $40,000. Noted Jan. 30.

★N. Y., New York—A. Louy Co., 511 West 21st St., let contract building 2 story, 125 x 197 ft., rein.-con. and steel factory and garage, rein.-con. flooring, concrete foundation, to T. J. Murphy, 405 Lexington Ave. About $90,000. Noted Jan. 23.

★N. Y., New York—A. Ruth, 3rd Ave. and 168th St., will build 1 story, 125 x 176 ft. steel and brick garage, concrete foundation, Bronx Boro. About $40,000. Work will be done by day labor.

★N. J., Elizabeth—U. S. Leather Co., 17 Battery Pl., New York City, let contract building 2 story, 131 x 220 ft. rein.-con. warehouse, to Turner Constr. Co., 244 Madison Ave., New York City.

★N. J., Newark—Schofield Oil Co., Ave. R, let contract building 2 story, rein.-con., steel and brick cooperage shop, rein.con. flooring, concrete foundation, to F. Kilgus, Inc., 13 South 6th St. About $54,850.

★N. J., New Brunswick—Howe Rubber Co., Codwise Ave., let contract building 2 story, 76 x 106 ft. addition to plant, to Turner Constr. Co., 244 Madison Ave., New York City.

★Pa., Boyertown—Boyertown Burial Casket Co., 1211 Arch St., Phila., plans to build 1 story, 100 x 200 ft., rein.-con. and steel addition to woodworking plant by day labor. About $60,000.

★Pa., Clifton Heights—Clifton Yarn Mills let contract building 3 story, 65 x 130 ft. brick mill, concrete foundation, to Barclay, White & Co., 1713 Sanson St. About $60,000.

★Pa., Phila.—H. C. Derby Co., 425 Fairmount Ave., let contract building 2 story, 20 x 95 ft. addition to packing plant, rein.-con., to J. Sims Wilson Co., 1125 Brown St. About $25,000. Noted Feb. 13.

★Ill., Chicago—Melba Mfg. Co., 4237 Indiana Ave., let contract building 3 story, 65 x 65 ft., brick and timber addition to factory, brick foundation, to D. A. Crilly, 6242 Ellis Ave. About $25,000.

★N. D., Jamestown—Bridgeman-Russell Co. let contract building 2 story, 30 x 60 ft., brick addition to steam generator and condensing plant, rein.-con. flooring and concrete foundation, to Northern Constr. Co., Grand Forks, (time-material job).

★Colo., Denver—Gates Rubber Co., 999 South Bway., will build 4 story, 125 x 170 ft. factory, also 4 story, 90 x 140 ft. warehouse, both brick concrete, rein.-con. flooring, concrete foundation. About $200,000 each. Work will be done by day labor.

★Ont., Toronto—Dominion Government, Ottawa, let contract building 2 story, 60 x 150 ft. frame and stucco limb factory in connection with Military Orthopedic Hospital, to W. Williamson, Toronto. About $41,481. Noted Jan. 23.

Buildings

PROPOSED WORK

Mass., Boston—Armory—State Legislature petitioned to build armory in Dorchester Dist. Cost between $200,000 and $300,000.

Mass., Boston—Bank and Office—Boston Five Cent Savings Bank, School St., plans to build 5 story bank and office building. About $1,500,000.

Mass., Newton—Houses—C. W. Bixby, archt., 8 Beacon St., Boston, soon receives bids building 50 houses for workmen, welfare house for men and one for women, timber, on Chapel, Bridge and California Sts., Saxony-Worsted Mills, 49 Chapel St. (owner). About $180,000.

Mass., Sherborn—Prison—State Legislature, Boston, petitioned to appropriate $332,600 to remodel and improve Women's Prison here. E. C. Bagley, dir. prisons.

Buildings (Continued)

Mass., Springfield—Office—H. L. Sprague, archt., 310 Main St., receives bids in March remodelling building on Dwight St. into office for Baker Realty Trust Co., care of archt. About $75,000.

Mass., Springfield — School — Bd. Educ. plans to build 2 story, addition on Oakland St., to include assembly hall and gymnasium. About $200,000.

Mass., Worcester—Office—See "Industrial Works."

R. I., Newport—Auditorium—City plans to build auditorium and memorial hall on Thames St. F. P. Fulberton, clk.

R. I., Pawtucket—Auditorium—City plans to build memorial building and auditorium. About $100,000. H. A. Fuller, clk.

R. I., Pawtucket—Church—St. Jean Baptist congregation, 39 Quincy Ave., receives bids in spring rebuilding brick and stone, on Quincy Ave. to replace building recently destroyed by fire. About $100,000. Noted Oct. 31.

Conn., Bridgeport — Bank — Commercial Trust Co., care of J. A. Spafford, 886 Main St., purchased site at 1328-1334 Main St., and plans to build.

Conn., Bridgeport—Theatre—S. Z. Poli, 24 Church St., New Haven, plans to build 3 story, concrete, steel and brick, rein.-con. flooring and concrete foundation, on Main St., here. About $400,000. T. W. Lamb, 644-8th Ave., New York City, archt.

Conn., Danielson—Community House, etc. —Connecticut Mills Co., 175 Connecticut Mills Ave., plans to build community house on Plant St. to include auditoriums, smoking rooms, hospital, cafe and houses for employees. About $150,000.

Conn., Fairfield—Y. M. and Y. W. C. A. plans to build 2 story, 40 x 100 ft. combined building. Address C. W. Saunders, Center St.

Conn., Hartford — Auditorium — Horace Bushnell Memorial Hall Assn., 108 Gillett St., receives bids in spring building brick and stone, on Trinity St. and Capitol Ave. About $500,000. Helme & Corbett, 190 Montague St., Brooklyn, N. Y., archts. Noted Feb. 13.

Conn., Hartford—Hotel—Berenson & Moses, archts., 26 State St., receives bids in March building 5 story, 46 x 126 ft. brick, steel and timber apartment hotel, rein.-con. flooring, concrete foundation, on Farmington Ave., for N. Carabillo, 5 Edwards St. About $80,000.

Conn., Naugatuck—Y. M. C. A., Rockwell Ave., receives bids in March for 3 story brick, steel and timber building, rein.-con. flooring, concrete foundation, on Church St. About $80,000. H. L. Isbell, chn. L. W. Jallade, 37 Liberty St., New York City, archt. Noted Aug. 22.

Conn., New Britain—Fire House—City receives bids in spring building 2 story, in South End Sect. About $75,000. W. H. Hall, city engr.

Conn., New London—Business—B. A. Copp, trustee, 48 Bank St., plans to rebuild business building on Bank St., recently destroyed by fire. About $100,000.

Conn., Plainville—Stores, etc.—M. J. Unkelbach, archt., 162 Main St., New Britain, soon receives bids for 2 story, 60 x 135 ft., brick and concrete store building and bowling alleys, concrete foundation on Main St., for Neri Bros., 8 East Main St. About $50,000.

Conn., Torrington—Theatre—Meyer & Rickert, 70 East Main St., plans to build moving picture theatre on site of old Strand Theatre. About $60,000.

Conn., Waterbury—Fire House—City receives bids in summer building in Bunker Hill Sect. About $50,000. R. A. Cairns, city. engr.

Conn., Waterbury—Fire House and Police Station—City receives bids in summer building fire house and annex for police station in Waterville Dist. About $75,000.

Conn., Waterbury—Theater—S. Z. Poli, 24 Church St., New Haven, receives bids about March, for 1 story, brick and steel, rein.-con. flooring and concrete foundation, here. About $500,000. T. W. Lamb, 644 8th Ave., New York City, archt. Noted Jan. 30.

N. Y., Brooklyn—Bank—Peoples Trust Co., 181 Montague St., having plans prepared by Ludlow & Peabody, archts., 101 Park Ave., New York City, for 4 story, steel and brick, concrete foundation, at 230-232 Flatbush Ave. About $75,000.

N .Y., Gouverneur—Theater, Temple, etc., Bldg. Com. Local Lodge of Foresters plans to build theater, temple, dancing and banquet halls, etc., marble and brick, on Clinton St., here About $50,000.

N. Y., New York—Restaurant—Mouquin Restaurant & Wine Co., 20 Ann St., having preliminary sketches prepared by W. E. Bloodgood, archt., 681 5th Ave., building at 147 Fulton St. About $100,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., purchased site on Hamilton Pl. and 141st St., Bronx Boro., and plans to build teachers training school. C. B. J. Snyder, Municipal Bldg., archt.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon lets contract building 2-story, 60 x 100 ft., steel and brick addition to P. S. No. 43, concrete foundation, on Brown Pl., and 136th St., Bronx Boro. About $70,000. C. B. J. Snyder, Municipal Bldg., archt.

N. Y., New York—Synagogue—Uptown branch of congregation Kalvirean Sons of Israel, 82 West 119th St., having plans prepared by Sommerfield & Steckler, archts., 31 Union Sq., for 1 story, 34 x 100 ft., steel and brick, concrete foundation. About $50,000.

N. Y., New York—Theater—City Realty Co., 176 Bway., having plans prepared by H. J. Krapp, archt., 114 East 16th St., for 2 story, 189 x 213 ft., steel and brick, concrete foundation, at 4819-4827 Bway. between 160th St. and Ft. Washington Ave. About $100,000. B. Cleveland, pres.

N. Y., Oswego—School—Bd. Educ. plans to build. About $75,000. J. M. Hurley, city clk.

N. Y., Troy—Market—Mohican Co., 280 Bway., New York City, receives bids about Mar. 10, building 3 or 4 story, 56 x 100 ft., steel and brick, concrete foundation, at 361 River St., here. Cost between $100,000 an $150,000. Noted Oct. 31.

N. Y., Watertown—Bank—Northern New York Trust Co., 118 Washington St., plans to reface and remodel 3 story, 30 x 100 ft. brick building adjoining its present office into bank. Cost between $50,000 and $60,000.

N. J., Elizabeth—Hospital—Crow, Lewis & Wickenhoefer, archts., 200-5th Ave., New York City, receive bids in spring, building 6 story, 33 x 75 ft., rein.-con. and brick addition, rein.-con. flooring, concrete addition, on East Jersey St., for Elizabeth Genl. Hospital. About $500,000. Noted Nov. 14.

N. J., Elizabeth—Office—L. F. & H. Hersh, 207 Broad St., plans to build 8 story, 75 x 110 ft., on Broad and East Grand Sts. About $250,000.

N. J., Glen Ridge—Memorial—Boro. will issue $62,500 bonds to build memorial building, probably on Herman St. and Bloomfield Ave. Total cost, $125,000; ½ of which will be raised by popular subscription.

N. J., Newark—Club—Y. M. H. A. having tentative plans prepared building here. About $75,000. B. T. Greenfield, chn. Publicity Com.

N. J., Newark—Fire and Police Stations —City sold $200,000 bonds to build fire and police stations. M. R. Sherrard, city engr. Noted Jan. 30.

N. J., Newark—Store—L. Bamberger & Co., Halsey and Market Sts., having plans prepared by J. Hunt, archt., 30 North Michigan Ave., Chicago, Ill., building about 15 story, rein-con., steel and brick, rein.-con. flooring, concrete foundation, on Market, Halsey, Bank and Washington Sts. About $1,500,000.

N. J., Secaucus—Insane Asylum—Hudson Co., (Jersey City), plans to build here. About $600,000. J. T. Rowland, Jr., 100 Sip Ave., Jersey City, archt.

N. J., West Orange—High School—Bd. Educ. considering construction of junior high school, on Gaston St. and Lindsley Ave.

Pa., Blairsville—Hospital, etc.—S. S. Richard, Altoona, plans to build hospital and group institutional buildings, near here, consisting of administration buildings, reservoir, auditorium, nurses homes, sewage disposal plant and morgue. F. McCrooks, Jones Law Bldg., Pittsburgh, archt. G. S. Idell, 34 South 16th St., Phila., consultg. archt.

Pa., Phila.—Hotel—F. V. Nichols, archt., 4400 Manayunk Ave., receives bids in 2 weeks, building 4 story, 68 x 106 ft. brick, on Darien and Catherine Sts., for F. Palumbo. About $60,000.

Pa., Pittsburgh—Community Building—First Baptist congregation, Bellefield Ave., plans to build community house and swimming pool. About $350,000.

Pa., Tarentum—Y. M. C. A., 117 East 7th Ave., plans campaign to raise $50,000 to construct additional building, including swimming pool.

Md., Baltimore—Library and Auditorium —Trustees Johns Hopkins Hospital, Keyser Bldg., having plans prepared by Archer & Allen, archts., 47 Central Savings Bank Bldg., for 3 story, 100 x 142 ft., steel and brick, rein.-con. flooring, stone and concrete foundation, on Broadway and Monument Sts., to be known as "Henry M. Hurd Bldg." About $100,000. Noted Jan. 30.

W. Va., Elkins—College—Trustees Davies and Elkins College plans to build group college buildings to include science hall, auditorium, gymnasium, laboratory, etc.

W. Va., Martinsburg—School—City will vote on Mar. 25th on $75,000 bond issue to build 2 story, brick.

N. C., Wilson—Home—Wilson Co. plans election to vote on $50,000 bond issue to build here.

Ga., Augusta—Theater — Lenox Amusement Co. had plans prepared by G. L. Preacher, archt., Johnson Bldg., for 30 x 160 ft., brick and rein.-con., steel trusses. About $60,000.

Fla., Miami—Hotel—G. A. McKinnon 1505 15th St., soon receives bids building 7 story, on Ave. C. About $50,000

Fla., Palatka—Schools—Bd Pub. Instruction of Putnam Co. sold $85,000 bonds to build 2 schools.

Ala., Bessemer—Exchange—Amer. Telephone & Telegraph Co., Hurt Bldg., Atlanta, Ga., acquired 75 x 150 ft. site on 4th Ave. between 18th an 19th Sts., and plans to build 2 story, brick here About $60,000.

O., Cincinnati—Office and Store—Dixie Terminal Co., 1st Natl. Bank Bldg., soon lets contract building 9 and 10 story, 150 x 180 ft. office and store on 4th and Walnut Sts. Garber & Woodward, Union Century Bldg., archts. About $750,000.

O., Cleveland—Memorial—City plans to build brick, steel and rein.-con. memorial building for soldiers and sailors, rein.-con. flooring and concrete foundation, on Lakeside and Ontario Aves. About $300,000. Address M. Berbstein, 1442 East 105th St.

O., Cleveland—Mercantile—J. L. Free, 1005 Prospect Ave., having plans prepared by M. Dunning, archt., 1005 Prospect Ave., building 2 and 3 story, 80 x 200 ft., brick and steel, rein.-con. foundation, on Prospect Ave. and East 21st St. About $200,000.

O., Cleveland—Office—D. R. Hanna, 511 Leader News Bldg., plans to build 16-18 story, 199 x 210 ft., brick, steel and rein.-con., rein.-con. flooring and concrete foundation, on East 14th St. and Euclid Ave.

O., Cleveland—Theater and Office—J. Grossman, care of Standard Theater Co., East 9th and Prospect Sts., plans to build 6 story, 75 x 196 ft., brick, steel and rein.-con., rein.-con. flooring and concrete foundation, on Euclid Ave., near East 197th St. About $300,000.

O., West Unity—School—Bd. Educ. had plans prepared by Howard & Merriam, archts., 8 East Broad St., Columbus, building 3 story, 70 x 130 ft., brick and concrete. About $120,000.

Buildings (Continued)

Mich., Flint—Offices, etc.—L. F. Sunlin having plans prepared by G. Bachman, archt., building 3 story, 41 x 150 ft. brick and rein.-con. business block, to include offices, theatre and shops, tile and rein.-con. flooring, concrete foundation, on South Saginaw St. About $75,000.

Ill., Chicago—Bank and Office—State Bank of Chicago, 135 West Washington St., receives bids in spring of 1921, building 16 story 95 x 189 ft., steel and concrete bank and office, on La Salle and Monroe Sts. About $2,000,000.

Ill., Chicago—Infirmary—Comrs. Cook Co. plan to build at Oak Forest Infirmary to house 1000 adults. E. E. Hall, 11 South La Salle St., co. archt.

Ill., Duquoin—Hospital—Estate of Mrs. L. F. Browning, plans to build. About $200,000. Address M. Teague, trustee Browning Hospital.

Wis., Racine—Bank and Office—Racine City Bank, 1345 Washington Ave., having plans prepared by Van Ryn & De Gelleke, archts., 114 Grand Ave., Milwaukee, building 2 story, 40 x 82 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation. About $70,000. Noted Jan. 2.

Wis., Superior—Auditorium—City plans to build 2 story, 100 x 140 ft. About $100,000. E. B. Banks, city engr. Noted Apr. 18.

Wis., Superior — Church and School — Sacred Heart Cathedral plans to build. About $150,000. V. Meagher, 1201 Hughitt Ave., pastor.

Wis., Superior—Hall—Royal Order of Moose plans to build. About $50,000.

Wis., Superior — School — City receives bids in April building 2-story, 80 x 200 ft., with wing 1-story, 56 x 70 ft., on 21st St. between Lamborn and Weeks Sts. About $200,000. Tweed & Kerr, 534 Metropolitan Bank Bldg., Minneapolis, Minn., engrs.

Wis., Wauwatosa — Grade School — Bd. Educ. receives bids in spring building 2 story, concrete, brick and steel, rein.-con. flooring, concrete and brick foundation, on Wauwatosa Ave. About $50,000. E. O. Kuenzli, 151 Warren Ave., archt.

Ia., Menlo—School—Bd. Educ. having plans prepared by Keffer & Jones, archts., 610 Youngerman Bldg., Des Moines, building rein.-con. and brick. About $75,000.

Ia., Pella — Memorial — Central College having preliminary plans prepared by J. Verhey, archt., Pella, building brick and stone. About $75,000.

Ia., Sioux City—Infirmary—Comrs. Woodbury Co. receive bids about Mar. 5 building 2-story, 40 x 140 ft., rein.-con. and brick, on Danbury Rd. About $100,000. W. L. Steele, 502 United Bank Bldg., archt.

Ia., Tama—Hotel—Hotel Assn., c/o H. Cherry, secy., Commercial Club, plans to build here. About $75,000.

Minn., Cloquet—Church—St. Andrews Episcopal congregation receives bids about Apr. 1 building 2 story, brick, rein.-con. flooring, concrete and rock foundation, on Arch St. About $75,000. C. I. McNair, chn. bldg. com.

Minn., Duluth—Church—Grace Methodist congregation plans to build 2 story, 70 x 140 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation on 3rd St. and 26th Ave. About $75,000. J. G. Schaibly, pastor.

Minn., St. Paul—Library—City having plans prepared by C. A. Hausler, engr., City Hall, building 1 story, brick memorial library on Minnehaha Ave., east of Snelling Ave. About $70,000.

Minn., St. Paul—Store—Silverman Bros., 150 North Concord St., receives bids in spring building 5 story, 75 x 120 ft. department store, at 149 North Concord St. About $75,000.

Kan., Wichita—School and Rectory—St. Mary's Cathedral Parish plans to build 124 x 167 ft., brick and stone school to cost $70,000; rectory, $30,000.

Neb., Omaha — University — See "Industrial Works."

Neb., Ingleside—Hospital—State Legislature, Lincoln, petitioned to appropriate $125,000 to construct and equip hospital here.

N. D., Bismarck—Mansion—State plans to build Governor's Mansion here. About $140,000.

Mont., Butte—School—School Bd. had plans prepared by W. Smith, archt., Butte, building 1 and 2 story, on Gallatin St. and Shields Ave., to replace Jefferson School. Cost between $65,000 and $74,000.

Mont., Helena—Capitol—Senate Com. on Pub. Bldgs. introduced bill in State Legislature providing for issuance of bonds for refacing main capitol building with Montana granite and remodeling and refurnishing interior. About $250,000.

Mo., Fulton—Hospital—Bd. Trustees Calloway Co. having plans prepared building here. About $75,000. Noted Jan. 23.

Mo., St. Louis—Theater, Stores, etc.—S. Hamburg, Jr., mgr., Belt Investment Co., 2407 North B'way., receives bids about Apr. 1, for 6 story, 115 x 465 ft., brick, rein.-con. and steel, rein.-con. flooring, concrete foundation, on Delmar and Clara Aves. Kennerly & Stiegmeyer, Benoist Bldg., archts. Noted Dec. 12.

Mo., Webster Groves (St. Louis P. O.)—Club House—Algonquin Golf Club having plans prepared by E. C. Klipstein, archt., Chemical Bldg., St. Louis, building here. About $60,000. E. O. Hale, pres. Noted Jan. 23.

Tex., Ft. Worth—Temple—Beth-El congregation had plans prepared building here. About $75,000. G. Fox, rabbi.

Colo., Boulder—Administration, Social Center, Dormitories, Liberal Arts, etc.—State having plans prepared by Day & Klauder, archts., 925 Chestnut St., Phila., Pa., for 16 buildings on College Campus. About $2,000,000.

Colo., Greeley—Bank—Union Natl. Bank, 8th Ave. and 8th St., having plans prepared by Roeschlaub & Fuller, archts., 310 Foster Bldg., Denver, for remodelling bank here About $70,000.

Idaho, Boise—School—Independent School Dist. No. 1 having plans prepared by Wayland & Fennell, archts., Idaho Bldg., building 2 story, brick, concrete foundation, on East Bannock St. Cost, including equipment, $90,000. Bonds voted for project. Noted Sept. 26.

Ida., Caldwell—High School—School Dist. having plans prepared by Wayland & Fennell, archts., Idaho Bldg., Boise, building 2 story, concrete and brick, rein.-con. flooring, concrete foundation. About $75,000. Bonds voted for project.

Idaho, Nampa—Hospital—Tourtellote & Hummel, archts., Overland Bldg., Boise, receive bids about Mar. 5, building 40 x 152 ft. brick, concrete foundation, for Sisters of Mercy. Cost between $50,000 and $60,000.

Utah, Ogden—Offices, etc.—City and Weber Co. having plans prepared by C. Woods, archt., 1st Natl. Bank Bldg., building rein. con. and steel building, containing offices courts, library, jail and auditorium. Abou $250,000.

Ariz, Tucson—School—Bd. Supervs. Pim Co. plans to build. About $300,000. Address E. Randolph.

Ore., Corvallis—Laboratory, etc.—State Legislature, Salem, granted following appropriations to Oregon Agricultural College here: remodeling barracks, $15,000; general maintenance, $157,566; building engineering laboratory, $60,000; extension work, $38,530; experiment stations for Clatsop and Hood Counties, $28,000.

Ore., Portland—Exposition—Pacific International Livestock Assoc. plans to build exposition building on 7½ acre site, consisting of 200 x 300 ft. amphitheatre with 100 x 200 ft. show ring, etc. Total cost about $250,000. O. M. Plummer, mgr., chamber of commerce.

Cal., Los Angeles—Hotel—T. F. Curtis, 671 South Coronado St., having plans prepared by H. Albright, archt., 553 Laughlin Bldg., for 12 story, 175 x 250 ft., rein.-con., on 6th St., near Westlake Park. About $1,250,000.

Cal., Oakland—Temple and Hotel—Oakland Labor Temple Assn. plans to build 10-story, on Bway., between 17 and 18th Sts. About $700,000. G. C. Davis, mgr.

Cal., Wasco—School—Wasco School Dist. plans election to vote on $60,000 bonds to build 2 story, 146 x 182 ft., grammar school. J. M. Saffell, 16-17 New Fish Bldg., Bakersfield, archt.

N. S., Sydney—Bank—Canadian Bank of Commerce, 23 King St., W., Toronto, Ont., having plans prepared for building here. About $70,000.

N. B. Fredericton—Memorial Hall, etc.—University of New Brunswick plans to build memorial hall and laboratories. About $75,000. C. C. Jones, chancellor.

B. C., Point Grey—Schools—School Bd., Municipal Hall, Kenisdale, plans to build two 3 story, rein.-con. and brick, concrete foundation, Shaughnessy Dist. About $80,000 each. R. P. S. Twizell, 837 Hastings St., W., Vancouver, archt.

BIDS DESIRED

N. Y., Brooklyn—Hospital—Until Feb. 28 (change of date), by Bushwick Maternity Hospital, 761 Bushwick Ave., building 4 story, 75 x 100 ft., steel and brick, concrete foundation, on Bushwick Ave. and Cedar St. About $70,000. Carlson & Wiseman, 226 Henry St., archts. Noted Jan. 2.

N. Y., Brooklyn—School—Until Feb. 29, by Bd. Educ., 500 Park Ave., New York City, building P. S. No. 29, 5 story 118 x 192 ft., steel and brick, concrete foundation, Henry and Harrison Sts. About $543,474. C. B. J. Snyder, Municipal Bldg., New York City, archt. Noted Feb. 6.

N. Y., Far Rockaway — Theater — Until Feb. 24, (change of date) by T. W. Lamb, archt., 644 8th Ave., New York City, building 1 story, 44 x 250 ft., steel and brick, concrete foundation, on Central Ave., for Far Rockaway Strand Theater Co., 47th St. and B'way, New York City. About $100,000. Noted Feb. 13.

Pa., Johnstown—School—Until Mar. 17, by Bd. Dirs. School Dist., for building main school building and boiler house for group of 6 buildings known as William A. Cochran School, in 8th ward. C. H. Meyer, secy.

Ill., Chicago—Store and Office—Holabird & Roche, archts., 104 South Michigan Ave., receiving bids building 6 story, 27 ft. 9 in. x 108 ft., brick and steel, rein.-con. flooring and concrete foundation, at 127-129 South State St., here, for L. E. Waterman & Co., 191 Bway., New York City. About $175,000.

Tex., Dallas—School—Until Mar. 14, by W. B. Ittner, archt., Bd. Educ. Bldg., St. Louis, Mo., building 2nd unit Oak Cliff High School, to include auditorium, art rooms, music rooms, restrooms, lunchrooms, etc. About $200,000.

Ariz., Humboldt—School—Until Mar. 14, by A. H. Nelson, clk. bd. educ., building school here. R. N. Lamberth, Hotel St. Michael, Prescott, archt.

Cal., Firebaugh—School—Until Mar. 1, by T. E. Brown, clk. bd. educ., building school here. A. Johnson, Kingsburg, archt.

Cal., Quincy—Court House and Jail—Until Apr. 7, by Bd. Supervs. Plumas Co., building 4-story, rein.-con., rein.-con. flooring, concrete foundation. G. C. Sellon, Mitau Bldg., Sacramento, archt.

Man., Winnipeg—Dormitories, Barrack Room, etc.—Until Mar. 4, by Dept. Pub. Wks., Ottawa, Ont., constructing buildings at Military Hospital at Tuxedo Park consisting of 3 story "H" shaped dormotories with two 33 x 108 ft. side wings and 40 x 63 ft. connecting wing, stucco, on concrete foundation; 2 story, 61 x 132 ft. stucco barrack room, concrete foundation; 2 story, 86 x 94 ft. stucco recreation building on concrete piers; 3 story, 37 x 97 ft., timber and stucco medical officers residence, concrete foundation; 2 story 30 x 53 ft., timber and stucco storage building, concrete piers. About $190,000. Address R. C. Wright.

Buildings (Continued)

Alta., Edmonton — Administration, etc.—Until Feb. 24, by A. G. McKay, minister of municipal affairs, Parliament Bldgs., constructing administration and service buildings, infirmary, 3 pavilions, power house and tunnels, near Keith Sta.

B. C., Esquimalt—Hospital—Until Mar. 18, by Dept. Pub. Wks., Ottawa, Ont., building two 2 story, 80 x 100 ft. and one 1 story, 50 x 90 ft. additions to Military Hospital here to form 2 new active treatment pavilions, with additional story to Hydrotheropenic Building. About $150,000. R. C. Wright, archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., New York**—Bank—Brown Bros. & Co., 59 Wall St., let contract building 4 story, 44 x 88 ft., steel and brick, concrete foundation, at 81-83 Beaver St., to M. Eidlitz & Son, 30 East 42nd St. About $150,000.

★**N. Y., New York**—Bank—M. A. Hoyt, 28 East 36th St., let contract altering office building at 40-44 Pine St., into bank, brick and limestone, concrete foundation, to M. Eidlitz & Son, 30 East 42nd St. About $300,000. Mercantile Bank of Amer., 38 Pine St., lessee.

★**N. Y., New York**—Bank—New York Stock Exch., Broad St., let contract altering 3 story, brick and steel, at 170 Bway., to G. Richter, 100 William St. About $50,000. Zimmerman & Forshay, 9 Wall St., lessee.

★**N. Y., New York**—Home—Daughters of Jacob, 157th St., Findlay and Tuller Aves., let contract building 5 story, 100 x 150 ft., steel and brick, brick foundation, in Bronx Boro., to G. R. Davis & Co., 30 East 42nd St. About $600,000.

★**N. Y., New York**—Office—Estate of R. S. Clark, 19 Liberty St., let contract building 4 story, 25 x 100 ft., steel and brick, concrete foundation, at 89 Maiden Lane, to J. Kennedy & Co., 1133 Bway. About $50,000. Natl. Surety Co., 115 Bway., lessee. Noted Jan. 16.

★**N. Y., New York**—Office—E. K. Stalle Estate let contract building 30 story, 51 x 99 ft., steel and brick addition, concrete foundation, on 42nd St. between Bway. and 7th Ave., to Subway Central Bldg. Corp., 1482 Bway. About $1,500,000. United Land & Stores Co., 44 West 18th St., lessee.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., received bids building (a) P. S. 6, 5 story, 60 x 142 ft., brick and steel, concrete foundation, Tremont and Bryant Aves.; (b) P. S. 57, 5 story, 118 x 192 ft., steel and brick, concrete foundation, Crotona Ave. and 181st St., Bronx Boro. Lowest 3 were Nugent Constr. Co., Park Ave., (1) $218,080, (b) $456,282; T. A. Clark Co., (a) $206,000, (b) $510,300; P. J. Brennan & Sons, (a) $243,000, (b) $476,000. Noted Feb. 6.

★**N. J., Newark**—Market—Coöperative Market Co., 28 Peshine Ave., let contract building 1- and 2-story, 206 x 300 ft., concrete, steel and brick rein.-con. flooring, concrete foundation, on Hunterdon St. and 15th Ave., to F. Fatzler Co., 810 Broad St. About $300,000.

★**Pa., Phila.**—Fire and Police Stations and Stable—Dept. Pub. Safety, let general contract building and completing 1 and 2½ story, 96 x 98 ft. and 46 x 103 ft. fire house, police station and stable, on 24th and Ritner Sts., to F. G. Stewart, 1619 Sansom St., $289,000; heating to C. E. Monday & Co., 1318 Olive St., $31,820; electric work, to Electro Constr. Co., Commercial Trust Bldg., $12,985. Noted Feb. 13.

★**Md., Canton** (Baltimore P. O.)—See "Miscellaneous."

★**Va., Richmond**—Bank—Federal Reserve Bank let contract building 5 story, 100 x 110 ft., concrete, steel and brick, concrete foundation, to J. T. Wilson, Fulton St. About $350,000. Noted Dec. 19.

Federal Government Work

PROPOSED WORK

Mass., Hingham—Fire Protection System Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install, here; Spec. 3808. About $200,000.

N. Y., Iona Island—Power Plant Extension—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3809. About $30,000.

N. Y., Oswego—Dredging—Amendment to Rivers & Harbors bill has been passed providing $300,000 to improve Oswego Harbor. Work involves additional dipper or shell dredging and lengthening concrete breakwater.

N. Y., Syracuse—Post Office—U. S. Government plans to build here. About $1,000,000.

N. Y., Rockaway—Seaplane Hangar—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3811. About $55,000.

N. J., Lake Denmark—Lighting System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install, here; Spec. 3807. About $50,000.

N. J., Newark—Aero Hangars, etc.—U. S. Government plans to build aero hangars, shops, etc. at Forest Hill. About $125,000.

Pa., Phila.—Storage Shed and Railroad Track—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build temporary steel storage shed and railroad track here; Spec. 3810. About $200,000.

D. C., Wash.—Road Work—U. S. Dept. of Agriculture plans to build roads throughout various states through Highway Depts. About $209,000,000 will be expended for project.

Va., Norfolk—Ward—Bureau Yards & Docks, Wash., D. C., plans to build pneumonia ward here; Spec. 3806. About $82,000.

S. C., Paris Island—Extension to Fresh Water System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3805. About $12,000.

Ia., Iowa City—Post Office—House Com. on Pub. Bldgs. & Grounds Comn., Wash., D. C., authorized appropriation of $100,000 to build post office here.

Mo., St. Louis—Office—House Com. on Pub. Bldgs. & Grounds, Wash., D. C., passed amendment authorizing construction of 119 x 152 ft., sub treasury building, 4th and Chestnut Sts. About $1,000,000.

Tex., San Antonio—Addition to Federal Building—Local Postmaster applied to Congress for appropriation of $250,000 for addition to Federal Building on Ave. D and Houston St.

Ore., Astoria—Building House—Com. on Pub. Bldg & Grounds., Wash., D. C., considering bill for an appropriation of $150,000 for federal building here.

The following are appropriations for postoffices and courthouses, some new, others enlargements and still others are for additional funds on post offices for which bids have been opened recently but no awards made owing to insufficient funds.

		Approximate Appropriation
Post office and other government offices	Akron, O.	$686,725
Post office and courthouse	Alexandria, La.	90,000
Post office	Andalusia, Ala.	15,000
Post office	Amherst, Mass	25,000
Post office	Athens, Tenn.	10,000
Post office	Bath, Maine	10,000
Immigration station	Boston, Mass	100,000
Post office	Buffalo, Wyo.	9,500
Post office	Bakersfield, Cal	35,000
Post office	Branford, Conn	5,000
Post office	Bluffton, Ind	6,500
Post office	Bayonne, N. J.	100,000
Post office	Belle fourche, S. D.	6,500
Post office	Chicago, Ill	4,250,000
Post office	Coeur D'Alene, Idaho	163,200
Post office and courthouse	Cordova, Alaska	100,000
Post office	Clinton, Ind	2,000
Post office	Carroll, Iowa	5,000
Post office	Cherokee, Iowa	14,000
Post office	Caribou, Maine	30,000
Post office	Cheboygan, Mich	13,000
Post office	Central City, Neb	35,000
Post office (additional funds)	Cohoes, N. Y	28,600
Post office (additional funds)	Chandler, Okla	9,500
Post office (additional funds)	Clinton, S. C	5,500
Post office (additional funds)	Chamberlain, S. D	1,000
Post office and courthouse	Chattanooga, Tenn	55,000
Post office	Comanche, Tex	13,000
Post office	Decatur, Ala	5,500
Post office and courthouse	Durango, Colo	250,000
Post office	Dawson, Ga	5,000
Post office	Des Moines, Iowa	350,000
Post office	Donora, Pa	20,000
Post office	Dubois, Pa	35,000
Post office	Denton, Tex	38,000
Post office	East Orange, N. J	95,000
Post office	Eureka, Utah	35,000
Post office and courthouse	East Las Vegas, N. Mex.	15,000
Post office	Franklin, Pa	29,000
Post office	Front Royal, Va	8,000
Post office	Fort Fairfield, Maine	22,000
Post office	Fairmont, Minn	10,000
Post office	Favette, Mo	5,000
Post office	Fallon, Nev	16,500
Post office	Fort Plain, N. Y	10,000
Post office	Fremont, O	33,000
Post office	Frankiin, Tenn	11,200
Post office	Globe, Ariz	27,500
Post office	Geneseo, Ill	15,000
Post office	Goldfield, Nev	15,000
Post office	Gilmer, Tex	5,000
Post office	Hinton, W. Va	15,000
Post office	Honolulu, Hawaii	500,000
Post office	Hastings, Mich	5,500
Post office	Holly Springs, Miss	11,500
Post office	Harrisonville, Mo	26,500
Post office	Hoosick Falls, N. Y	8,500
Post office	Hondy Grove, Tex	10,000
Post office	Jamestown, N. D	85,000
Post office	Juneau, Alaska	450,000
Post office	Jerseyville, Ill	21,500
Post office	Kenosha, Wis	95,000
Post office	Kenton, O	26,000
Post office	Lancaster, S C	19,000
Post office	Leominster, Mass	50,000
Post office	Long Island City, N. Y	100,000
Post office	Lewistown, Pa	6,500
Post office	Liberty, Mo	6,000
Post office	Millville, N. J	75,000
Post office	Muscogee, Okla	50,000
Post office	Memphis, Tenn	630,000
Post office	Marianna, Ark	3,000
Post office	Mystic, Conn	84,000
Post office	Metropolis, Ill	10,000
Post office	Mount Carmel, Ill	M,00
Post office	Malden, Mass	135,000
Post office	Midland, Mich	2,000
Post office	Mount Pleasant, Mich	16,500
Post office	Montevideo, Minn	10,000
Post office	Montclair, N. J	40,000
Post office	McKees Rocks, Pa	20,000
Post office	Mount Pleasant, Tex	10,000
Post office	Madison, Wis	525,000
Post office	Monroe, La	80,000
Post office	North Vernon, Ind	15,000
Post office	Newburyport, Mass	25,000
Post office	Olyphant, Pa	30,00
Post office additional funds (bids have been opened)	Orange, Tex	10,000
Post office	Oconto, Wis	6,800
Post office and courthouse	Paris, Tex	65,000
Post office	Park City, Utah	22,000
Post office	Prescott, Ark	10,000
Post office	Putnam, Conn	35,000
Post office	Phoenixville, Pa	50.000
Post office	Pittston, Pa	25,000
Post office	Rockingham, N. C	5,000
Post office	Russellville, Ark	17,500
Post office	Red Bluff, Cal	20,000
Post office	Rochester, Ind	27,000
Post office	San Luis Obispo, Cal	42,500
Post office	San Pedro, Cal	80,000
Post office	Sand Point, Idaho	25,000

BIDS DESIRED

N. Y., Charlotte—Boathouse, etc.—Until Mar. 12, by C. E. P. Bertholf, commandant U. S. Coast Guard, Bond Bldg., Wash., D. C., building boathouse and accessories at Coast Guard Sta. 233, here; advertised in this issue.

N. Y., Ft. Lafayette—Dredging—Until Feb. 24 by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging here; Spec. 3579. About $26,000. Noted Feb. 6.

Federal Government Work (Continued)

D. C., Wash.—Sidewalks—Until Mar. 3, by Dist. Comrs., Dist. Bldg., laying cement sidewalks here.

Va., Hampton Roads—Grandstand and Bleachers—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3795. About $64,500. Noted Feb. 6.

W. Va., Martinsburg—Plumbing—Until Feb. 27, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing in post office, not for construction as stated in our issue of Feb. 13.

S. D., Rapid City—School and Assembly Hall—Until Mar. 10, by C. Sells, comr. Indian Affairs, Wash., D. C., building school and assembly hall here.

Mo., St. Louis—Enlarging Levees—Until Mar. 12, by Secy. Mississippi River Comn., 1311 International Life Bldg., building 450,000 cu.yd. earthwork in Sny Island Levee D. D., Illinois; advertised in this issue.

Tex., North Ft. Worth—Argon Production Plant—Until Mar. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., developing argon production plant. Plans include construction of buildings, water system, etc.; Spec. 3800. About $607,250. Note Feb. 13.

Tex., North Ft. Worth—Cooling Pond—Until Feb. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at argon production plant, here; Spec. 3700. About $15,000. Noted Dec. 5.

Okla., Woodward—Post Office, etc.—Until Mar. 19, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office and courthouse.

Cal., Mare Island—Structural Shop—Until Mar. 10, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building steel structural shop, concrete or wood pile foundation; Spec. 3691. About $1,450,000. Noted Feb. 6.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. H., Portsmouth—Piping and Circulating System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 17, installing in power house at Navy Yard, here, from Carroll Electric Co., 714 12th St., Wash., D. C., $42,800; J. W. Danforth, 20 Ellicott Sq., Buffalo, N. Y., $42,986; Rideout, Chandler & Joyce, 178 High St., Boston, Mass., $44,158. Noted Jan. 30.

★**Mass., Boston**—Steel Stack and Storage Shed—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to G. A. Fuller Co., 131 State St. About $73,920 (150 days). Noted Jan. 30.

N. Y., New York—Chimney—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 10, building radial block chimney at Navy Yard here, (1) price and time (work complete) according to plans and specification, (2) price and time (work complete) according to plans and specifications with such modifications as bidder may desire provided all such exceptions shall be explicitly stated in proposal, from M. W. Kellogg Co., 90 West St., (1) $14,440 (90 days); (2) $13,940 (90 days); H. R. Heinecke, Inc., 147 4th Ave., (1) $14,925 (90 days); alternate $12,800 (90 days); A. Custodus Chimney Co., 95 Nassau St., (1) $15,200 (100 days); (2) $13,040 (100 days); (2a) $350. Noted Jan. 30.

N. Y., New York—Coal and Ash Handling Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 10, installing in extension to central power plant at Navy Yard, here.

(1) net price and time for coal bunker, complete, in accordance with drawings and specifications.

(1a) net price and time for coal bunker, complete based on alternative form of bunker.

(2) net price and time for complete ash and soot ejector system including all accessories and connections, complete in accordance with drawings and specification.

(3) net price and time for the belt conveyor, tripper and appurtenances, coal valves, soot valves, traveling coal larries, coal crusher, apron feeder, hoppers, elevator, housings, chutes, and all other requirement not covered in (1 or 2) complete in accordance with the drawings and specification.

(3a) net price and time for equipment contemplated in (3) but based on alternative automatic scale type of larry, from Guarantee Constr. Co., 140 Cedar St., (1) $9,925 (150 days); (2) $6985 (150 days); (3) $24,460 (150 days).

R. H. Beaumont Co., 315 Arch St., Phila., Pa., (1) $15,000 (120 days); (1a) $13,900 (120 days); (1b) $12,250 (120 days); (3) $21,500 (120 days); (4) $33,000 (120 days).

Link Belt Co., Nicetown, Phila., Pa., (1) $15,250; (1a) $16,445 (130 days); (3) $26,100 (130 days).

C. Meads & Co., 38 Park Row, (combined bid) $64,200—Items 1, 2 and 3. Noted Jan. 30.

★**N. Y., Wards Island**—Laundry Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing laundry equipment at Naval Hospital, here, to Amer. Laundry Machy. Co., 134 West 37th St., New York City. About $14,162 (45 days). Noted Jan. 30.

N. Y., Wards Island—Refrigerating Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 10, installing at Naval Hospital Reservation, (work complete) from Vilter Mfg. Co., 872 Clinton St., Milwaukee, Wis., $20,935; Frick Mfg. Co., West Main St., Waynesboro, Pa., $21,074 (93 days); Mayer Ice Machine & Eng. Co., 315 Grant Ave., Jersey City, N. J., $21,192 (60 days). Noted Jan. 30.

Pa., Phila.—Additions to Crane Runways—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 17, building for bulkhead handling and storage shipbuilding slips Nos. 2 and 3, at Navy Yard, here:

(1) structural steel for high tower construction, slip No. 2—consisting of 100 ft. extension (inboard) to existing high crane runway over shipbuilding ways No. 2, similar in design and detail to existing structure, except that there shall be proved cantilever construction at inboard and carrying runways for all cranes approximately 39 ft. beyond center of existing end tower. Also modification will be required in design of westerly end tower, and wind truss located on west side of westerly truss for 40-ton crane runway;

(2) structural steel for low runway construction Slip No. 3—consisting of approximate 574 ft. of low crane runway designed for two 15-ton cranes of approximately 50 ft. lift and 152 ft. span, extending inboard from inboard end of existing structure over ship building ways No. 3, columns (or dwarf towers) and crane trusses for 100 ft. span immediately adjoining existing high crane runway to be so designed as to permit being utilized in future extension of existing high crane runway over shipbuilding ways inboard 100 ft. Also cantilevers on inboard end of existing high structure over ways, carrying runways for all cranes inboard for a distance of approximately 39 ft. beyond center of existing end towers. These cantilevers shall be so designed and detailed that they may be removed and replaced in a corresponding location when runway over slip No. 3 is extended by a 100 ft. bay as outlined above. Provision shall also be made for connection between proposed and existing structures, from Amer. Bridge Co., M St., S. E., between 3rd and 4th Sts., (1) $124, (2) $119; McClintic Marshall Co., Munsey Bldg., (1) $169, (2) $148; both contractors of Wash., D. C. Noted Feb. 6.

★**Pa., Phila.**—Fence and Shelter Terminal Station—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building, here, to Turner Concrete Steel Co., 1737 Sansom St., $12,950 (40 days). Noted Jan. 23.

★**Md., Indianhead**—Boat Basin and Wharf Bulkhead—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building small boat basin and wharf bulkhead, to McLean Constr. Co., 1415 Fidelity Bldg., Baltimore, $38,900 (100 days). Noted Feb. 6.

D. C., Wash.—Bridge—Dist. Comrs., Dist. Bldg., received bids building concrete encased steel plate girder bridge on South Dakota Ave. over tracks of Baltimore & Ohio R.R., involving (1) 550 cu.yd. excav.; (2) abutments, piers and bridge complete, excepting (1), from C. H. Tompkins, 1883 3rd St., N. W., (1) $3, (2) $32,400; McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $4.75, (2) $33,377; F. J. Boas, 201 North Broad St., Phila., Pa. (1) $2, (2) $34,800. Noted Jan. 16.

Va., Hampton Roads—Coal and Ash Handling Equipment—Bureau Yards, Navy Dept., Wash., D. C., received bids Feb. 10, installing here:

(1) Net price and time for coal bunker and ash bunker with supports, complete, in accordance with drawings and paragraphs 35 and 36 of this specification.

(1a) Net price and time for coal and ash bunkers based on alternative form of bunkers, ash bunker shall be lined with concrete in any type proposed.

(2) Net price and time for coal valves, ash valves, traveling coal larries, coal crusher and accessories, elevator, conveyor, ash cars, track and valves and skip hoist, complete in accordance with drawings and specification.

(2a) Net price and time for equipment contemplated in (2), but based on the alternative automatic scale type of larry, from Guarantee Constr. Co., 140 Cedar St., New York City, (1a) $22,880; (2) $32,970, (150 days).

Link Belt Co., Nicetown, Phila., Pa., (1) $26,200; (1a) $19,500; (3) $49,500 (150 days).

R. H. Beaumont Co., 315 Arch St., Phila., Pa., (1) $21,500; (1a) $20,200; (1b) $18,150; (2) $30,000; (2b) $26,000; (3) $42,500, (120 days).

J. E. Granbury, 15 Fleming Bldg., Wash., D. C., (1) $27,200; (2) $39,835; (2a) deduct $2000, time as specified. Noted Jan. 30.

Va., Hampton Roads—Mechanical Equipment and Piping—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids installing in central power plant, at Naval Operating Base, (1) work complete, (2) amount deducted from (1) furnishing, but not installing feed water heater, storage tank, pumps and certain steam exhaust, boiler feed and drip piping in connection with above equipment, to points indicated on drawings, from H. F. Friedstedt, 327 South La Salle St., Chicago, (1) $4898 (50 days); (2) $14; Rust Eng. Co., Farmers Bank Bldg., Pittsburgh, Pa., (1) $6840 (30 days); (2) $19. Noted Jan. 30.

★**Va., Portsmouth**—Fire Escapes and Doors—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 3 steel fire escapes and 5 doors in main hospital building, Naval Hospital Reservation, to Wisconsin Iron and Fire Wks., 1660 Booth St., Milwaukee, Wis. About $12,841. (60 days.)

★**Va., Quantico**—Tanks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 2 rein.-con. tanks, in Marine Corps Barracks, here, to H. F. Friestedt Co., 327 South La Salle St., Chicago, Ill. About $4898 (50 days). Noted Jan. 30.

★**Ga., Savannah**—Additional Buildings——Constr. Div., War. Dept., Wash., D. C., let contract building 6 additional buildings at U. S. Quarantine Sta., to E. Morgan, Savannah, $94,573.

Miscellaneous

PROPOSED WORK

Drydock, etc.—Boston, Mass.—Boston Dry Dock & Constr. Co. plans to build drydock, repair basins and shops. About $5,000,000.

Station—Boston, Mass.—City petitioned Senate to authorize expenditure for preliminary plans to build subway station in Boylston St. subway. About $100,000.

Seawall—Cambridge, Mass.—State Legislature, Boston, petitioned to authorize Metropolitan Park Comn., 18 Tremont St., Boston, to rebuild seawall of Broad Canal. About $35,000.

Playgrounds—Lynn, Mass.—State Legislature, Boston, petitioned to appropriate sum complete and improve playground along shore Lynn Harbor, to include construction public boat landing. Cost to exceed $10,000.

Wharf—Lynn, Mass.—See "Excavation and Dredging."

Fill—Bridgeport, Conn.—City appropriated $10,000 for filling in west of Barnum Dyke at Seaside Park. J. A. McElroy, city engr.

Miscellaneous Supplies — New Haven, Conn.—City soon lets contract furnishing blue stone, yellow pine, cement, sewer castings, crushed stone, vitr. sewer pipe and granite catch basin, for 1 year from Mar. 1. F. L. Ford, city engr.

Miscellaneous (Continued)

Dam—Chaumont, N. Y.—F. J. Heath and S. J. Heath, plan to build timber dam across Horse Creek with 5 x 20 ft. concrete flume 450 ft. long, and head gate, also install water wheel to operate hay press manufacturing plant. About $20,000.

Fenders—Jersey City, N. J.—Hudson Co. having plans prepared installing fenders on Passaic and Hackensack River bridges on Lincoln Highway. About $20,000.

Swimming Pool—Pittsburgh, Pa.—See "Buildings."

Tunnel—Pittsburgh, Pa.—City plans to build double-track street car tunnel to drop underground at 5th Ave. and Chatham St., under 5th Ave., to 6th, Liberty, Market and 3rd Aves., to Ross St. and along Ross St. to 6th Ave., closing the loop. About $6,000,000. N. S. Sprague, City County Bldg., city engr.

Swimming Pool—Tarentum, Pa.—See "Buildings."

Dry Docks, etc.—Baltimore, Md.—See "Industrial Works."

Electric Conduit System—Baltimore, Md.—City Electrical Comn., City Hall, plans to extend electric conduit system in city's new annex, first work to be done in Highlandtown and Canton Dists. Will also build trunk lines from old city line on Belair and Harford Rds. and Greenmount Aves., Falls Rd. to Mt. Washington Ave., Park Heights Ave., from Mt. Washington to **Park Heights Ave., Liberty Heights**, Edmondson and Wilkens Aves. and Washington Rd. Cost between **$150,000 and $300,000**. P. G. Ligon, ch. engr.

Paving Materials—Detroit, Mich.—J. A. Martin, comr. dept. purchases and supplies, 1302 Real Estate Exch. Bldg., soon lets contract furnishing 16,000 tons more or less ½ in., 1 in. and 1½ in. crushed stone; also 22,000 cu.yd. more or less bank sand, 1800 cu.yd. more or less river sand and 9000 cu.yd. more or less gravel for concrete.

Seawall—Detroit, Mich.—Windmill Point Land Co., 2258 Penobscot Bldg., having plans prepared filling and grading seawall at Windmill Point. Area to be filled about **200 ft. wide and 4200 ft. long**, along shore back of seawall, involving 250,000 to 500,000 cu.yd. hydraulic or floating dredge work. T. M. Campau, 502 Whitney Office Bldg., engr.

Road Oil—Oshkosh, Wis.—Bd. Pub. Wks. soon lets contract for 70,000 gal. road oil.

Bridge Lumber—Washington, Ia.—Washington Co. soon lets contract furnishing 4 carloads of bridge lumber involving 250-3 x 12 x 14, 150-3 x 12 x 16, 50-3 x 12 x 18 and 20-3 x 12 x 20. A. L. Griffith, co. aud.

Channel—Beaumont, Tex.,—Jefferson Co. Navigation Bd. plans to deepen channel to Port Arthur. About $273,000.

Memorial Gateway—Denver, Colo.—City and Denver Co. soon receive bids building stone and rein.-con memorial gateway. About $115,000. Marean & Norton, Chamber Commerce Bldg, archts.

Road Machinery—Grand Junction, Colo.—Comrs. Mesa Co. plan to purchase road machinery, to include rock crusher, loading machines, spading machine, road grader, and tractor engine.

Transmision Line, etc.—Fresno, Cal.—See "Industrial Works."

Oil and Gas Pipe Lines—Los Angeles, Cal.—Union Oil Co., Union Oil Bldg., applied to Bd. Supervs. Los Angeles Co., for franchise to build 6.75 mi. oil and gas pipe lines in Lexington and Gallatin Rds., San Gabriel Blvd. and other streets in county.

BIDS DESIRED

Distribution System—South Boston (Boston P. O.), Mass.—Until Feb. 26, by Comn. Waterways & Pub. Lands, Room 473, State House, Boston, furnishing and installing complete and ready for operation, electric distribution systems for electric power and lighting at drydock being built here. F. W. Hodgdon, engr.; advertised in this issue.

Rebuilding Ferry Racks—New York, N. Y.—Until Feb. 26, by J. A. Delaney, comr. plant and structures, rebuilding ferry racks at Manhattan Terminal of Staten Island ferry.

Flooring—Willard, N. Y.—Until Feb. 25, by State Hospital Comn., Capitol, Albany, building tile flooring and base in Pines Bldg., Willard State Hospital; advertised in this issue.

Repairing Fenders—Newark, N. J.—Until Feb. 26, by Bd. Freeholders Essex Co., repairing fenders on Lincoln Highway bridges over Hackensack and over Passaic Rivers. Work involves 500,000 sq.yd. flooring, 100,000 ft. piling, etc. About $15,000.

Road Material—Newark, N. J.—Until Mar. 4, by T. L. Raymond, dir. dept. sts. & pub. impvts., furnishing 400 tons asphalt cement in metal drums. M. R. Sherrard, city engr.

Paving Materials—Detroit, Mich.—Until Feb. 26, by J. A. Martin, comr. dept. purchases and supplies, 1302 Real Estate Exch. Bldg., furnishing 20,000 sq.yd. more or less granite blocks, 5000 ft. more or less granite curb; also 10,000 lin.ft. more or less Elyria, Amherst or Berea curb stone, 3000 lin.ft. more or less, Medina curbstone and retaining stone.

Bridge Materials—Chariton, Ia.—Until Mar. 1, by Comrs. Lucas Co., for furnishing 5900 ft. 12-36 in. metal, c.i. or rein.-con. culvert pipe, 30 tons reinforced steel and 2250 bbls. cement. G. E. Parkin, aud.

Riprap—Shakopee, Minn.—Until Mar. 3, by Comrs. Scott Co., riprapping Minnesota River bank, north of Belle Plaine bridge, State Rd. No. 19. Work involves 4500 sq.ft. matting and 400 cu.yd. riprap. T. H. Walsh, aud.

Road Oil and Tar—Clayton (St. Louis P .O.), Mo.—Until Mar. 5, by St. Louis Co., furnishing 600,000 gal. road oil and refined tar. About $25,000. W. Elbring, highway engr.

Dock—Seattle, Wash.—Until Mar. 3, by Comrs. King Co., building Quartermaster Harbor dock creosoted piling with open frame freight shed. A. Humes, co. engr.

Piles—Blythe, Cal.—Until Mar. 1, by Palo Verde Joint Levee Dist., furnishing and driving 400 round cedar piles, 50 and 60 ft. lengths, to form jetties and revetments on 4½ mi. Colorado River; also supplying and building timber bridge work over trestles, and timber support frame for brush revetments. District will furnish barge equipped with hoist, pile driver and jet rig; contractor must furnish other equipment, materials and labor. J. C. Allison, Calexico, engr.

Miscellaneous Supplies—Hamilton, Ont.—Until Mar. 3, by city, supplying broken stone and screenings, limestone dust, asphalt, sand, sand and gravel, vitr. brick, creosoted wooden blocks, lumber, sewer pipe, sewer brick, lime, castings (ordinary and special), iron pipe, hydrants, valves, extension boxes, hardware, lead pipe, pig lead, road oil, gasoline, concrete and garbage duck covers, rubber boots, rubber hose, sectional sweepers, brass work, including ordinary and special bronze castings for water department. S. H. Kent, city clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro. pres., received bids, Feb. 11, furnishing and delivering 240,000 gal. refined asphalt in liquid form and 50 tons refined asphalt in containing packages, from Warner-Quinlan Asphalt Co., 79 Wall St., New York City, $16,678; Standard Oil Co., 26 Bway., New York City, $17,712; 50,000 asphalt paving blocks, with depth of 2½ in., from Hastings Paving Co., 25 Broad St., New York City, $3845; 40,000 grade 1 paving blocks, from J. Leopold & Co., Woolworth Bldg., New York City, $5000; Hildred Granite Co., 150 Nassau St., New York City, $5120; Rockport Granite Co., 13 Park Row, New York City, $5200; 40,000 wood paving blocks, from J. Leopold & Co., Woolworth Bldg., New York City, $2230; Amer. Creosoting Co., 17 Battery Pl., New York City, $2548; E. E. Buehler Co., $2760; 6000 bbl. Portland cement, from L. Finklestein, 1071 Lafayette St., $16,800; J. A. McCarthy, 551 Exterior St., New York City, $20,700; E. E. Buehler, $21,600; 1500 tons limestone, from New York Trap Rock Co., 17 Battery Pl., New York City, $12,975; R. N. Soper, 39 Cortland St., New York City, $13,800; 10,000 sq.yd. bluestone flagging, 2 in. thick, from J. B. Johnson Cut Stone Co., 341 Butler St., $2020; E. McMullin, $2400; J. J. Guinan, 2314 Gravesend Ave., $2400; 800 cu.yd. paving gravel, from Newtown Supply Co., Varick Ave., $2537; Ames Bldg. Material Co., Inc., Neptune Ave., $2596; J. Jennings, 3927 Ferris St., $3800; 250 tons paving pitch, from Barrett Co., 17 Battery Pl., New York City, $4750; 7000 cu.yd. asphalt sand, from Ames Bldg. Material Co., Neptune Ave., $10,290; Newtown Supply Co., Varick Ave., $11,900; 4000 cu.yd. paving sand, from J. J. Quinan, 1633 Shore Rd., $5320; Newtown Supply Co., Varick Ave., $5400; F. J. Gallagher, 490 Park Pl., $6120; 3000 cu.yd. 1½ in. broken stone, from Calvin-Thompson Co., $7200; New York Trap Rock Co., 17 Battery Pl., New York City, $7350; 8000 cu.yd. binder stone, from J. J. Quinan, 1633 Shore Rd., $8370; Newtown Supply Co., Varick Ave., $8640; New York Trap Rock Co., 17 Battery Pl., New York City, $8850. Noted Feb. 6.

Refrigeration Equipment—Iroquois, N. Y.—W. Hunt, pres. bd. mgrs., Thomas Indian School, received bids Feb. 13, installing equipment in school, here, from Mayer Ice Machine & Eng. Co., 315 Grant Ave., Jersey City, N. J., $9400; Mollenberg-Betz Machine Co., 110 Washington St., Buffalo, $9558; Wegner Machine Co., 67 Mississippi St., Buffalo, $9930. Noted Jan. 30.

★Blanket—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., let contract building concrete and rip rap stone blanket over portion of 7th Lexington Ave. Rapid Transit R.R. at old slip, Route No. 28, to Morris & Cummings Dredging Co., 17 State St., $250,950. Noted Jan. 2.

Grand Stands—New York, N. Y.—Mayor's Com. received lowest 3 bids, Feb. 11, building and removing observation stands, from G. J. Koch, Inc., 1431 Bway., $74,000; Exposition Constr. & Decorating Co., 150 Nassau St., $82,500; J. Kelly, 256 West 22nd St., $93,750.

Boilers, Piping, etc.—Utica, N. Y.—State Hospital Comn., Capitol, Albany, received bids, Feb. 11, installing boilers in power plant at Utica State Hospital, from Gillis & Geoghegan, 537 West B'way, New York City, $42,990; McNaull Boiler Wks., 983-1015 Front St., Toledo, O., $58,120; E. Keeler Co., 50 Church St., New York City, $67,920; heating work, from W. B. Armstrong Co., Fulton St., Albany, $39,640; Almiral Co., Inc., 1 Dominick St., New York City, $41,975; H. C. Peterson Co., 20 Oneida St., $44,963. Noted Jan. 23.

★Fenders—Lyndhurst, N. J.—Delaware, Lackawanna & Western R.R., 90 West St., New York City, let contract building bridge fenders over Passaic River here, to Linde & Griffith Co., 4th Ave., Newark, $25,000.

★Piers—Laceyville, Pa.—See "Bridges."

★Pier—Phila., Pa.—G. Webster, dir. dept. wharves, docks and ferries, 550 Bourse Bldg., let contract for building with appurtenant work, Kenilworth St. Pier No. 30, South Delaware Wharves, to F W. Mark Constr Co., Finance Bldg., cost $908,420. Noted Jan. 23.

★Pier and Shed—Canton (Baltimore P. O.), Md.—Standard Oil Co., Pier 2, Pratt St., Baltimore, let contract building 60 x 530 ft. rein.-con. pier on pre-cast concrete piles and 1 story concrete shed, at exporting plant, 2nd and Clinton Sts., here, to Raymond Concrete Pile Co., 922 Munsey Bldg., Baltimore. About $400,000.

Dam—Winston-Salem, N. C.—City received lowest 3 bids building concrete dam across Salem Creek, from Preston, Tverstreet & Guy, Bedford City, Va., $70,570. C. A. Heilig, Winston-Salem, $102,960; E. H. Clement & Co., Commercial Bank Bldg., Charlotte ,$105,450. J. Firth, city engr.

★Sea Wall—Miami, Fla.—See "Streets and Roads."

★Road Oil—Oshkosh, Wis.—City let contract for 70,000 gal. road oil to Standard Oil & Refining Co., Independence, Kan.

★Retaining Wall—St. Louis, Mo.—United Railways, 39th St. and Park Ave., will build concrete retaining wall at 3831 Park Ave. Work will be done by day labor. About $12,000.

Pipe Drain—Santa Barbara, Cal.—City received bids furnishing and placing 1600 lin.ft. 36-in. rein.-con. drain pipe at Gibralter Dam; lowest 3 were, Bent Bros. & Kraner, 825 Central Bldg., Los Angeles, $11,378; Hunter & Mattson, Los Angeles, $12,435; E. H. Hunt, Santa Barbara, $14,200.

★Wharf, etc.—Esquimalt, B. C.—Dept. Pub. Wks. let contract reconstructing dock yard and wharf, to McDonald & Watson, Victoria. About $52,924. Work involves 30,000 lin.ft. wood piling, 250,000 ft. timber and 42,000 creosoted draft pins and bolts. Noted Jan. 16.

Waterworks (Continued)

N. J., Bayonne—Bd. Comrs. receives bids about Mar. 14 furnishing and laying about 3100 ft. new 30 in. water pipe upon pile and timber foundations on the east and west banks of Hackensack, double 30 in. c.i. pipe with flexible joints in trench to be dredged under Hackensack River, valves, connections, etc., taking up and relaying 3300 ft. 30 in. c.i. water pipe now located on old right of way on east and west side of Hackensack River and thoroughly cleaning and repainting same, inside and out, removing and relaying same on new right of way parallel with new 30 in. line, furnishing and laying 900 ft. 18 in. c.i. water pipe with valves and appurtenances, 760 ft. 12 in. and 700 ft. 4 in. c.i. water pipe, class "B," Amer. Waterworks standard. Project involves furnishing and laying 950 tons 30 in. flexible joint c.i. pipe, 520 tons 30 in. c.i. pipe, 70 tons 18 in. c.i. pipe, 30 tons 12 in. c.i. pipe, 8 tons 4 in. c.i. pipe, 1700 piles, dredging 100,000 cu.yd. in Hackensack River, placing 1000 cu.yd. concrete, furnishing valves, hydrants, meters, etc. No bids received on Feb. 21. M. R. Sherrerd, 20 Clinton St., Newark, consult. engr. Noted Feb. 13.

Pa., Huntingdon—Boro. retained Gannett, Seelye & Fleming, engrs., 204 Locust St., Harrisburg, to make detailed study and submit report and plans for complete rehabilitation and purification of water-supply system.

Pa., Pottsville—Girard Water Co., Thompson Bldg., having plans prepared for dam to store 370,000,000 gal. water. About $170,000. Gannett, Seelye & Fleming, 204 Locust St., Harrisburg, engrs.

Pa., Williamstown—Williams Valley Water Co. plans to improve water-works, including rebuilding reservoir, extension to water mains, etc. Gannett, Seelye & Fleming, 204 Locust St., Harrisburg, engrs.

Md., Baltimore—City having surveys made by W. E. Lee, water engr., extending water mains along Belair Rd. and vicinity to Gardenville Sect. of city's new annex. About $10,000.

Md., Frederick—City considering installation of water meters to check water loss. About $30,000. E. C. Crum, city engr.

Ala., Birmingham—Birmingham Ry. Light & Power Co., 2001 1st Ave., plans to install new water gas set. About $75,000. H. E. Cox, ch. engr.

Tenn., Nashville—State Legislature petitioned to authorize $500,000 bond issue to modernize waterworks system.

Ky., Newport—City plans to improve water-works to include installation of additional valves and hydrants, connecting Newport and Covington water systems with 10 in. main, and installing additional mains. J. Hermann, comr.

O., St. Bernard—City soon receives bids for improving water-works. About $15,000. H. Nunlist, Traction Bldg., Cincinnati, engr.

Wis., Radisson—Wisconsin-Minneapolis Light & Power Co., Eau Claire, had plans prepared by L. A. De Guer, engr., Wood Co. Bank Bldg., Grand Rapids, for building reservoir here. About $500,000.

Neb., Seward—City plans election to vote on $100,000 bonds to increase water supply.

N. D., Fargo—City plans to replace water mains. About $10,000. W. B. Stevenson, engr.

N. D., Scranton—City plans to install water main system in connection with wells. Dakota Engr. Co., Mitchell, S. D., engrs.

Mo., St. Louis—Bd. Pub. Serv. soon receives bids building 4 in. concrete roofs over 3 settling basins, two 250 x 500 ft. each at Bissell's Point and one 400 x 500 ft. at Baden. About $350,000. E. E. Wall, City Hall, engr.

Okla., Bixby—City voted $85,000 bonds to build water and sewerage systems.

Okla., Sapulpa—City plans election to vote on $75,000 bonds to improve waterworks system. R. E. Jeness, city clk.

Utah, Ogden—City plans to extend water system. About $25,000. J. M. Tracy, city engr.

Ore., St. Johns (Portland)—City plans to lay 1 mi. 12 in. water pipe to increase water supply. C. Ross, St. Johns, asst. engr. About $20,000.

Cal., Whittier—Whittier Water Co., 205 North Greenleaf Ave., obtained franchise from Bd. Supervs. Los Angeles Co. to build 10 mi. water mains in several streets and roads near here. P. McLaren, supt.

Que., Verdun—City having plans prepared by A. E. Cohy & Sons, engrs., City Hall, building extensions to water works and filtration plant. About $200,000.

Ont., Bear Line—Dover Twp. soon lets contract building pumping plant, and 3 concrete bridges in connection with Cadotte mechanical drainage works. W. G. McGeorge, Chatham, engr.

Ont, Kemptville—Town plans to build water works system. About $25,000. S. H. Guest, clk.

Ont., Parry Sound—Town plans to extend water works system. About $30,000. J. D. Broughton, clk.

Ont., Scarborough—Town council plans to install water works system and garbage disposal plant in southwestern Sect. of city.

BIDS DESIRED

Kan., Junction City—Until Mar. 10, by T. W. Dorn, clk., for furnishing material and labor for improving waterworks system as follows. (1) furnishing c. i. pipe and specials, f.o.b. cars at point of shipment, full freight allowed to here, (2) furnishing hydrants and valves, f.o.b. cars at point of shipment with full freight allowed to here, (3) trenching and laying c. i. pipe and setting hydrants and valves and installing 50 k.w. engine generator set, etc., (4) furnishing material and building rein.-con. reservoir, (5) furnishing f.o.b. cars, 50 k.w. engine generator set. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 13.

N. D., Underwood—Until Mar. 10, by village, building water system to include 50,000 gal. steel tank on 100 ft. steel tower, two 8 in. wells, about 130 ft. deep, two deep well power heads geared direct to 110 volt A. C. motor, pumping station, heating plant, 1770 lin.ft. 8 in. Class "B" c.i. water pipe, 8261 lin.ft. 6 in. Class "B" c.i. water main and 14 hydrants. C. Bauer, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—N. J. Hayes, comr. water supply, gas and electricity received bids Feb. 20, furnishing, delivering, unloading, stacking and storing, (a) c.i. valve box castings; (b) valves; (c) hydrants, from J. Fox & Co., 253 Bway., (a) $6152; (c) $32,364; A. P. Smith Mfg. Co., Norman St., East Orange, N. J., (b) $7845; (c) $28,574; J. Wilson Fdry., (a) $7098; Chapman Valve Mfg. Co., 180 Lafayette St., (b) $8235; Kennedy Valve Mfg. Co., 81 John St., (c) $29,232. Noted Feb. 13.

N. J., Jersey City—Bd. Comrs., received only bid building water main under Hackensack and Passaic Rivers, from J. L. Sigretto Co., South Curtis Ave., Brooklyn, N. Y., $599,307. Noted Jan. 30.

N. J., Jersey City—City received only bid furnishing water gate boxes for year, from Fagan Iron Wks., 14th St., $3.24 per lb. Total cost, about $15,000.

Sewers

PROPOSED WORK

N. Y., Endicott—Endicott, Johnson & Co., 753 Bleecker St., Utica, plans to build sewer to serve tannery, also make other extensions. About $200,000.

Pa., Gallitzin—See "Streets & Roads."

Pa., Pittsburgh—City plans to build sewer on property of Baltimore & Ohio R.R., on Furnace Way, involving 1970 ft. 9-20 in. terra cotta pipe. About $13,000. I. C. Palmer, City County Bldg., engr.

Fla., Leesburg—See "Streets and Roads."

Ala., Birmingham—City having surveys made by J. Kendrick, city engr., for sanitary sewerage system. About $5,000,000 will be expended on project.

Tenn., Nashville—City having estimates prepared for extending storm and lateral sewerage systems. W. W. Southgate, city engr.

Wis., Keewatin—City voted $60,000 bonds to build sewers.

Okla., Bixby—See "Water-works."

Utah, Ogden—City plans to expend $100,000 to extend sewerage system. J. M. Tracy, city engr.

Ariz., Clifton—City election Mar. 22 to vote on $150,000 bonds to build sewerage system.

Ore., Klamath Falls—See "Streets and Roads."

Ore., North Bend—See "Streets and Roads."

Ore., Portland—City plans to build East 63rd and Halsey St. sewerage system in following streets: East 63rd St. from center line Halsey St. to 63rd and Willow Sts.; Halsey St. from 70 ft. west of center line East 53rd St., north of Halsey St. to proposed sewer in East 63rd St.; East 62nd St. from center line Thompson to Halsey Sts.; Hancock St. from sewer in East 60th to East 62nd Sts.; East 60th St. from Klickitat to Hancock Sts.; Klickitat St. from center line East 57th to East 60th Sts.; Halsey St. from 170 ft. east of center line of 65th to Halsey Sts.; East 61st St. from 270 ft. north center line Thompson St. and 40 ft. north of north line B'way to Hancock St.; East 60th St. from 40 ft. north of north line B'way to Hancock St.; East 61st St. from center line B'way to Halsey St.; East 60th St. from center line of B'way. to Halsey St.; East 59th St. from 276 ft. north of center line B'way. to Halsey St.; East 58th St. from 326 ft. north from center line, B'way to Halsey St.; Hancock St. from center line East 58th to East 60th Sts.; East 59th St. from Sandy Blvd. to Hancock St.; East 58th St. from south line Sacramento to Hancock Sts.; East 59th St. from 246 ft. south of center line Hancock St. to proposed sewer in Hancock St.; East 58th St. from 200 ft. south center line of Hancock St. to proposed sewer in Hancock St.; Wasco from 100 ft. west from center line East 61st to East 63rd St.; East 62nd St. from center line Clackamas to Wasco Sts.; Clackamas St. from 100 ft. west center line East 61st St. and from 170 ft. east, center line East 62nd St. to proposed sewer in East 62nd St.; East 59th St. from 300 ft. south center line Hassalo St. to center line Halsey St.; Hassalo St. from 234 ft. west center line East 58th to 63rd Sts.; East 62nd St. from 134 ft. north center line of Thompson St. east to East 62nd St. at center Thompson St.; Morris to East 68th Sts.; East 57th St. from center line Wasco to Hassalo Sts.; East 57th St. from 300 ft. south of center line Hassalo St. to proposed sewer in Hassalo St.; East 62nd St. from 172 ft. north south line Stanton to Sacramento Sts.; Brazee St. from 182 ft. west of East 63rd to East 64th Sts.; East 57th St. from 440 ft. south from center line Halsey St. to proposed sewer in Halsey St.; East 64th St. from 125 ft. south of The Almeda to Sacramento St.; The Almeda to East 67th St.; The Almeda from 160 ft. west center line East 66th St. and from 160 ft. east center line East 66th St. to proposed sewer in East 66th St.; The Almeda from 125 ft. west from west line 63rd to 65th Sts.; East 65th St. from 440 ft. north center line Klickitat St. and from Sandy Blvd. to proposed sewer in Klickitat St.; East 61st St. from 440 ft. north center line Klickitat St. and from 504 ft. south center line Siskiyou to Klickitat Sts.; East 58th St. from south line Fremont to Klickitat Sts.; East 59th St. from 424 ft. north from center line Klickitat St. and from 184 ft. south of center line Stanton St. to proposed sewer in Klickitat St.; East 60th St. from 430 ft. north from center line Klickitat St. to sewer in Klickitat St.; Klickitat St. from center line of East 65th St. to center line of 60th St.; East 61st St. from 120 ft. south center line of Holladay Ave. to proposed sewer in Holladay Ave.; in Holladay Ave. from 100 ft. west from center line East 61st St. to O. W. R. & N. Company's right-or-way to East 62nd St.; East 62nd St. from center line Multnomah to Hassalo Sts.; Multnomah St. from 170 ft. east from center line East 61st to East 62nd Sts.; East 62nd St. from northwest line of O. W. R. & N. Company's right-of-way to proposed sewer in Hassalo St.; East 60th St. from 150 ft south center line Multnomah to Halsey Sts.; East 60th St. from center line of Holladay Ave. to Hassalo St.; East 64th St. from 440 ft. north from center line Klickitat St. and from 60 ft. south from center line Siskiyou St. to proposed sewer in Klickitat St.; East 63rd St. from 440 ft. north from center line Klickitat St. and from 206 ft. south from center line Siskiyou to Klickitat Sts.; East 62nd St. from

Sewers (Continued)

428 ft. north from center line Klickitat St. and from 350 ft. south from center line Siskiyou St. to proposed sewer in Klickitat St.; East 55th St. from 326 ft. north center line of Bway to Halsey St.; East 57th St. from 50 ft. south of Sandy Blvd. to Halsey St.; East 56th St. from 400 ft. north from center line Tillamook to Halsey Sts.; Sacramento St. from 132 ft. east from center line East 61st St. to East 60th St.; Sacramento St. from East 68th to East 65th Sts.; Sacramento St. from 150 ft. southwest from center line East 65th St. to proposed sewer in East 65th St.; East 68th St. from 140 ft. north center line Morris St. to proposed sewer in Sacramento St.; East 67th St. from 90 ft. north of center line Siskiyou to Sacramento Sts.; East 66th St. from 100 ft. north of center line Siskiyou to Sacramento Sts.; East 55th St. from 200 ft. north center line of Tillamook to Halsey Sts.; East 54th St. from 200 ft. north center line Tillamook to Halsey Sts.; East 53rd St. from 400 ft. north center line Hancock to Halsey Sts.; East 63rd St. from 340 ft. north of south line of Brazee St. to proposed sewer in Brazee St.; East 65th St. from south line Siskiyou St. to Sacramento St., south through private property to 90 ft. south of Sacramento St.; East 60th St. from center line Klickitat to Hancock Sts.; Klickitat St. from center line East 57th to East 60th Sts.; East 60th St. from 40 ft. north of B'way to Hancock St. at center East 60th St.; East 61st St. from center line B'way. to Halsey St.; East 61st St. from 270 ft. north from center line Thompson to Hancock Sts.; Halsey St. from 170 ft. east of center line East 65th St., south to Halsey St. at center East 63rd St.; East 60th St. from center B'way to Halsey St.; East 62nd St. from center line Clackamas to Wasco Sts.; East 59th St. from 276 ft. north center line B'way to Halsey St.; East 59th St. from 326 ft. north center line B'way to Halsey St.; East 64th St. from Sandy Blvd. and from 354 ft. south center line Stanton St. to proposed sewer in Stanton St.; Hancock St. from center line East 58th to East 60th Sts.; East 59th St. from south line of Sandy Blvd. to proposed sewer in Hancock St.; Wasco St. from 100 ft. west from center line East 61st to East 63rd Sts.; East 58th St. from 200 ft. south center line Hancock St. to proposed sewer in Hancock St.; East 59th St. from 246 ft. south center line Hancock St. to proposed sewer in Hancock St.; East 58th St. from south line Sacramento to Hancock Sts.; East 61st St. from Stanton to Sacramento Sts.; The Almeda from 144 ft. west East 61st St. and from 100 ft. east of East 61st St. to proposed sewer in East 61st St.; Stanton St. from center line East 68th to East 62nd Sts.; East 63rd St. from 10 ft. south of Sandy Blvd. and 125 ft. north of The Almeda to Stanton St. City Engineer Laurgaard's estimates are vitrified sewer pipe or cement sewer pipe, $343,519.33. Sewer is to be constructed with sewer service branches and pipes, lampholes, catchbasins and manholes.

Ore., Portland—Citizens Morningside Addition recommended that city build sewer in 69th St. and Matteson Ave. from East Stark to East Davis Sts. O. L. Aurgaard, city engr.

Ont., West London (London P. O.)—City having plans prepared for building sewers. H. A. Brazier, city engr. About $50,000.

Sask., Estevan—Town plans to rebuild sewers. About $14,000. W. F. Thompson, clk.

BIDS DESIRED

N. Y., Buffalo—Until Mar. 4, by W. F. Schwartz, removing between 2 and 3 mi. deposit estimated at 4342 cu.yd. from 8 ft. trunk sewer without diverting flow. G. H. Norton, Buffalo, engr.

N. J., Phillipsburg—Until Mar. 3, by Bd. Comrs., building sewerage system consisting of collecting trunk sewer involving 4652 ft. 20-27 in. vitr. pipe, and South Main St. storm sewer, involving 1543 ft. 18-24 in. vitr. pipe. C. E. Tilton, town engr.

N. J., South Orange—Until Mar. 3, by Bd. Trustees, Village Hall, grading and building storm water and sanitary sewers in Tichenor Ave. between Montague Pl. and Garfield Pl. About $15,000. I. T. Redfern, engr.

N. J., Trenton—Until Mar. 14, by city, building sewers in Lipton, Clearfield, Bloomfield, Westminster, Newell, Laclede, Lee and Columbus Aves. and Riverside Dr. L. D. Hirsch, clk. Noted Aug. 8.

N. C., Durham—Until Mar. 10, by M. E. Newsom, mayor, building sanitary sewers in Alston Ave., Main, Morris, Watkins and Spring Sts., Main St. house connections, Neuse River out fall sewer, etc. Work involves 35,355 ft. 6-24 in. vitr. sewer pipe.

Mich., Detroit—Until Mar. 5, by Bd. Pub. Wks., building sewers in Erwin, Burns and Peter Hunt Aves. from Harper Ave. to center of Edgewood Ave., 2859 ft. long, brick or monolithic concrete, pipe to vary from 5 ft. cylinder to 38 x 57 in. egg shape; also public sewer in Dexter Blvd. from Joy Rd. to Davison Ave., 7956 ft. long, brick or monolithic concrete, pipe from 5-6 ft. diameter. C. W. Hubbell, engr. Noted Jan. 30.

N. D., Underwood—Until Mar. 10, by village, building sewerage system, in Dist. No. 1, 16,702 lin.ft. 8-18 in. vitr. sewer pipe, 2870 lin.ft. open ditch, 31 manholes, concrete bulkhead, etc. C. Bauer, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Creedmore—State Hospital Comn., Capitol, Albany, received bids Feb. 19, building sewage disposal plant at Brooklyn State Hospital here, from Murphy Bros., 262 Bay 43rd St., Brooklyn, $22,483 (200 days); L. F. Kelly, Inc., 296 Stuyvesant Ave., Brooklyn, $22,540 (200 days); J. L. Sigretto & Co., 455 Woodhaven, L. I., $23,000 (200 days). Noted Feb. 6.

O., Cleveland—City received bids Feb. 20 building vitr. sewers in (a) East 156th St. from Waterloo to Daniel Aves., involving 810 ft. 12, 24 and 30 in. pipe and forty-seven 24 and 30 in. "Y" branches; (b) 850 ft. Yorick Ave. from Ivanhoe Rd. east, 800 ft. 12 and 15 in. pipe and forty-two, 12 and 15 in. "Y" branches; (c) Waldo Rd. from St. Clair to Youlk Aves., 498 ft. 12, 15 and 18 in. pipe and twenty-six 15 and 18 in. "Y" branches; (d) East 155th St. from Holmes to Saranac Aves., 510 ft. 12 in. pipe and thirty 12 in. "Y" branches; (e) East 159th St. from Holmes Ave. to Saranac Rd., 1060 ft. 12, 15, 18 and 20 in. pipe and sixty-four 12, 15, 18 and 20 in. "Y" branches; (f) East 160th St. from Calcutta to Waterloo Rds., 510 ft. 12 and 15 in. pipe and twenty-eight 12 and 14 in. "Y" branches; (g) East 157th St. from Holmes Ave. to Saranac Rd., 840 ft. 12, 15 and 18 in. pipe and forty-eight 12, 15 and 18 in. "Y" branches, from D. Pfahl, 723 Guardian Bldg., (a) $5378, (e) $3492, (g) $2568; W. P. Gibbons Constr. Co., 340 Leader News Bldg., (a) $5794, (b) $2736; P. Ciraci, Cleveland, (a) $6164; N. Iafornaro & Co., (b) $3002, (c) $2415; Gallagher-Burke Co., (b) $3287; Fredericks & Hosaine, (c) $2228, (f) $1673; Iannetta Bros., (c) $2411; A. C. Hattendorf & Co., Cleveland, (d) $3697, (e) $3296, (f) $1705, (g) $2454; Water & Sewer Improvement Co., (d) $3872, (e) $3453; Aftoors & Joseph, (d) $3942, (g) $2414; N. Salem, (f) $1639. Noted Feb. 13.

Bridges

PROPOSED WORK

N. Y., Vischer Ferry—State Legislature, Capitol, Albany, petitioned to appropriate $339,000 to build steel plate girder bridge over Mohawk River here.

N. J., Newark—Essex Co. having plans prepared building bridge over Canal on Heller Pkway. F. A. Reimer, co. engr.

Wis., Readstown—Vernon Co., (Viroqua) having plans prepared by State Highway Comn., Madison, for rein. con. bridge here. About $13,500.

Mont., Libby—State Highway Comn., Helena, plans to build bridge across Kootenai River between Montana and Idaho state lines. About $35,000; cost to be borne as follows: State of Montana, $10,000; State of Idaho, $10,000; Lincoln Co., $7500; Boundary Co., Idaho, $7500.

Tex., Victoria—Comrs. Victoria Co. plan to build bridge over Adenosa Creek. About $10,000.

Ariz., Clifton—City election Mar. 29 to vote on $5000 bonds to build bridge over Chase Creek. Greenlee Co. will appropriate $5000 toward cost.

Ariz., Jerome—Bd. Supervs. Yavapai Co. had plans prepared by B. M. Atwood, state engr., Phoenix, building bridge over Verde River here. About $40,000. State appropriated $20,000 toward cost. Noted Mar. 21.

Ore., Coquille—Coos Co. has $30,000 available for bridge over Coquilla River here. Authority must be obtained from State Highway Comn., Coquille River Port and U. S. War Dept. before same can be constructed.

Ont., Bear Line—See "Water Works."

BIDS DESIRED

Mass., Springfield—Until Mar. 20, by Bd. Supervs., Dept. Streets & Eng., Springfield, furnishing falsework and labor for removing three 180 ft. spans of Old Toll Bridge, timber structure across Connecticut River between here and West Springfield and erecting superstructure of new bridge with six 90 ft. wooden lattice truss spans. R. P. Marsh, supt. streets and eng.; advertised in this issue.

Pa., Falls—Until Mar. 11, by G. A. Schreiner, supt. pub. grounds & bldgs., Capitol, Harrisburg, for building bridge over north branch of Susquehanna River, here. Paxson & Morgan, 2nd Nat'l Bank Bldg., Wilkes Barre, consultg. engrs.

Miss., Charleston—Until Mar. 15, by Lamb-Fish Lumber Co., for building sub- and super-structure of steel bridge over Tallahatchie River, 7 mi. west of here, consisting of 3 deck plate girder spans, 40-71 and 61 ft. long, central 74 ft. span to be vertical lift span of "Waddell" type; spans to be carried on 4 concrete piers, pedestals to rest on wooden piles. Work involves 420 cu.yd. concrete in pier bases, 2750 lin.ft. piles below bases of piers, 500 cu.yd. concrete in pier shafts, 130 tons structural steel, 14 tons machinery, 8000 lb. rails and fastenings, 37 M ft. timber in deck. V. K. Wagner, engr.; advertised in this issue.

Ont., Walkerton—Until Mar. 10, by Comrs. Bruce Co. building steel reinforced bridge here. About $25,000. F. B. James, Walkerton, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Kan., Wichita**—See "Streets and Roads."

Structural Steel

PROPOSED WORK

Tex., Ft. Worth—See "Buildings."

Reinforced Concrete

PROPOSED WORK

Mass., Dorchester—(Boston P. O.)—See "Buildings."

R. I., Kent—(Hope P. O.)—See "Miscellaneous."

N. Y., New York—See "Industrial Works."

N. Y., Syracuse—See "Industrial Works."

Mo., St. Louis—See "Industrial Works."

Tex., Ft. Worth—See "Buildings."

Cal., Los Angeles—See "Miscellaneous."

BIDS DESIRED

Mass., Springfield—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Rochelle Park**—See "Miscellaneous."

★**Cal., Fresno**—See "Industrial Works."

Streets and Roads

PROPOSED WORK

Conn., New Haven—City plans to pave Water, Putnam, Spring and Commerce Sts., Union and Washington Aves., 13,300 ft long, 30-40 ft. wide. About $300,000. F. L. Ford, city engr.

New York—State Highway Dept., Albany, had plans prepared building 2.59 mi., Perry Center-Moscow Rd., part 1, Wyoming Co., cost, $51,195; 5.57 mi. Greene Oxford Rd., part 1, and 5.87 mi. Greene-Oxford Rd., part 2, Chenango Co., $106,500 and $117,300 respectively; 4.29 mi. Fredonia-Silver Creek Rd., part 2, Chautauqua Co., $86,000; 3.48 mi. Nicholville-St. Regis Falls Rd., part 1, St. Lawrence Co., $66,572; 3.21 mi. Alton-Walcott Rd., part 2, Wayne Co., $64,010; 1.06 mi. Akin-Johnstown Rd., part 2, Fulton Co., $21,192.

Streets and Roads (Continued)

New York—State Highway Dept., Albany, plans to build 5.16 mi., Part 1 and 3 of New Jersey State Line-Nyack Rd., and 2.47 mi. Stony Point-Tompkins Cove Rd., Rockland Co.; 2.5 mi. Ft. Montgomery-Highland Falls Rd., Orange Co., 6.54 mi., part 1, 2 and 3, of Marathon-Cortland Rd., Cortland Co., 7.04 mi. Pennsylvania-State Line-Ripley-Forsythe Rd., 4.64 mi. Brocton-Fredonia Rd., and 7.64 mi. Westfield-Brocton Rd., Chautauqua Co., 5.07 mi. part 1, Cherry Valley-Sharon Springs Rd., Otsego Co.

New York—State Highway Dept., Albany, plans to appropriate various amounts for repairing and maintaining highways in following counties: Columbia Co., $110,232; Dutchess Co., $117,511; Greene Co., $83,290; Nassau Co., $25,883; Orange Co., $180,010; Putnam Co., $19,520; Rockland Co., $48,445; Suffolk Co., $67,040; Ulster Co., $154,589; Westchester Co., $203,490; Albany Co., $140,200; Clinton Co., $39,300; Essex Co., $43,200; Rensselaer Co., $185,500; Saratoga Co., $125,700; Schenectady Co., $85,400; Warren Co., $46,800; Washington Co., $43,900; Jefferson Co., $141,661; St. Lawrence Co., $112,282; Franklin Co., $55,346; Lewis Co., $41,211; Fulton Co., $37,125; Hamilton Co., $60,578; Herkimer Co., $98,691; Madison Co., $41,959; Montgomery Co., $117,119; Oneida Co., $144,528; Broome Co., $102,230; Chenango Co., $76,060; Delaware Co., $101,750; Otsego Co., $86,860; Schoharie Co., $32,050; Sullivan Co., $72,450; Cayuga Co., $74,890; Cortland Co., $36,940; Onondaga Co., $229,600; Oswego Co., $48,390; Seneca Co., $23,190; Wayne Co., $26,990; Genesee Co., $69,447; Livingston Co., $161,222; Monroe Co., $171,395; Ontario Co., $122,773; Orleans Co., $32,042; Wyoming Co., $23,121; Allegany Co., $78,199; Chemung Co., $44,543; Schuyler Co., $23,843; Steuben Co., $257,916; Tioga Co., $40,308; Tompkins Co., $59,061; Yates Co., $28,230; Cattaraugus Co., $51,442; Chautauqua Co., $26,428; Erie Co., $217,770; Niagara Co., $110,360.

N. Y., New York—M. E. Connolly, pres. Queens Boro., rejected bids received Jan. 29, regulating and grading roadway space, etc., in 88th Ave. from 102nd to 104th Sts. Work will be readvertised later. Noted Feb. 6.

N. Y., Watertown—Jefferson Co. plans to build 3¼ mi. Baggs Corners-Dexter Rd. with Federal Aid; also resurfacing portion roads between Antwerp, Carthage, Cape Vincent, Clayton, Gunns Corners and La Fargeville Twps., and 3 mi. Redwood-Alexandria Bay Route. H. S. Ball, co. highway supt.

N. J., Newark—Essex Co. Park Comn. applied to Finance Com. for permission to convert Speedway into parkway. About $225,000. F. A. Reimer, Court House, engr.

N. J., Passaic—City soon receives bids for improving Passaic Ave. from Lincoln Highway north to Meadow line. Cost over $30,000.

N. J., West Orange—Town Council plans to improve Ridgeview Ave., concrete curbs and gutters and bituminous roadway.

Pa., Gallitzin—Boro. soon receives bids building 2000 ft. 12 in. vitr. clay sewer, 8000 sq.yd. vitr. brick paving on concrete base and 7000 sq.yd. concrete paving. H. F. Conrad, secy. D. W. Dillman, 80-81 Altoona Trust Bldg., Altoona, engr.

Pa., Pittsburgh—City plans to widen Beechwood Blvd. and Greenfield Ave. at intersection with Hazlewood Ave.; widen and repave East Ohio St. from Heinz St. to city line; extend, open and fix grade on Hatfield St. from 50th to 51st St. N. S. Sprague, city engr.

Pa., Pittsburgh—Council passed ordinance excavating, curbing and paving 860 ft. Alexis St. from Saline St. to 10 ft. way at east line of A. R. Neeb's, 18 and 22 ft. wide, involving 2100 sq.yd. pavement on 6 in. concrete base, 1720 lin.ft. steel protected curb and 3500 cu.yd. excav., cost, $20,000; grading, paving and curbing 615 ft. Howley St. from Main St. to Friendship Ave., 24 ft. roadway, involving 1640 sq.yd. asphalt on 6 in. concrete base, 1230 lin.ft. steel protected curb and 900 cu.yd. excav., $14,000. T. Reed, City County Bldg.

Maryland—State Rds. Comn., 600 Garrett Bldg., Baltimore, will have surveys made for improving 14 mi. state highway in Washington Co. beginning at Wolfsville, probably macadam, 22 ft. wide with 3 ft. dirt shoulders.

Md., Baltimore—City Paving Comn. having plans prepared by B. K. Compton, ch. engr., repaving 3800 ft. Wolfe St. from Jefferson to Aliceanna Sts., 450 ft. Chapel St. from Baltimore to Lombard Sts., 26-36 ft wide, sheet asphalt on 6 in. concrete base.

Va., Bristol—C. P. Moore, chn. street com. receives bids about Mar. 20 paving 25,000 yd. State St. between 10th St. and Pennsylvania Ave., Washington Co. Anderson & Cristie Inc., Charlotte, N. C., engrs.

W. Va., New Cumberland—Butler Dist., Hancock Co., plans election Mar. 29 to vote on $100,000 bond issue for road improvements as follows: $50,000 for River Rd. from Kings Creek bridge, to pave road near Clay Dist. line; $25,000 for Swearingen Hill Rd.; $25,000 for Turkey-Foot Rd. C. E. Grafton, co. engr.

W. Va., Wellsburg—Comrs. Brooke Co. plan election to vote on $700,000 bond issue for road improvements this year. H. Donaldson, Beaver Falls, Pa., co. engr.

N. C., Danbury—Stokes Co. plans election Mar. 18 to vote on $35,000 bonds to build roads in Snow Creek Twp. R. G. Petree, co. clk.

Florida—State Rd. Dept., Tallahassee, plans to build 15 mi. State Rd. No. 1, between Milton and eastern line of Santa Rosa Co.; grouted brick pavement, 9 ft. wide, with rock shoulders 3 ft. wide involving. 79,200 sq.yd. vitr. brick and $158,400 lin.ft. wood curbing. About $190,000. Will be Federal Aid project for about 4 or 5 mi. G. L. Barnard, asst. engr. W. F. Cocke, state road comr.

Fla., Appling—Comrs. Columbia Co. plan to grade and surface with sand-clay, 9.16 mi. Rd. No. 1 from Lake City to western line of county, 20 ft. wide, cost, $25,000, Work involves 20,180 cu.yd. earth excav., 17,912 cu.yd. clay surface and 7 acres clearing and grubbing. Address W. F. Cocke, state rd. comr., Tallahassee.

Fla., Bunnell—Flagler Co. soon receives bids for improving roads in northwestern section of county. About $100,000.

Fla., Leesburg—City plans election Mar. 12 to vote on $50,000 bonds for opening, widening, grading and paving various streets and building storm sewers. J. C. Lee, acting mayor.

Miss., Cleveland—Bd. Supervs. Bolivar Co. receives bids about Apr. 1, grading and graveling about 30 mi. roads, 9 ft. wide. L. W. Mashburn, Clarksdale, engr.

Miss., Tunica—Bd. Supervs. Tunica Co. receives bids about Apr. 1 grading and graveling 40 mi. roads, 9 ft. wide. L. W. Mashburn, Clarksdale, engr.

Tennessee—State Highway Comn., Nashville, plans to expend between $4,000,000 and $5,000,000 for state highways.

Tenn., Nashville—City having estimates prepared for 100,000 yd. of permanent pavements. W. W. Southgate, city engr.

Ky., Louisville—Bd. Pub. Wks. plans to pave Finger Ave. from Cherokee to Bardstown Rds.; cost, $2910; Breckenidge St. from Logan to Barret Sts., $30,000; Hill St from 3rd to 4th Sts., $6490; Bank St. from 24th to 25th Sts., $11,555; selected old granite on concrete base; also 15th St. from Main to Walnut Sts., $20,800; 13th St. from Market to Jefferson Sts., $5200. J. Chambers, city engr.

O., Cincinnati—Comrs. Hamilton Co. plan to pave Springfield Pike, through Wyoming Twp. (not including car tracks), cost, $176,538, if semi-monolithic brick pavement is used; $169,204 for bitulithic or asphaltic concrete, and $211,745 for wood block; Carthage-Hamilton Rd. from Decamp Ave. to Wyoming Twp. connecting with proposed county improvements, cost, $109,366 for brick and $112,559 for asphaltic concrete.

O., Cleveland—Comrs. Cuyahoga Co., plan to pave 1½ mi. Fitzwater Rd. from Brecksville to River Rds., 16 ft. wide, water bound macadam, cost $35,000; also 2 mi. Bentleyville Rd. from Chagrin Falls to township line, 16-25 ft. wide, $75,000. W. A. Stinchcomb, co. engr.

O., Cleveland—Comrs. Cuyahoga Co. will receive bids in spring paving 4½ mi. Wilson Mills Rd. from Chagrin River Rd. to Euclidville corporate line, concrete, 16 ft. wide. About $206,000.

O., Dayton—Comrs. Montgomery Co. plan to improve 2.64 mi. Xenia Pike, 16 ft. wide, bituminous macadam. About $58,000. S. S. Sharts, co. engr.

Ind., Bicknell—City plans to improve various streets 5 mi. long, 20-24 ft. wide, brick or asphalt wearing surface on concrete base. F. Dunlap, city engr.

Mich., Port Huron—Comrs. St. Clair Co. having surveys and estimates made for building 18 mi. Turnpike Rd. from Bunce Creek to county line, 18 ft. wide, 7 in. concrete. D. Belyea, Port Huron, engr.

Mich., River Rouge—Village plans to pave and grade Great Lakes Ave. from Jefferson Ave. to village limits, 1500 ft. long; also South Dearborn Rd. from Michigan Central R.R. to north limits, 1500 ft. long, 26 ft. wide, concrete. L. Laginess, clk.

Ill., Moline—City plans to lay concrete sidewalks: 600 ft. 26th St. from 11th to 12th Aves.; 1490 ft. 27th Ave. from 4th to 7th Sts.; 450 ft. 13th Ave. from 25th to 26th Sts.; 400 ft. 25th Ave. from 7th to 9th Aves.; 753 ft. 5th Ave. from 50th St. east; 980 ft. 6th Ave. and 51st St.; 10th Ave. from 18th St. to 18th St., B; 10th St. from east side to 18th Ave.; 18th St. A., from 12th and 18th Aves., both sides; 16th St. 160 ft. north on 26th Ave.; 16th St. from 28th to 30th Aves. L. Paton, city engr.

Wisconsin—A. R. Hirst, state highway engr., Madison, has announced that following amounts are available for road work during coming year: state aid construction (new and unexpended appropriations), $3,800,000; Federal Aid construction (new and unexpected appropriations), $3,200,000; county construction (not aided), $1,500,000; state and county maintenance, $2,500,000, and township construction, $3,000,000.

Ia., Hartley—City receives bids about Mar. 25 paving 6th St. from 2nd to 3rd Aves., 5th St. from 2nd to 5th Aves., 4th St. from 1st to 5th Aves., 3rd St. from 1st to 6th Aves., 2nd St. from 1st to 6th Aves., 1st St. from south city limits to 6th Ave., Railroad St. from 1st to 6th Aves., Edwards St. from 1st to 4th Aves., Wilbur St. from 1st to 6th Aves., 4th Ave. from 4th St. west to city limits, 1 mi. 3rd Ave., 4th Ave. from 1st to 2nd Sts., 1 mi. 2nd Ave., 1st Ave. from 4th to Wilbur Sts. and 4 blocks alleys. H. H. Green, Cedar Rapids, engr.

Ia., Logan—City receives bids about Mar. 25, paving, grading, curbing, guttering and building storm sewers in 55 blocks. C. L. Huff, C. E. Logan engr.

Minn., Anoka—Comrs. Anoka Co. receive bids in spring building Central Ave. Rd. from Anoka to Minneapolis involving 6 mi. concrete surfacing, (70,000 sq.yd. concrete paving) 86,000 cu.yd. excav. and 22,000 cu.yd. sand clay surfacing. H. H. Thurston, engr.

Minn., Elbow Lake—Comrs. Grant Co. receive bids in April or May for grading and graveling 5 mi. Federal Aid Project No. 28. W. E. Burgess, co. engr.

Minn., Fergus Falls—Comrs. Ottertail Co. receive bids in April for 18 mi. roadwork, Federal Aid Project No. 29, involving 150,000 cu.yd. excav., 22,000 cu.yd. gravel surfacing and 1 culvert. F. L. Flygare, co. engr.

Minn., Long Prairie — Comrs. Todd Co. receive bids in April or May grading and gravel surfacing 10 mi. highway, Federal Aid Project No. 26. A. M. Graves, co. engr.

Minn., St. Cloud—Comrs. Stearns Co. receive bids in March or April building Federal Aid Project No. 25. Work involves 20 mi. roadwork, 90,000 cu.yd. grading and graveling and 3 bridges. M. J. Cleveland, co. engr.

Minn., St. James—City receives bids in April for 37,000 yds. paving. J. W. Shaffer, 405 New York Life Bldg., Minneapolis, engr.

North Dakota—State Highway Comn., Bismarck, soon receives bids building 4-5 mi. gravel road from Churches Ferry east, cost, $12,385; 17.1 mi. northwest and southeast from Devils Lake Twp., $20,123; 3 mi. east from Devils Lake Twp., $4100, all in Ramsey Co. Noted Dec. 19.

N. D., Crosby—Comrs. Divide Co. plan to build about 20 to 25 mi. Federal Aid road project this summer. W. E. Vadnais, Co. aud.

Streets and Roads (Continued)

N. D., Grafton—City having plans prepared repaving entire business section, with concrete, asphaltic concrete and bitulithic. C. L. Pillsbury Co., 805-11 Metropolitan Life Bldg., engrs.

Montana—State Highway Dept., Helena, plans to grade 33 mi. Cardwell Basin—Nigger Hollow Rd., in Jefferson Co., and 16.75 mi. Larina-Tuffky-Emory Rd., Musselshell Co., 26 ft. wide. About $39,930 and $18,200 respectively. P. D. Pratt, state highway engr.

Mo., Carthage—Comrs. Jasper Co. soon let contract paving 6½ mi. Joplin-Gulfton Rd., 24 ft. wide, concrete. J. Malang, supt. Joplin Special Rd. Dist.

Mo., Danville—New Florence Special Rd. Dist., Montgomery Co., plans to pave 8 mi. state highway with rock between St. Louis and Kansas City, in Mineola Hills section. About $275,000.

Mo., Kansas City—Jackson Co. having estimates prepared for resurfacing 4 county highways, 15 mi. long. O. C. Sheley, co. engr.

Mo., St. Louis—Pitzman's Co., engrs., 615 Chestnut St., soon lets contract for 96,000 cu.yd. grading on south line Euclid Ave. from Bircher Rd. to Florrisant Ave. Cost to exceed $10,000.

Texas—State Highway Comn., Austin, plans to extend State Highway No. 20 from Austin to Fredericksburg through Johnson City. Work involves 80 mi. macadam pavement.

Tex., Ballinger—Comrs. Runnels Co. had plans prepared for 20 mi. of Highway No. 7.

Tex., Bastrop—Bastrop Co. election Mar. 15 to vote on $250,000 bonds to build roads in Elgin Precinct; $35,000 for Paige Precinct and $35,000 for McDade Precinct.

Tex., Dallas—City plans to pave Munger Ave. from Haskell to Carroll Sts. and Cleveland St. from Grand to Forest Aves., bitulithic. G. D. Fairtrace, city engr.

Tex., Dallas—City plans to pave Colonial Ave. from Lenway to city limits with uvalde asphalt; Cleveland St. from Forest to Grand Aves. and Munger Ave. from Haskell to Carroll Ave., bitulithic. G. D. Fairtrace, city engr.

Tex., Groesbeck—Limestone Co. election Mar. 18 to vote on $250,000 bonds to build roads in Mexia Precinct; $54,000 for Cooledge Precinct and $60,000 for Shileh Precinct.

Tex., Hillsboro—Comrs. Hill Co., Road Dist. No. 3 plan election to vote on $250,000 bonds to improve roads. Noted Sept. 12.

Tex., Houston—Comrs. Harris Co. soon let contract repairing South Main St., Chocolate Bayou, and Seabrook and La Porte Rds. H. L. Washburn, co. aud. Noted Jan. 2.

Tex., McKinney—Collin Co., Plano Dist., plans election Mar. 15 to vote on $450,000 bonds to build roads; Weston Dist. plans to vote $350,000 bonds for same purpose. Noted Jan. 9.

Tex., Rockwall—Rockwall Co. voted $800,000 bonds and State Highway Comn. appropriated $100,000 to build roads to include 13 mi. concrete road, 16 ft. wide across county from Dallas Co. line to Hunt Co. line.

Tex., San Antonio—City plans to expend $100,000 to macadamize about 30 mi. streets. Part of work now being done by day labor; bids on remainder will be called for shortly. H. Helland, City Hall, engr.

Colo., Denver—City plans to surface about 50 blocks streets in North Denver Surfacing Dist. No. 5, smelter slag, sand, and gravel and loam, cost $46,803; also pave 12 blocks in Alley Paving Dist. No. 49, asphalt. About $20,975. J. A. Hunter, city engr.

Colo., Grand Junction—Comrs. Mesa Co. plan to expend $10,000 of state road funds to build water bound macadam road east from city limits.

Utah, Brigham—City plans to pave and gutter various streets. About $75,000. C. O. Rospellez, Brigham, engr.

Utah, Ogden—City receives bids about May 1, for 100,000 sq.yd. pavement. About $350,000. J. M. Tracy, engr.

Ariz., Clifton—Greenlee Co. plans election Mar. 22 to vote on $200,000 bonds to build highways between Morenci and Metcalf Twps. and through Wards canyon. A. L. Terry, clk. bd. supervs.

Wash., Kent—City plans to pave portions Titus St. and Scenic Way, concrete, 20 ft. wide. L. E. Price, city clk.

Oregon—U. S. Senate, Wash., D. C., passed bill increasing State Rd. Fund (Federal Aid) from $1,189,108 to $4,330,944. Noted Jan. 30.

Ore., Astoria—City plans to improve following streets: Agate St., 40 ft. grade, 24 ft. hard surface; Alameda St. from Taylor to Hull Sts., 8 ft. sidewalks; Bond St., replanking with 4 in. lumber; Hume, Florence and Rivington Sts., 24 ft. hard surface; Franklin St., 24 ft. hard surface; 5th St., 24 ft. hard surface; Grand St., 30 ft. hard surface; Duane St. from 14th St. to point 144 ft. east of present pavement; 3rd St., 24 ft. hard surface; 45th St., grading and 30 ft. hard surface; 2nd St., grading; Lexington St., 24 ft. hard surface; Franklin St., 40 ft. hard surface; 9th St., 24 ft. hard surface; 10th St. from Grand to Lexington Sts., 11th St. from Jerome to Niagara Sts. G. T. McClean, city engr.

Ore., Bend—City plans to expend $20,000 to improve streets. R. B. Gould, engr.

Ore., Klamath Falls—City had plans and estimates prepared for paving Crescent Ave. and installing sewerage system in Mills Addition. About $49,400. J. Cleghorn, Astoria, city engr.

Ore., Klamath Falls—Klamath Co. plans following road works: Klamath Falls-Merrill Rd., cost, $20,000; Green Springs-Ashland Rd., $20,000; Klamath Falls-Algoma Rd., $25,000, general repair work, $25,000.

Ore., North Bend—City plans to pave sidewalks and install sewers in Porter Hill Dist. About $50,000.

Ore., Portland—G. R. Funk, city aud., soon lets contract improving Bidwell Ave. from East 7th to Milwaukee Sts., bitulithic or asphaltic concrete pavement; East 47th St. from East Sherman to East Lincoln Sts., Hasam class B, gravel, asphaltic. concrete or bitulithic; East 38th St. from East Yamhill to Belmont Sts., bitulithic or asphaltic concrete; East Oak St. from East 28th St. to Castle Ann Addition, Hassam, class B gravel, bitulithic or asphaltic concrete; Portsmouth Ave. from Willis Blvd to south line of Columbia Slough Rd., asphalt or artificial stone sidewalks and grading.

California—State Highway Comn., Forum Bldg., Sacramento, had estimates prepared by W. C. Howe, div. engr., placing cost of building 11 mi. Cuyama Rd. through mountains in Santa Barbara Co., at $256,922. Work involves 250,000 cu.yd. excav., 18,000 ft. corrugated iron pipe for culverts, 46 tons reinforcing steel and 500,000 ft. timber for bridges; 4 mi. of road are graded.

Cal., Compton—City receives bids in March grading, paving, curbing, etc., 1500 ft. Perebinth, Tamarind and Magnolia Sts., involving 60,000 sq.ft. grading, 6 in. decomposed granite paving, 3000 lin.ft. cement curbs, 10,000 sq.ft. cement sidewalks, etc. E. N. Lynch, 716 Central Bldg., Los Angeles, engr.

Cal., Sacramento—City Comn. receives bids in April grading, curbing, guttering, etc., 1600 ft. 33rd St. from Truckee Way to Y St., 50 ft. wide, involving 6020 sq.yd. asphalt pavement on 4 in. concrete base, 2154 lin.ft. concrete curbing and guttering, 5442 sq.ft. concrete sidewalk and 1614 cu. yd. earth excav. F. C. Miller, city engr.

Cal., Visalia—Bd. Supervs. Tulare Co. plans to grade and pave several miles of county highways, concrete. About $140,000 available. Bids for paving Springville-Worth Rd. will soon be received. G. R. Prestidge, co. clk.

Que., Three Rivers—City receives bids in March, paving various streets. About $30,000. A. Boliveau, 43 Des Forges St., engr.

Que., Verdun—City plans to pave sections of Gordon, Galt, Hickson, Mulvavkoy and Regina Sts., 60 ft. wide, asphalt. About $100,000. A. E. Gehysens, City Hall, engr.

Ont., Pembroke—Renfrew Co. plans to expend $20,000 to build roads. R. J. Rooney, clk.

Ont., St. Thomas—Elgin Co. plans to expend $90,000 to build roads. K. W. McKay, clk.

Ont., Sarnia—Lambton Co. plans to expend $100,000 to build roads. J. Dalziel, clk.

B. C., Burnaby—Municipal Council plans to build roads. About $20,000. A. G. Moore, clk.

BIDS DESIRED

Rhode Island—Until Mar. 5, by State Bd. Pub. Rds., State House, Providence, building 2.04 mi. state highway on Boston Neck Rd., North Kingstown and Narragansett Twps., involving 7000 cu.yd. earth excav., 1450 cu.yd. stone fill foundation, 7875 cu.yd. gravel foundation, 7000 tons crushed stone, and 60,000 gal. hauling, heating and applying bituminous binder; advertised in this issue.

N. Y., Brooklyn—Until Mar. 5, by E. Riegelmann, boro. pres., grading, curbing and laying sidewalks on East 8th St. from Ave. K to Ave. M, paving 86th St. from 21st to 22nd Aves., 36th St. from 15th Ave. to Chester St., and repaving 4th Ave. from 60th St. to Bay Ridge Ave., asphalt.

N. J., Hoboken—Until Mar. 4, by city, grading, paving and improving, 4th, 7th, 11th, 12th and Grand Sts., and Willow Ave. About $100,000. J. O. Whittemore, city engr. Noted Feb. 20.

N. J., Mt. Holly—Until Mar. 5, by Bd. Freeholders Burlington Co., paving 15,870 sq.yd. Burlington-Florence Rd., macadam surface on macadam foundation, 18 ft. wide. J. Logan, 11 Main St., engr.

N. J., Salem—Until Mar. 10, by Bd. Freeholders Salem Co., paving 4th and 5th Sects. Malaga-Pennsgrove Rd., Pilesgrove Twp., involving 41,453 sq.yd. concrete surface pavement. I. C. Smashey, co. clk.; advertised in this issue.

N. J., South Orange—See "Sewers."

N. J., West Orange—Until Mar. 4, by town, for concrete curbing and bituminous paving on Parkside Ave., concrete curbing on Central Ave., concrete curbing and guttering on Harrison Ave., concrete curbing on Eagle Rock Ave., between Washington St. and Harrison Ave.

Md., Baltimore—Until Mar. 12, by Bd. Awards, repaving, recurbing and regrading 6260 ft. Lanvale St. from Payson St. to Druid Hill Ave., 750 ft. Payson St. from Lanvale to Mosher Sts., 790 ft. Lafayette Ave. from Fulton Ave. to Payson St., 690 ft. Edmondson Ave. from Fremont to Clinton Aves., 660 ft. Brune St. from Franklin to Harlem Aves., 1520 ft. Clinton Ave. from Franklin to Myrtle Aves., 1465 ft. Argyle Ave. from Lanvale to Sewell Sts., 785 ft. McElderry St. from Milton to Linwood Aves., 1200 ft. McElderry St. from Wolfe to Chester Sts., 1180 ft. Madison St. from Patterson Park Ave. to Luzerne St., 1700 ft. Collington Ave. from Ashland Ave. to Biddle St., 1700 ft. Lakewood Ave. from Baltimore to Monument Sts., 650 ft. Jefferson St. from Milton to Lakewood Aves., 650 ft. Orleans St. from Milton to Lakewood Aves., 2250 ft. Randall St. from Hanover to Covington Sts., 680 ft William St. from Clement to Randall Sts., 740 ft. Battery Ave., from Gittings to Randall Sts., 1460 ft. Covington St. from Fort Ave. to Wells St., 530 ft. Covington St. from Gittings to Falsum Sts., 430 ft. Clement St. from Light to Williams Sts., 960 ft. Grindall St. from William to Covington Sts., 1163 ft. Clement St. from Riverside Ave. to Key Highway, 350 ft. Poultney St. from Light to Patapsco Sts., 325 ft. Barclay St. from Chase to Biddle Sts., 1190 ft. Forrest St. from Manument to Eager Sts., 325 ft. Forrest St. from Chase to Biddle Sts., 970 ft. Ashland Ave. from McKim to Aisquith Sts., 1515 ft. Somerset St. from Madison to Biddle Sts., 40 ft. wide, sheet asphalt on 6 in. concrete base with armored concrete curbing; also 3000 ft. Jordan Alley, from Biddle St. to North Ave., 1520 ft. Camel Alley from Madison to Cathedral Sts., 220 ft. Brexton St. from Eager to Cathedral Sts., 15-20 ft. wide, cement and concrete. R. K. Compton, ch. engr; advertised in this issue. Noted Feb. 20.

W. Va., Fayetteville—Until Mar. 10, by Comrs. Fayette Co., paving 9.5 mi. county highway. R. J. Stegall, clk.; advertised in this issue.

Streets and Roads (Continued)

W. Va., New Cumberland—Until Mar. 4, by R. R. Hobbs, clk. Hancock Co., building 4 mi. brick and concrete roads. C. E. Grafton, co. engr.

W. Va., Webster Springs—Until Mar. 7, by Comrs. Webster Co., grading and draining 60 mi. roads. P. B. Logan, co. engr.

Ga., Atlanta—Until Mar. 15, by Comr. Rds. & Revenues of Fulton Co., paving following roads: Paces Ferry Rd., from Court House Buckhead to Howell Mill Rd., 34,000 sq.yds.; Marietta Rd. from end of car line at Inman Yards to Marietta car line at river, 26,000 sq.yd.; Cascade Ave. and Gordon St. from Holderness St. to Sewell Rd., 30,000 sq.yd.; Cascade Ave., from Sewell Rd. to Fairburn Rd., 27,000 sq.yd.; Hapeville Rd., from East Point Depot to Fulton Ave. in Hapeville, 26,000 sq.yd.; concrete, bituminous concrete, vitr. brick or patented pavement such as vibrolithic or bitulithic. C. M. Holland, 507 Court House, purch. agt.

Fla., Sumterville—Until Mar. 3, by State Rd. Dept. and Comrs. Sumter Co. at Bushnell, grading and surfacing with sand clay 6.7 mi. road between Sumterville and Bushnell, 20 ft. roadway, 16 ft. surface. About $18,000. Work involves 24,827 cu.yd. earth excav., 10,463 cu.yd. clay surface, 58,960 sq.yd. mixing and shaping. Address W. F. Cocke, Tallahassee, state rd. comr.

Ala., Eutaw—Until Mar. 11, by Comrs. Green Co., surfacing with clay gravel 4.6 mi. of Eutaw and Tuscaloosa Rd., part State Trunk Rd. No. 7, between here and Knoxville. W. S. Keller, Montgomery, state highway engr.

Ala., Selma—Until Mar. 10, by Bd. Revenue Dallas Co. rebuilding and resurfacing with gravel about 15 mi. Benton Rd. between here and Safford. W. M. Vaughan, judge. Noted Jan. 23.

Miss., Coffeeville—Until Mar. 3, by Bd. Superv. Yalobusha Co., building 6 mi. Cottner Rd., 6½ mi. Banner Rd.; 7 mi. Coffeeville and Pontotoc Rd., in Beat 2; 5½ mi. Water Valley and Shoales Rd. in Beat 2; 2 mi. Pittsboro Rd., from Banner Rd. to Calhoun Co. L. T. Wisdom, clk.

La., Alexandria—Until Mar. 3, by city, building and paving concrete sidewalks with cement curbs on south side of 110th St., from Lee to Winn St., also cement curb on both sides of North 16th St., from Gould Ave. to Bayou Rapides. I. W. Sylvester, city engr.

O., Mt. Vernon—Until Mar. 10, by A. D. Rinehart, aud., Knox Co., grading and paving with tar-bound macadam and building culverts and bridges on 1.78 mi. Sect. A Centerburg-Croton Rd., 14 ft. wide. About $40,692; advertised in this issue.

Indiana—By Bd. Co. Comrs. building roads in following counties:

Mar. 8, Hunting Co., Huntington, building roads in Jefferson, Dallas and Salamonie Twps. O. E. Eviston, aud.

Mar. 10, St. Joseph Co., South Bend, concrete road in Penn Twp. A. F. Wolf, aud.

Mar. 13, Marion Co., Indianapolis, building 2 roads in Franklin Twp. L. K. Fesler, aud.

Michigan—Until Mar. 11, by F. F. Rogers, comr. state highways, Lansing, grading, paving with concrete and installing culverts on 5.585 mi. Paw Paw Rd. to Kalamazoo.

Wis., Kenosha—Until Mar. 6, by city, paving 80,000 sq.yd., brick, sheet asphalt, rein.-con. or vertical fibre brick. P. J. Hurtgen, city engr. Noted Jan. 30.

Ia., Davenport—Until Mar. 4, by city, paving following streets and alleys:

3903 lin.ft. Telegraph Rd. from Davie to 3rd Sts., involving 9390 sq.yd. vitr. brick, 7486 lin.ft. cement curbing, 7486 lin.ft. gutter, 4151 cu.yd. earth excav., 281 ft. wood header curb and 9390 sq.yd. 5 in. concrete base.

2314 lin.ft. Union St. from Washington to Howell Sts., 7332 sq.yd. vitr. brick, 4704 lin.ft. cement curbing, 4704 lin.ft. cement gutter, 2213 cu.yd. earth excav., 156 ft. wood header curb and 7332 sy.yd. 5 in. concrete base.

320 lin.ft. Vine St. from 9th to 10th Sts., 834 sq.yd. vitr. brick, 678 lin.ft. cement curbing, 678 lin.ft. cement gutter, 271 cu. yd. earth excav., 62 ft. wood header curb and 834 sq.yd. 5 in. concrete base.

345 lin.ft. Western Ave. from 5th to 6th Sts., 1036 sq.yd. vitr. brick, 809 lin.ft. cement curbing, 65 lin.ft. cement gutter, 339 cu. yd. earth excav. and 1036 sq.yd. 5 in. concrete base.

2385 lin.ft. Taney St. from Fillmore to Davie Sts., 5686 sq.yd. vitr. brick, 4739 lin.ft. cement curbing, 4739 lin.ft. cement gutter, 2860 cu.yd. earth excav., 106 ft. wood header curb and 7332 sq.yd. 5 in. concrete base.

2178 lin.ft. Grand Ave. from Henry St. to South Ave., 6918 sq.yd. vitr. brick, 4477 lin.ft. cement curbing, 4477 lin.ft. cement gutter, 2144 cu.yd. earth excav., 185 ft. wood header curb and 6917 sq.yd. 5 in. concrete base.

1821 lin.ft. Grand Court from Grand to Carey Ave., 7261 sq.yd. vitr. brick, 6620 lin.ft. cement curbing, 6620 lin.ft. cement gutter, 2428 cu.yd. earth excav., 50 lin.ft. wood header curb and 7261 sq.yd. 5 in. concrete base.

1301 lin.ft. Gaines St. from Locust to Lombard Sts., 4023 sq.yd. vitr. brick, 2646 lin.ft. cement curbing, 2646 lin.ft. cement gutter, 1250 cu.yd. earth excav., 76 ft. wood header curb and 4023 sq.yd. 5 in. concrete base.

360 lin.ft. Fair Ave. from 30th to 31st Sts., 1213 sq.yd. vitr. brick, 776 lin.ft. cement curbing, 776 lin.ft. cement gutter, 78 ft. wood header curb and 1213 sq.yd. 5 in. concrete base.

Claussen St. from Hancock Ave. to 129 ft. east, 441 sq.yd. vitr. brick, 270 lin.ft. cement curbing, 270 lin.ft. cement gutter, 141 cu.yd. earth excav., 31 ft. wood header curb and 441 sq.yd. 5 in. concrete base.

2219 lin.ft. Eastern Ave. from North to High Sts., 5819 sq.yd. vitr. brick, 1454 cu. yd. earth excav., 179 lin.ft. wood header curb and 5819 sq.yd. 5 in. concrete base.

1030 lin.ft. Bridge Ave. from High St. to Nicholas Ave., 1027 sq.yd. vitr. brick, 2097 lin.ft. cement curbing, 2097 lin.ft. cement gutter, 179 lin.ft. wood header curb, 3333 cu.yd. earth excav. and 1027 sq.yd. 5 in. concrete base.

2700 lin.ft. Clark St. from Rockingham to Telegraph Rds., 8879 sq.yd. vitr. brick, 5531 lin.ft. cement curbing, 5531 lin.ft. cement gutter, 4255 cu.yd. earth excav., 383 lin.ft. wood header curb and 8879 sq.yd. 5 in. concrete base.

354 lin.ft. Bowditch St. from west line Lincoln to east line Linwood Aves., 1063 sq.yd. vitr. brick, 709 lin.ft. cement curbing, 709 lin.ft. cement gutter, 701 cu.yd. earth excav. and 1063 sq.yd. 5 in. concrete base.

619 lin.ft. Carey Ave. from High to Henry Sts., 2027 sq.yd. vitr. brick, 1281 lin.ft. cement curbing, 1281 lin.ft. cement gutter, 624 cu.yd. earth excav., 49 ft. wood header curb and 2027 sq.yd. 5 in. concrete base.

8th St. from Grand Ave. to 220 ft. west, 642 sq.yd. vitr. brick, 498 lin.ft. cement curbing, 186 cu.yd. earth excav. and 642 sq.yd. 5 in. concrete base.

237 lin.ft. Grant St. from Harrison to Main St., 581 sq.yd. vitr. brick, 163 cu.yd. earth excav., 30 ft. wood header curb and 581 sq.yd. 5 in. concrete base.

1577 lin.ft. Hancock Ave. from Rockingham Rd. to Lincoln Ave., 3537 sq.yd. vitr. brick, 2992 lin.ft. cement curbing, 2992 lin.ft. cement gutter, 1211 cu.yd. earth excav., 133 lin.ft. wood header curb and 3537 sq.yd. 5 in. concrete base.

287 lin.ft. Hancock Ave. from Lincoln to Linwood Ave., 951 sq.yd. vitr. brick, 805 lin.ft. cement curbing, 805 lin.ft. cement gutter, 344 cu.yd. earth excav., 28 ft. wood header curb and 951 sq.yd. 5 in. concrete base.

1325 lin.ft. Hayes St. from Harrison to Brady Sts., 4150 sq.yd. vitr. brick, 1095 cu.yd. earth excav., 240 ft. wood header curb and 4150 sq.yd. 5 in. concrete base.

620 lin.ft. High St. from Iowa to Farnam Sts., 1545 sq.yd. vitr. brick, 1227 lin.ft. cement curbing, 1227 lin.ft. cement gutter, 740 cu.yd. earth excav., 115 ft. wood header curb and 1545 sq.yd. 5 in. concrete base.

819 lin.ft. Howell St. from Union to Locust Sts., 2044 sq.yd. vitr. brick, 1676 lin.ft. cement curbing, 1676 lin.ft. cement gutter, 666 cu.yd. earth excav., 80 ft. wood header curb and 2044 sq.yd. 5 in. concrete base.

1082 lin.ft. Le Claire St. from Central Park to South Ave., 3465 sq.yd. vitr. brick, 2189 lin.ft. cement curbing, 2189 lin.ft. cement gutter, 1569 cu.yd. earth excav., 112 ft. wood header curb and 3465 sq.yd. 5 in. concrete base.

2232 lin.ft. Locust St. from Carey to Eastern Aves., 8361 sq.yd. vitr. brick, 2206 cu.yd. earth excav., 331 ft. wood header curb and 8361 sq.yd. 5 in. concrete base.

738 lin.ft. Lombard St. from Scott to Gaines Sts., 1535 lin.ft. cement curbing, 1535 lin.ft. cement gutter, 1815 sq.yd. vitr. brick, 596 cu.yd. earth excav. and 1815 sq.yd. 5 in. concrete base.

1991 lin.ft. Lombard St. from Marquette to Sturdevant Sts., 7336 sq.yd. vitr. brick, 3982 lin.ft. cement curbing, 2352 cu.yd. earth excav., 159 ft. wood header curb and 7336 sq.yd. 5 in. concrete base.

2810 lin.ft. McKinley Ave. from Lincoln Ave. to Clark St., 9864 sq.yd. vitr. brick, 5790 lin.ft. cement curbing, 5790 lin.ft. cement gutter, 4002 lin.ft. earth excav., 320 ft. wood header curb and 9864 sq.yd. 5 in. concrete base.

320 lin.ft. Myrtle St. from 9th to 10th Sts., 784 sq.yd. vitr. brick, 658 lin.ft. cement curbing, 658 lin.ft. cement gutter, 257 cu.yd. earth excav., 40 lin.ft. wood header curb and 784 sq.yd. 5 in. concrete base.

820 lin.ft. Myrtle St. from Locust to High Sts., 2085 sq.yd. vitr. brick, 1696 lin.ft. cement curbing, 1696 lin.ft. cement gutter, 707 cu.yd. earth excav., 102 ft. wood header curb and 2085 sq.yd. 5 in. concrete base.

800 lin.ft. 2nd St. from Lincoln to Elmwood Aves., 2537 sq.yd. vitr. brick, 1651 lin.ft. cement curbing, 1651 lin.ft. cement gutter, 937 cu.yd. earth excav. and 2537 sq.yd. 5 in. concrete base.

1240 lin.ft. Scott St. from Locust to Lombard Sts., 3044 sq.yd. vitr. brick, 2529 lin.ft. cement curbing, 2529 lin.ft. cement gutter, 1726 cu.yd. earth excav., 90 ft. wood header curb and 3044 sq.yd. 5 in. concrete.

3rd St., from Telegraph Rd. to 490 ft. east, 3987 sq.yd. vitr. brick, 1161 lin.ft. cement curbing, 1161 lin.ft. cement gutter, 1249 cu.yd. earth excav. and 3987 sq.yd. 5 in. concrete base. R. E. Sawistowsky, city engr. Noted Jan. 23.

Neb., Lincoln—Until Mar. 8, by city repaving Dist. No. 66, paving Dists. Nos. 403, 405 and 409, 25-40 ft. wide. T. H. Berb, city clk. Noted Feb. 20.

Mont., Roundup—Until Mar. 4, by Comrs. Musselshell Co., graveling 15 mi. Goulding Creek Rd. About $15,000. R. E. Bushnell, co. engr.

Mo., Kansas City—Until Mar. 18, by Park Bd., grading Van Brunt Blvd. from 12th St. to Linwood Blvd., involving 130,000 cu.ft. earth excav. About $75,000.

Mo., St. Louis—Until Mar. 18, by Bd. Pub. Serv., paving and curbing 1300 ft. Minnesota Ave. from Osceola to Meramec Sts., vitr. brick with concrete curb. About $18,000. W. W. Horner, city engr.

Ariz., Clifton—Until Mar. 10, by Supervs. Greenlee Co., building Sects. 1-6 and portion of 7, of Clifton-Springerville Rd. A. L. Terry, co. clk. Noted Feb. 6.

Cal., Riverside—Until Mar. 17, by Bd. Supervs. Riverside Co. paving 26,000 sq. ft. 4 in. oiled macadam road involving 480 yd. excav.

Cal., Santa Ana—Until Mar. 18, by Orange Co., paving Garden Grove Ave., involving 108,000 sq. ft. 4 in. concrete pavement; also paving 160,000 ft. Losa Lamitos Rd., 2 in. topeka or bitulithic surface.

Que., Lingwich—Until Mar. 3, by A. B. MacDonald, Gould, building 11 mi. Sherbrooke-Boaucevillo Rd., 40-45 ft. wide from Bury to Winslow twps.

Que., St. Hubert—Until Mar. 3, by city grading and macadamizing 3 mi. Grando Ligno Rd. About $23,000. A. N. Beaugard, St. Hubert, engr.

Ont., Ottawa—Until Mar. 31, by Dept. Pub. Wks., for macadamizing 10 mi. road in county of Gaspe, Que., 35-40 ft. wide.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Albany—W. W. Wotherspoon, supt. pub. wks., let contract building certain parts of approach from Court St. and South Ave. to Barge Canal Terminal at Rochester, Contr. 57, to C. Kiehn, 26 Gard-

Streets and Roads (Continued)

ner Bldg., Utica, $120,598. Work involves 13,000 cu.yd. excav., 12,650 cu.yd. forming embankment, 42 cu.yd. 1-1 1-3 rein.-con., 134 cu.yd. 1st class rein.-con., 160 cu. yd. 2nd class concrete in column bases, 2285 cu.yd. 2nd class concrete, except as provided for by previous item, 23,000 b.m. timber in temporary cribs and fender, 143 cu.yd. stone filling for cribs, 294,000 lb. metal reinforcement, 7000 lb. c.i. drains and outlet pipes, 163 lin.ft. 12 in. and 168 lin. ft. 15 in. vitr. pipe and specials, 24,200 sq.ft. waterproofing concrete, etc. Noted Jan. 23.

★N. Y., New York—M. E. Connolly, pres. Queens Boro., let contract to Sicilian Asphalt Paving Co., regulating, grading, curbing, laying sidewalks and paving Hancock St. from Wyckoff Ave. to Evergreen branch of Long Island R. R., sheet asphalt on 6 in. concrete base, $5448; to C. Gallagher, 124th St. from Metropolitan to Jamaica Aves., $9595; 123rd St. from point north of 85th to 89th Aves., $13,863; Grimm Contg. Co., 125th St. from Jamaica to 89th Aves., $5042; R. A. Hess, Elmhurst, L. I., 150th St. from Beaver Rd. to South Rd., $826; Armand Pl. from Walter St. to point 250 ft. southwest, $1276; McCarthy, Rush & Ryan, East Trenton Ave., Bronx, Barclay Ave., from Parsons Blvd. to 147th St., $592; Delaware Ave. from Parsons Ave. to 147th St., $298; 153rd St. from Northern Blvd. to 34th Ave., $1250; Gates Ave. from Grandview to Forest Aves., $1040; E. W. Fitzpatrick, 244 Jackson Ave., Long Island City, Emerson St. from Freedom Ave. to Oxford St. $21,450; Peace Bros., 20 Main St., Flushing, 102nd St. from Jamaica Ave. to Park Lane, S., $300. Noted Feb. 6.

★Pa., Pittsburgh—Chartiers Twp. let contract grading, paving and curbing 958 ft. Middletown Rd. from Ladoga St. to Ashtola Alley, 30 ft. wide, to M. O'Herron & Co., 1st and McKeen Sts., $19,272. Work involves 1560 sq.yd. vitr. brick, 1050 lin.ft. steel protected curbing, 1520 sq.yd. stone, 3800 cu.yd. earth excav. and 3080 sq.yd. 6 in. concrete base. Noted Aug. 30.

★Virginia—State Highway Comn., Richmond, let contract building 3¼ mi. Richmond-Petersburg Turnpike from Chesterfield city limits to Falling Creek, Chesterfield Co., concrete, 16 ft. wide, to A. W. McClay, Richmond, $70,057. Noted Feb. 13.

Virginia—State Highway Comn., Richmond, received bids Feb. 17, building 3½ mi. road from Ridgeway to North Carolina line, 20 ft. wide, from T. W. Chandler, Virgilina, $21,758; L. Chandler, Virgilina, $24,428; G. T. Franklin Co., Pocahontas, $27,982; 8½ mi. gravel road from Franklin to Courtland, from R. R. Deuby, Norfolk, $90,417; Bryson & Beasley, Newport News, $100,802. Noted Feb. 13.

★Fla., Jacksonville—Comrs. Duval Co. let contract laying 5000 sq.yd. brick paving and 10,000 lin.ft. concrete curbing on St. Augustine Rd. from end of present brick road to Bayard Co. line, to Wilson Constr. Co., Clark Bldg., laying brick $.59 per sq.yd., curbing $.09 per lin.ft. Noted Feb. 13.

★Fla., Lakeland—City rescinded contract let to McDonald Paving Co., for 18 mi. paved streets, and has relet same, to Alabama Paving Co., Amer. Trust Bldg., Birmingham, Ala. Noted Feb. 6.

O., Cleveland—City received bids paving

(a) Mirlo Ave. from West 67th to West 73rd St., involving 15,755 sq.ft. 5 in. brick block, 650 cu.yd. excav. and 100 sq.ft. 3 in. Berea sidewalk;

(b) East 123rd St. from Ray to Taft Aves., 31,529 sq.ft. 5 in. brick block, 400 cu.yd. excav., 2305 cu.ft. Berea curb and 380 sq.ft. 2½ in. Berea sidewalk;

(c) West 87th St. from Brinswald to Emily Aves., 8218 sq.ft. brick block, 600 cu.yd. excav., 10 cu.ft. Medina curb and 80 sq.ft. 3 in. Berea sidewalk;

(d) West 7th St. from Railway to Novak Aves., 7600 sq.ft. 5 in. brick block on 6 in. concrete base, 560 cu.yd. excav. and 40 cu.ft. Berea curb;

(e) Dover Ave. from West 37th to West 39th Sts., 29,250 sq.ft. 4 in. brick block on 6 in. concrete base, 1550 cu.yd. excav., 2175 cu.ft. Berea curb and 205 sq.ft. 3 in. Berea sidewalk;

(f) East 106th St. and Hanley Ave. from St. Clair Ave. to Parkwood Dr., 9670 sq.ft. 4 in. brick block on 6 in. concrete base, 1020 cu.ft. Berea curb and 200 sq.ft. 3 in. Berea sidewalk;

(g) East 104th Pl. from Olivet to Hampton Aves., 3405 sq.ft. 5 in. brick block, 110 cu.yd. excav. and 20 cu.ft. Berea curb;

(h) Henley Ave. from West 77th to West 99th Sts., 17,800 sq.ft. 5 in. brick block, 1000 cu.yd. excav. and 30 cu.ft. Medina curb;

(i) Conover Court from West 85th to West 89th Sts., 4865 sq.yd. 5 in. brick block, 210 cu.yd. excav., 100 lin.ft. 5 in. Medina stone and 210 sq.ft. 2½ in. sawed Berea sidewalk;

(j) Otis Court from East 71st to East 75th Sts., 6385 sq.ft. 5 in. brick block, 270 cu.yd. excav., 135 sq.ft. 6 in. concrete base and 150 sq.ft. 3 in. Berea sidewalk;

(k) Dickens Ave. from East 91st to East 93rd Sts., 10,800 sq.ft. 5 in. brick block on 6 in. concrete base, 778 cu.ft. Medina curb and 250 sq.ft. 3 in. Berea sidewalk;

(l) Almira Ave. from West 105th to West 110th St., 29,405 sq.ft. 4 in. brick block on 6 in. concrete base, 1780 cu.yd. excav., 2176 cu.ft. Berea curb and 560 sq.ft. 3 in. Berea sidewalk;

(m) West 30th St. from Broadview Dr. to Colburn Ave., 17,900 sq.ft. 4 in. brick block on 6 in. concrete base, 815 cu.yd. excav., 1560 cu.yd. Berea curb and 400 sq.ft. 3 in. Berea sidewalk;

(n) West 38th St. from Denison Ave. south, 15,930 sq.ft. 4 in. brick block on 6 in. concrete base, 520 cu.yd. excav., 1230 cu.ft. Berea curb and 150 sq.ft. 3 in. Berea sidewalk;

(o) Novak Ave. from West 7th to West 5th Sts., 5150 sq.ft. 5 in. brick block on 6 in. concrete foundation, and 705 cu.yd. excav.

(p) Eliot Ave. from East 102nd St. to 120 ft. east of 105th St., 17,560 sq.ft. 4 in. brick block on 6 in. concrete base, 600 cu.yd. excav., 1425 cu.ft. Berea curb and 300 sq.ft. 3 in. Berea sidewalk;

(q) Lowell Ave. from East 93rd to East 96th St., 12,070 sq.ft. 5 in. brick block, 550 cu.yd. excav., 880 cu.ft. Berea curb and 300 sq.ft. 3 in. Berea sidewalk;

(r) Tecumseh Ave. from East 108th to East 110th St., 8700 sq.ft. 5 in. brick block, 360 cu.yd. excav., and 20 sq.ft. 3 in. Berea sidewalk;

(s) Olivet Ave. from East 108th St. to Hathaway Ave., 10,380 sq.ft. 5 in. brick block, 425 cu.yd. excav. and 10 sq.ft. 3 in. Berea sidewalk;

(t) Tanner Ave. from East 103rd St. to West End, 7320 sq.ft. 5 in. brick block, 340 cu.yd. excav., 905 cu.ft. Berea curb and 50 sq.ft. 3 in. Berea sidewalk;

(u) Pythias Ave. from East 156th to 161st St., 22,465 sq.ft. 4 in. brick block on 6 in. concrete base, 1020 cu.yd excav., 1900 cu.ft. Berea curb and 125 sq.ft. 3 in. Berea sidewalk;

(v) Pennant Ave. from West 83rd to West 85th St., 5910 sq.ft. 5 in. brick block, 190 cu.yd. excav., 50 cu.ft. Berea curb and 125 lin.ft. 3 in. Berea sidewalk;

(w) Wright Ave. from East 93rd St. to east end of street, 4615 sq.ft. 5 in. brick block, 200 cu.yd. excav., 432 cu.ft. Berea curb and 20 sq.ft. 3 in. Berea sidewalk, from

Freshwater Constr. Co., 9703 Madison Ave., (a) $6516; (c) $5022; (d) $4679; (e) $19,724; (h) $8684; (i) $2401; (l) $19,658; (o) $3189; (u) $15,366; (v) $2561.

Rieley Bros., 348 Arcade Bldg., (a) $6637; (b) $14,979; (d) $4625; (f) $8697; (g) $1309; (h) 8739; (i) $2431; (j) $2924; (p) $11,744; (q) $6314; (r) $3425; (s) $4084; (t) $4304; (u) $15,416; (v) $2604; (w) $2321.

Baldwin Bros., 506 Rose Bldg., (a) $6673; (b) $14,671; (c) $5003; (e) $19,681; (f) $8581; (i) $2441; (k) $7909; (m) $12,567; (n) $10,082; (o) $3158; (p) $11,880; (q) $6331; (r) $3435; (s) $4124; (t) $4297; (v) $2617; (w) $2370.

Gould & Maybach, 823 East 150th St., (b) $15,077; (f) $8453; (g) $1329; (k) $8070; (p) $11,737; (u) $15,315; (w) $2376.

Roehl Bros., Clark and West 25th Sts., (c) $4980; (d) $4541; (e) $18,821; (h) $8719; (l) $20,064; (m) $12,143; (n) $9512; (o) $3128; (q) $6395.

G. B. Herring, (g) $1304; (r) $314; (s) $4072; (t) $4230.

A. M. Pepa Paving Co., (j) $2901.

Bentley Bros., 403 Electric Bldg., (j) $2923; (k) $8100.

McHugh Bros., (l) $19,111; (m) $11,975; (n) $9817. Noted Jan. 30.

★Mich., Detroit—Dept. Pub. Wks. let contracts paving, grading and curbing:

(a) Corbin Ave. from Herman to 12th Sts., 24 ft. wide, involving 3431 sq.yd. asphalt, 6 in. concrete base, 2439 lin.ft. Berea or Amherst curbing, 1609 cu.yd. earth excav., 70 cu.yd. concrete, under and behind curb, 192 lin.ft. retaining stone.

(b) Army St. from Beard to Green Sts., 26 ft. wide, involving 2059 sq.yd. asphalt 6 in. concrete base, 1454 lin.ft. Berea or Amherst curbing, 924 cu.yd. earth excav., 40 cu.yd. concrete under and behind curb, 26 lin.ft. retaining stone.

(c) St. Hedwig Ave. from Lockwood St. to Junction Ave., 26 ft. wide, involving 1755 sq.yd. asphalt, 6 in. concrete base, 1064 lin.ft. Berea or Amherst curbing, 910 cu.yd. earth excav., 33 cu.yd. concrete under and behind curb, 180 lin.ft. retaining stone.

(d) Putnam Ave. from Lawton to Maybury Aves., 26 ft. wide, involving 1233 sq.ft. asphalt, 6 in. concrete base, 866 lin.ft. Berea or Amherst curbing, 690 cu.yd. earth excav., 25 cu.yd. concrete under and behind curbs, 70 lin.ft. retaining stone.

(e) Greusel Ave. from Otis to Kulie Sts., 26 ft. wide, involving 1843 sq.yd. asphalt, 6 in. concrete base, 1172 lin.ft. Berea or Amherst curbing, 995 cu.yd. earth excav., 34 cu.yd. concrete under and behind curb, 104 lin.ft. retaining stone.

(f) Wendall Ave. from Ferndale to Woodmere Aves., 26 ft. wide, involving 4834 sq. yd. asphalt, 6 in. concrete base, 3183 lin.ft. Berea or Amherst curbing, 2007 cu.yd. earth excav., 91 cu.yd. concrete under and behind curb, 227 lin.ft. retaining stone.

(g) Rathborne St. from Springwells to Lawndale Sts., 26 ft. wide, involving 4919 sq.yd. asphalt, 6 in. concrete base, 3323 lin.ft. Berea or Medina curbing, 2443 cu.yd. earth excav., 92 cu.yd. concrete under and behind curb, 124 lin.ft. retaining stone.

(h) Covin St., from Fort to Krupp Sts.

(i) Gilbert Ave. from north line Michigan Ave. to south line Wagner St., 26 ft. wide, involving 5642 cu.yd. earth excav., 7702 lin.ft. Amherst curbing, 13,312 sq.yd. asphalt, 6 in. concrete base, 246 cu.yd. concrete under and behind curb, 1625 lin.ft. retaining stone.

(j) Anderdon Ave. from north line Kercheval Ave. to south line Charlevoix Ave., 26 ft. wide, involving 3190 cu.yd. earth excav., 3236 lin.ft. Amherst curbing, 1944 sq.yd. asphaltic concrete, 6 in. concrete base, 92 cu.yd. concrete under and behind curb, 166 lin.ft. retaining stone.

(k) Trenton Ave. from north line Ferndale to south line Woodmere Aves., 26 ft. wide, involving 1784 cu.yd. earth excav., 2734 lin.ft. Amherst curbing, 4182 sq.yd. asphaltic concrete, 6 in. concrete base, 73 cu.yd. concrete under and behind curb, 228 lin.ft. retaining stone.

(l) Oregon Ave. from present pavement to east line Colfax Ave., 26 ft. wide, involving 2041 cu.yd. earth excav., 2056 lin. ft. Amherst curbing, 3053 sq.yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 78 lin.ft. retaining stone.

(m) Petoskey Ave. from north curb Joy Ave. to north line Graham Ave., 26 ft. wide, involving 1787 cu.yd. earth excav., 1965 lin.ft. Amherst curbing, 3038 sq.yd. asphaltic concrete, 6 in. concrete base, 57 cu.yd. concrete under and behind curb, 210 lin.ft. retaining stone.

(n) Boxwood Ave. from north line Moore to south line Tireman Aves., 26 ft. wide, involving 1080 cu.yd. earth excav., 1424 lin.ft Amherst curbing, 2178 sq.yd. asphaltic concrete 6 in. concrete base, 41 cu.yd. concrete under and behind curb, 108 lin.ft. retaining stone.

(o) White St. from north line Jefferson Ave. to south line Harbaugh St., 20 ft. wide, involving 800 cu.yd. earth excav., 1564 lin.ft. Amherst curbing, 1866 sq.yd. asphaltic concrete, 6 in. concrete base, 46 cu.yd. concrete under and behind curb, 156 lin.ft. retaining stone.

(p) Wilson Ave. from north line Virginia Park to south line Euclid Ave., 26 ft. wide, involving 754 cu.yd. earth excav., 674 lin.ft. Berea curbing, 1058 sq.yd. asphaltic concrete, 6 in. concrete base, 19 cu.yd. concrete under and behind curb, 65 lin.ft. retaining stone.

(q) Wilson Ave. from north line Bethune to south line Pallister Aves., 26 ft. wide, involving 520 cu.yd. earth excav., 588 lin.ft. Berea curbing, 827 sq.yd. asphaltic concrete, 6 in. concrete base, 16 cu.yd. concrete under and behind curb.

(r) Wilson Ave. from north line Clairmont to south line Atkinson Aves., 26 ft. wide, involving 597 cu.yd. earth excav., 533 lin.ft. Berea curbing, 892 sq.yd. asphaltic concrete, 6 in. concrete base, 17 cu.yd. concrete under and behind curb, 104 lin.ft. retaining stone, etc.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $14,820; (p) $5234; (q) $3976; (r) $4258.

Streets and Roads (Continued)

Detroit Asphalt Paving Co., 20 McGraw Bldg., (b) $8714; (c) $7831; (d) $6373; (e) $8138; (f) $20,284; (g) $21,034; (h) $10,446; (i) $55,674; (j) $21,241; (k) $17,523; (n) $9320; (o) $8389.

W. B. Brady Constr. Co., 1972 Grand River Ave., (l) $13,580; (m) $13,304. Noted Feb. 20.

★Mich., Detroit—Dept. Pub. Wks. let contracts paving with asphalt on 6 in. concrete foundation, Berea or Medina curb:

(a) Begole Ave. from Beachwood to Tireman Aves., 26 ft. wide.

(b) Medbury Ave. from Van Dyke to Fisher Aves., 26 ft. wide.

(c) Philadelphia Ave. from Cameron Ave. to Detroit, Grand Haven & Milwaukee R. R., 26 ft. wide.

(d) Tuxedo Ave. from 12th St. to Oakmans Subdivision, 1 roadway 26 ft. wide and 2 roadways 20 ft. wide.

(e) Willett Ave. from Livernois Ave.

(f) Iosco St. from Mackinaw St. to Grand River Ave., 26 ft. wide.

(g) Ellery St. from Harper to Milwaukee Aves.

(h) Medbury Ave. from Frontenac to Baldwin Aves., 26 ft. wide.

(i) Kanter St. from Moran St. to Mt. Elliott Ave.

(j) Howard St. from Junction to Cavalry Aves., 26 ft. wide.

(k) Richton Ave. from Oakman Ave. to 12th St., 24 ft. wide.

(l) Cardoni Ave. from Holbrook to Lynn Aves., to

Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $30,888; (b) $27,912; (e) $15,314; (h) $17,856.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (c) $21,162; (d) $17,875; (k) $7355; (l) $35,571.

W. B. Brady Constr. Co., 1972 Grand River Ave., (f) $12,121; (g) $18,550; (i) $12,936; (j) $13,620. Noted Jan. 30.

★Mich., Mt. Clemens—Comrs. Macomb Co. let contract paving 11 mi. Gratiot Highway from county line between Macomb and Wayne (Detroit) Counties to city limits, 24 ft. wide, sheet asphalt on 7 in. concrete base, to Detroit Asphalt Paving Co., 20 McGraw Bldg., Detroit, $543,140. Noted Sept. 26.

★Ill., Belleville—Comrs. St. Clair Co. let contract grading Belleville-Hecker Rd. and Belleville-Millstadt Rd., to C. Tritt, Reeb R.R. Sta. No. 4; cost $33,944 and $15,922 respectively.

★Ill., East St. Louis—City let contract paving 1500 ft. State St. from 33rd to 38th Sts., concrete and brick, 42 ft. wide, to L. Rich Constr. Co., 429 Missouri Ave., $27,208. Noted Feb. 20.

★Ill., Springfield—City let contract improving 1½ mi. lower Terre Haute Rd., brick, to A. J. Parish, Paris, $29,432.

★Kan., Wichita—Sedgwick Co. let contract grading, draining and surfacing Central Ave. Rd., 38,871.2 ft. long, 18 ft. wide, concrete, involving 37,314 cu.yd. earth excav., 132 cu.yd. Class "A" concrete, 457.1 cu.yd. Class "C" concrete, 26.5 cu.yd. hand rail concrete, 35,621 lbs. reinforcing steel, 51,828 sq.yd. earth shoulders, 77,742 sq.yd. concrete pavement, exclusive of joint and cement, 1250 lin.ft. guard fence, 2 markers, 20,970 lin.ft. joints for concrete pavement, to Smith Graham Constr. Co., Augusta, $208,583; also building 5 rein.-con. bridges and repairing and lengthening wing walls of rein.-con. bridge, to Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, $14,329 and $2983 respectively. Noted Jan. 9.

★North Dakota—State Highway Comrs., Bismarck, let contract building 16 mi. State Aid Project No. 1672, West from Glenfield in Foster Co., to Stanley Bros., Glenfield, $18,288.

★Tex., Albany—Comrs., Shackleford Co. let contract building 11.2 mi. highway, to P. X. Clarks. About $62,000. Noted Feb. 6.

★Tex., Houston—City let contract paving Washington Ave., from Wichman St. to city limits, to Texas Bitulithic Co., 701 Foster Bldg., $60,284. Noted Oct. 3.

★Tex., McAllen—City let contract paving various streets with trap rock and tarvia, gravel base, to Finley Method Co., 703 Stewart Bldg., Houston. About $75,000.

Tex., San Antonio—City received bids Feb. 3, for fine grading and surfacing with 2 in. bituminous trap rock, rock asphalt or bitulithic, 5500 ft. New Braunfels Ave. from Van Ness to Commerce St., 30 ft. wide, from Uvalde Rock Asphalt Co., Swearengen Bldg., $1.25 per sq.yd. with 10 yr. maintenance, $.25 per sq.yd. for grading, total, $36,300; $1.20 per sq.yd. with 5 yr. maintenance, $.25 per sq.yd. for grading, total, $35,090; Texas Bitulithic Co., Gunter Bldg., $1.75 per sq.yd. with 5 yr. maintenance, $.23 per sq.yd. for grading, total $47,916; $1.70 per sq.yd. without maintenance, $.23 per sq.yd. for grading, total, $46,706; Finley Method Co., Stewart Bldg., Houston, $1.50 per sq.yd. with 5 yr. maintenance, $.23 per sq.yd. for grading, total, $41,866; $1.17 per sq.yd. without maintenance, $.23 per sq.yd. for grading, total, $33,880. (Figures based on approximate amount of 34,000 sq.yd.) Noted Jan. 30.

★Cal., San Diego—City let contract paving Park Blvd., to G. R. Daley, McMuse Bldg San Diego, $50,889.

★Cal., San Diego—City let contract grading and paving La Jolla Blvd., 20 ft. wide, to D. H. Ryan, 3606 Sierra St., San Diego, $89,246. Work involves 13,380 lin.ft. concrete pavement with oil and screening surface. Noted Feb. 20.

Railways

PROPOSED WORK

New York—H. C. Allen, city engr., Syracuse, and J. W. Pfau, ch. constr. engr., New York Central R.R., 1044 Trinity Ave., and associates, plan to build "loop line railroad" serving Barge Canal Terminal and connecting trackage around harbor. Address J. W. Pfau.

New York—New York Central R.R. and Rutland R.R. both of Grand Central Terminal, New York City, having plans prepared extending tracks of Rutland R.R. along river front, Ogdensburg; also building drawbridge over mouth of Oswegatchie River. G. W. Kittredge, New York City, ch. engr. of former, and J. G. Schillinger, Rutland, Vt., ch. engr. of latter.

Texas—T. J. O'Donnell, pres. Midland & Northwestern Ry., Midland, and others, plan to build 80 mi. railroad from Stephenville to De Leon, Desdemona, Ranger, Eastland, Cisco and Breckenridge.

BIDS DESIRED

Oregon—Until Mar. 22, by Whitney Co., 904 Lewis Bldg., Portland, building 11 mi. standard gauge railroad in Bay City, Tillamook Co.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Oregon—Shevlin-Hixon Lumber Co., Bend, let contract building 9 mi. logging road along Upper Deschutes River, to Sims & Carlson, Spokane, Wash. About $100,000.

Excavation and Dredging

PROPOSED WORK

N. Y., Long Island City—Canal—State Legislature, Capitol, Albany, petitioned to appropriate sum for work in connection with canal to be built here.

Wis., Oconto—Ditch—Comrs. Oconto Co. soon let contract for 15 mi. open ditch and 12,000 ft. 16-24 in. tile. A. Rocfue, Lena, clk.

Ark., Jonesboro—Ditch—Comrs. Cache River D. D., Craighead, Lawrence and Jackson counties, rejected bids received Feb. 18, building 22 mi. main ditch and 12 mi. lateral involving 5,000,000 cu.yd. excav. J. R. Rhyne, Corning, engr. Noted Feb. 6.

Ore., Madras—Irrigation—Dirs. Farmers' Commercial Bodies & Irrigations Projects, applied to Secy. of Interior, Wash., D. C., for authority to start work on Merger Irrigation project, 200,000 acres in Deschutes River territory. Tentative plans prepared for making surveys for reservoir sites; surveys to be made by Government Geologist

Cal., Elsinore—Irrigation—G. I. Lamy, engr., Marsh-Strong Bldg., Los Angeles, applied to State Water Comn. to appropriate 120 second feet of water of Lake Elsinore to irrigate 20,000 acres of land. Plans include construction of 42 mi. canal, lined partly with concrete, power and pumping plant. About $1,000,000.

Cal., Imperial — Irrigation — Imperial Water Co. No. 12 plans to sell bonds to build irrigation canal to supply water to several thousand acres west of present Westside canal.

Cal., Los Angeles—Irrigation—W. Mulholland, ch. engr. bd. pub. serv., 645 South Olive St., reported that project to supply water from Los Angeles aqueduct to 30,000 acres in Westgate annexed district is feasible. Plans include construction of 25 mi. pipe line from San Fernando reservoir to district and distributing system to supply domestic and irrigation water. About $1,950,000. Noted Dec. 19.

Cal., Porterville—Irrigation—A. J. Bolin, Porterville, representing Kansas City syndicate, plans to level 1000 acres land and build irrigation system. About $100,000.

BIDS DESIRED

Miss., Marks—Excavation—Until Mar. 10, by Marks D. D., excavating drainage channels; about 100,000 yd. floating dredge work. W. R. Wallis, engr.

Minn., Marshall—Ditch—Until Mar. 5, by R. D. Houdersheldt, aud. Lyon Co., digging and building Co. Ditch No. 29 involving 66,584 lin.ft. 6-30 in. tile, 2 mi. open work involving 42,843 cu.yd. About $29,082 for tile work and $6426 for open work. Noted Dec. 12.

Minn., Waseca—Ditch—Until Mar. 10, by Waseca Co. (Waseca), and Steele Co. (Owatonna), building Judicial Ditch No. 5. About $17,579. Work involves 81,464 cu.-yd. excav., 66.29 cu.yd. concrete, 1850 ft. 12 in. tile, 2 flood water inlets, 21,015 ft. 3 wire fence and leveling spoil banks. T. Peterson, co. aud. Noted Dec. 19.

S. D., Vermilion—Drainage—Until Mar. 4, by W. L. Russell, aud. Clay Co. building Bethel Tile Drain.

Ark., Harrisburg—Channel—Until Mar. 11, by D. D. No. 7, Poinsett Co., building 22 mi. channel, 30-50 ft. base, to intercept floor water from hills on west of district, involving 1,670,000 yd. floating dredgework. Pride & Fairley, Blytheville, engrs.

Ark., Osceola—Dredging—Until Mar. 20, by D. D. No. 17, Mississippi Co., building 4 mi. ditch, 75 ft. bottom, 1 mi. ditch 40 ft. bottom, 12 mi. levee, 8 ft. crown and three 1 side slopes from 8-11 ft. high, involving 1,800,000 yd. floating dredgework. Pride & Fairley, Blytheville, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Albany—Barge Canal Works—W. W. Wotherspoon, supt. pub. wks., Capitol, let contract protecting shore of Erie Basin between Lake St. and Slip No. 1, Buffalo, Cont. 69, involving 150 cu.yd. excav., 300 cu.yd. cinder backfill, 900 lb. structural steel, 60 cu.yd. 1st class rip rap, 19,000 ft. b.m. sawed lumber, 11,000 cu. yd. 2nd class concrete, 100 cu.yd. stone filling in cribs, etc., to R. C. Bush, Tonawanda, $5866; installing electric wiring, lighting, power and battery charging equipment for canal terminal at Erie Basin, Buffalo, Contr. 107, to J. Livingston & Co., 70 East 45th St., New York City, $28,239. Noted Jan. 23.

★N. Y., Albany—Barge Canal Work—W. Wetherspoon, supt. pub. wks., let contract (1) building pile dolphins for aids to navigation on Cayuga and Seneca Lakes, Contr. Q; (2) driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport, Contr. 200, involving 5300 cu.yd. excav., 22,000 b. m. sheeting and bracing, 770 cu.yd. forming embankment, furnishing 2300 sq.ft. ¼ in. steel sheet piling, 77,000 sq.ft. ⅜ in. steel sheet piling, 2900 cu.yd. 2nd class concrete, 500 cu.yd. wash wall, 460 lb. structural steel, 1040 lb. metal reinforcement, removing 730 cu.yd. concrete, coffer dams, pumping, draining, etc.; (3) providing for completion of concrete lining at Carterville and building stream entrance near Knapps bridge, Contr. 201 to W. F. Martens, 245 Cutler Bldg., Rochester, (1) $5092; Lupfter & Remick, Ellicott Sq., Buffalo, (2) $15,248; Ludington & Sons, Inc., Powers Bldg., Rochester, (3) $42,824. Noted Jan. 23.

★N. Y., Albany—Freight Shed—W. W. Wotherspoon, supt. pub. wks. let contract building Barge Canal Terminal freight shed at Greenpoint, Brooklyn, N. Y., Contr. 223, to Post & McCord, 101 Park Ave., New York City, $75,719. Work involves 594,500 lb. structural steel, 450 ft. 8 in. 300 sq.ft. 6 in. and 2100 ft. 4 in. terra cotta tile, 610 sq.ft. wood flooring, 6048 sq.ft. warehouse doors, 9800 sq.ft. corrugated metal siding, 4900 sq. ft. flashing, 21,900 sq.ft. roof covering, 810 lin.ft. gutters, 240 lin.ft. corrugated conductors, 250 lin.ft. 4 in. pipe conductors etc. Noted Jan. 23.

Excavation and Dredging (Continued)

★Miss., Tunica — Excavation — Comrs. Prichard D. D., Tunica Co., let contract for 540,000 yd. floating dredge work and 25,000 cu.yd. earth embankment, to Kohler Constr. Co., Minneapolis, Minn., $0.13½ per cu.yd. Noted Feb. 6.

O., Cleveland—Excavation—See "Streets and Roads."

Ia., Logan—Drainage—Comrs. Harrison Co. (Logan) and Monona Co. (Onawa) received bids Feb. 18, building Upper Willow D. D. No. 2, Sects. 1 to 9, main ditch involving 504,680 cu.yd. excav. and 8 lateral ditches involving 16,106 cu.yd. excav. from Calahan Walker Co., Omaha, Neb., entire job, $0.1132 per cu.yd., S. O. Briggs Co., 925 City Natl. Bank Bldg., Omaha, Neb., main ditch, $0.1173 per cu.yd., laterals, $0.30 per cu.yd., M. E. Mills, Omaha, Neb., main ditch, $0.1249 per cu.yd., laterals, $0.18 per cu.yd. Noted Feb. 6.

★Minn., Ada—Ditch—Comrs. Norman Co. (Moorhead) and Clay Co. (Ada) let contract building Judicial Ditch No. 56 to Strom, Deggernes & Hanson, Gary, $.0983 per cu. yd. excav. and $275 per lin.mi. leveling. Work involves main ditch and 3 laterals and includes 914,619 cu.yd. excav., 27 mi. road leveling and 32 bridges.

★Kan., Wichita — Excavation — See "Streets and Roads."

★Ark., Lonoke — Excavation — Bayou Metropolitan D. D. No. 1, Lonoke Co., let contract dredging in old Bayou channel, with laterals draining into bayou and clearing right-of-way; old channel to be enlarged to 50 ft. base, laterals 6-16 ft. base, to O. Kochtitzky, Cape Girardeau, Mo., cost $.10½ cu.yd. for bayou work, $.30 cu.yd. team work and laterals and $27 an acre for clearing. Noted Feb. 20.

★Idaho, Boise—Irrigation—Idaho Farm Development Co. signed contract with State Land Bd. to irrigate 8000 acres land in Twin Falls Co. Project includes storage reservoirs and canals from Cedar Creek. W. N. Gibb, Boise, engr.

★Cal., El Centro—Irrigation—Dirs. Imperial Irrigation Dist., Masonic Temple, let contract to W. Ledbetter, Pacific Electric Bldg., Los Angeles, building headgate at Sharps Heading, $86,000; at Ash heading, $20,600. Noted Jan. 9.

Industrial Works

PROPOSED WORK

Mass., Lowell—Standard Oil Co., 50 Congress St., plans to build garage and office on Main and Canada Sts. About $80,000.

Mass., Worcester—E. T. Chapin, archt., 340 Main St., soon receives bids building 2 story, 64 x 111 ft. brick garage on Main St., for A. S. Hanson, 873 Main St. About $38,000. Former bids rejected. Noted Feb. 6.

Mass., Worcester—B. Press., 1 Granite St., having plans prepared by E. T. Chapin, archt., 340 Main St., building 1 story, 50 x 90 ft. brick and rein.-con. garage, rein.-con. flooring and concrete foundation on Vernon St. About $25,000.

Conn., Bridgeport—Greenbaum & Kovags, 893 Hancock Ave., having plans prepared by F. A. Cooper, archt., 1024 Main St., building 1 story, 50 x 141 ft. brick and steel garage, rein.-con. flooring and concrete foundation corner Fairfield Ave. and Whittier St. About $30,000. Address S. Greenbaum, 893 Hancock St.

Conn., Stamford—Stamford Extract Mfg. Co., Cove Rd., plans to rebuild manufacturing plant recently destroyed by fire with loss of about $900,000.

N. Y., Brooklyn—Belgian Fur Dyeing Co., 321 Manhattan Ave., receiving preliminary estimates for 3 story, 68 x 98 ft., steel and brick factory, rein.-con. flooring, concrete foundation, at 566 Johnson Ave. About $35,000. E. Purim, pres. B. Dorfman, 26 Court St., archt.

N. Y., New York—W. F. Connell, 1001 Intervale Ave., receives bids in 2 or 3 weeks for 2 story, 70 x 100 ft., steel and brick garage, rein.-con. flooring, concrete foundation, on Intervale Ave. and 163rd. St., Bronx Boro. About $30,000. J. J. Dunnigan, 391 East 149th St., archt.

N. Y., New York—Eagle Pencil Co., 703 East 13th St., having plans prepared by Buchman & Kahn, archts., 56 West 45th St., for 6-story, 75 x 200 ft., rein.-con. addition, rein.-con. flooring, concrete foundation on Avenue D, between 13th and 14th Sts.

N. Y., New York—W. H. Hussey & Son, 150 West 35th St., soon receives bids building 4 story, 42 x 98 ft., brick and steel warehouse, rein.-con. flooring, concrete foundation, at 233-235 West 35th St. About $75,000. G. Keyster, 56 West 45th St., archt. Noted Feb. 6.

N. Y., New York—B. W. Levitan, archt., 7 West 45th St., receives bids about Feb. 28, building 2 story, 100 x 171 ft., steel and brick garage, rein.-con. flooring, concrete foundation, on Lenox Ave. between 110th and 111th Sts. for Swartout Realty Co., 26 West 31st St. About $200,000. New York West Side Garage Corp., care of Ames & Co., 26 West 31st St., lessee.

N. Y., New York—F. A. Munsey, 280 Bway., plans to alter interior and build addition to printing plant. About $50,000. Starrett & Van Vleck, 8 West 40th St., archts.

N. Y., New York—Pictorial Review Co., 222 West 39th St., having plans prepared building 12 story, 107 x 147 ft., brick and steel printing plant, on 7th Ave. and 39th St. About $1,000,000. Renwick, Aspinwall & Tucker, 8 West 40th St., archts. Noted Feb. 13.

N. Y., Syracuse—Onondaga Milk Producers Co-Operative Assn. plans to build concrete and steel milk condensary. About $150,000 available for project. Address C. L. Amos, 1204 James St., dir.

N. Y., Syracuse—Overland Syracuse Co., East Genesee St., plans to build 3 story, 96 x 100 ft., brick service station to replace present building on Grape St.; also build 3rd story to existing building on East Genessee St.

N. J., Washington—H. Christine, mayor, O Menkel and associates, will soon receive bids building 2 story, 48 x 140 ft. brick hosiery mill. About $100,000. Noted Feb. 20.

Pa., Chester—H. P. Bartow, 612 Newmarket St., having plans prepared for 3 story, 20 x 100 ft. printing house.

Pa., Phila.—J. E. Sjohsom, Inc., 1715 North 10th St., plans to build 3 story, 68 x 102 ft. brick factory. About $50,000.

Pa., Temple—Temple Malleable Iron & Steel Co. having plans prepared by F. D. Chase, Inc., engrs., 120 South Michigan Ave., Chicago, for rebuilding plant damaged by fire.

Pa., Yorkhaven—Yorkhaven Water & Power Co., engaged Gannett, Seelye & Fleming, engrs., 204 Locust St., Harrisburg, to make complete study and report on improvements and enlargement of 20,000 h.p. hydro electric plant.

N. C., Winston Salem—Hanes Rubber Co. plans to extend plant here, including construction of warehouses and 40 cottages. Lockwood, Greene & Co., Healy Bldg., Atlanta, Ga., engrs.

Tenn., Kingsport—R. Y. Grant and J. H. Lang have acquired the Kingsport Tannery and plan to alter same, also build 3 story, 100 x 400 ft. addition, to include currying shops.

Ky., Lexington—Burley Tobacco Co. plans to build 160 x 800 ft. warehouse here. About $100,000. C. Lebus, pres.

O., Dayton—Custer Specialty Co., 2628 North Ludlow St., having plans prepared by R. E. Gebhart, archt., 73 Calahan Bank Bldg., building 3 story, 60 x 80 ft. factory on Franklin St.

Mich., Detroit—Holley Carburetor Co., 145 East Willis Ave., having plans prepared by A. Kahn, Marquette Bldg., for 1 and 2 story, 60 x 224½ ft. and 40 x 94½ ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on Epworth Blvd. and Vancouver St.

Mich., Detroit—J. G. Kastler, archt., 523 Chamber Commerce Bldg., soon lets contract building 2 story, 50 x 180 ft. brick, concrete and steel garage, rein. con. flooring and concrete foundation on Chene St. and East Grand Blvd. Owner's name withheld. Noted Feb. 13.

Mich., Detroit—J. G. Kastler, archt., Chamber Commerce Bldg., preparing plans for 2 story, 40 x 100 ft. brick and rein. con. bakery, concrete foundation, on Chopin and McGraw Aves. Owner's name withheld.

Mich., Grand Rapids—C. A. Connor Ice Cream Co., Owosso, plans to build plant here. About $150,000.

Mich., River Rouge—Ford Motor Co., Highland Park, soon receives bids building 2 story, 40 x 80 ft. steel substation and transformer house here, also 70 x 300 ft. pig casting machine shop. Brick and concrete work to be done by day labor.

Ill., Blue Island—American Wire Fabrics Co., 208 South La Salle St., Chicago, purchased site near here and plans to build large plant. About $1,000,000.

Wis., Atkinson—Better Sox Knitting Mills Co. plans to build 1 story, 20 x 50 and 25 x 30 ft. addition to factory. D. S. Becker, mgr.

Wis., Manitowoc—Dixie Motor Co., having plans prepared by Juul & Smith, archts., 801 North 8th St., Sheboygan, building 2 story, 75 x 180 ft., rein.-con. and brick garage on North 8th St. here.

Wis., Racine—E. C. Tecktonium Mfg. Co., 1224 13th St., having plans prepared by D. R. Davis, archt., 526 Wisconsin St., building 2 story, 100 x 160 ft. addition to factory with 50 x 80 ft. wing, rein. con., brick and steel.

Wis., Superior—J. O. Bach, archt., Superior, soon receives bids building garage for D. S. Webb, 1607 21st St. About $35,000.

Ia., Davenport—Standard Oil Co., 715 Federal St., soon receives bids building oil filling station on 4th and Warren Sts. A. Flanigan, asst. mgr.

Ia., Storm Lake—G. Coulson and O. B. Kelly plan to build 1 story, 50 x 100 ft. brick warehouse, Erie and Railroad Sts.

Minn., Mankato—Eckman Bros. having plans prepared by H. C. Gerlach, archt., Mankato, building 2 story, 30 x 50 ft. garage, 17 x 40 ft. office, 10 x 15 ft. stockroom and 50 x 88 ft. workshop.

Minn., St. Cloud—Standard Oil Co., 4th and Oak Sts., Minneapolis, soon lets contract building 1 story, 40 x 150 ft. filling station 1 story, 40 x 80 ft. barn and 2 story, 30 x 118 ft. warehouse here. About $100,000.

Kan., Wichita—O. S. Shirk, 805 Schweiter Bldg., plans to build 4 story brick warehouse on old Vilm Mill site, at Waco and Douglas Aves. About $40,000.

Mont., Great Falls—State Bd. Examiners, Helena, plans to sell $250,000 bonds Mar. 15, to build terminal elevator here.

Mo., St. Louis—A. B. Groves, archt., Room 501, Merchants Exch. Bldg., soon receives bids for 1 story, 120 x 260 ft. rein.-con. addition to factory, for Bemis Bag Co., 601 South 4th St. About $100,000.

Mo., St. Louis—Missouri Farmers Assn, care of A. Dunlap, representative, Gallatin, plans to build flour mill here. About $350,000.

Mo., St. Louis—St. Louis Wire & Iron Co., 926 Chouteau Ave., plans to build 2 story, 50 x 150 ft., brick and concrete factory, concrete foundation, at 930 Chouteau Ave. About $30,000.

Tex., Abilene—Gulf Well Machry. Mfg. Co. plans to build factory here, also make other improvements. About $250,000.

Tex., Waco—Geyser Ice Co. plans to build cold storage plant here. About $100,000.

Colo., Brighton—Natl. Beet Harvester Co. plans to build factory and foundry here. About $30,000.

Colo., Colorado Springs—City plans election in April to vote on $75,000 bond issue to build heating plant, garage and central fire station.

Utah, Salt Lake City—J. G. McDonald, 159 West Bway., receives bids about Apr. 1, building 6 story, 55 x 145 ft., rein.-con. addition to factory. About $100,000. Headlund & Kent, Dooly Bldg., archts. Noted Dec. 12.

Wash., Spokane—Albers Milling Co. plans to build flour mill here. About $150,000. Address L. Palmerton, 1101 Nora St.

Wash., Wenatchee—Cashmere Apple Co. had plans prepared by H. M. Braggin, archt., for 3 story, 90 x 107 ft. warehouse on Wenatchee Ave. and Spokane St.

Cal., Los Angeles—French-Amer. Shipbuilding Corp., 418-19 Marsh Strong Bldg., recently incorporated with $2,000,000 capital stock, leased site in San Pedro Dist., and plans to build shipbuilding plant. About $100,000 will be expended. W. E. Russell, Haas Bldg., pres.

Industrial Works (Continued)

Cal., Modesto—McHenry Canning Co. plans to build fig packing plant at McHenry Sta., north of here. About $50,000.

Cal., San Jose—Producers Warehouse Co. plans to build addition to warehouse. About $200,000.

Que., Grand Mere—Laurentide Co., Ltd., McGibbon and 3rd Ave., plans to build paper mill. About $400,000. S. Cahoon, Grand Mere, engr.

Que., Montreal—Montreal Tramways Co., 78 West Craig St., had plans prepared for substation on Cute St., cost, $400,000; also for car barns on Fullum and Mt. Royal Sts., $110,000. B. Vernon, Royal Trust Bldg., archt. W. Graves, Tramways Bldg., ch. engr.

Que., Quebec—Valcartier Lumber & Pulp Co., Ltd., receives bids in March for pulp mill. About $350,000.

Que., Sherbrooke—Canadian Connecticut Cotton Mills, Ltd., Drummond Rd., soon lets contract building addition to plant. About $100,000.

Ont., Collingswood—W. J. Holden purchased site here and plans to build planing mill and sash and door factory. About $40,000.

Ont., Coniston—Mond Nickel Co. plans to build 3 new furnaces. C. V. Corloss, mgr.

Ont., Hamilton—Dominion Fdry. & Steel Co., Ottawa St., soon lets contract building plate mill to have capacity of 12,000 tons per month.

Ont., Ottawa—Dominion Government, Dept. Rys. and Canals, receives bids in spring building shops and roundhouse at Overbrook. W. A. Bowden, Ottawa, engr.

Ont., Parry Sound—Town plans to build electric-light plant. About $125,000. J. D. Broughton, clk.

Ont., Strathroy—Dominion Canners receive bids about Mar. 1 building 2 story brick warehouse. About $60,000. Noted Jan. 9.

B. C., New Westminister—City plans to build cold storage plant on new city market site. A. W. Gray, mayor.

B. C., Port Moody—Moody Rolling Mills, Ltd., Pacific Bldg., Vancouver, plans to build steel rolling mill here.

B. C., Victoria—Harbour & Morne Co., care of C. J. V. Spratt, pres. Victoria Machinery Depot, Ltd., Victoria, receives bids in about week building shipbuilding plant to include mould loft, mill, plate shop, blacksmith shop, building ways and offices.

BIDS DESIRED

Ill., Chicago—Mundie & Jensen, archts., 39 South La Salle St., is receiving bids for 1-story, 133 x 520 ft., brick factory, brick foundation, on 47th and Whipple Sts., for J. S., H. C. and H. Phipps, 787 5th Ave., New York City. About $225,000. Marshall, Field Co., 22 East Washington St., lessee.

Minn., Hibbing—Until Mar. 10, by C. Foster, engr., care of Hibbing Power & Light Co. building 3 story, 104 x 158 ft. power house, rein. con., brick and steel, rein. con. flooring, concrete foundation on Main St. About $150,000. Holstead & Sullivan, Palladia Bldg., Duluth, archts. Noted Feb. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Chelsea** (Boston P. O.)—Griffin Wheel Co., 42 Gerrish Ave., let contract building 1 story brick, steel and concrete foundry, machine shop, core room, cleaning room, etc., rein. con. flooring and concrete foundation, to F. F. Jonesberg Co., 294 Washington St., Boston. About $300,000. Noted Feb. 6.

★**Mass., Worcester**—M. Barski, 21 Green St., let contract building 1 story, 134 x 200 ft., brick and concrete garage, rein.-con. flooring, concrete foundation on Green St., to Federal Eng. Co., 518 Main St. About $50,000. Noted May 23, 1918.

★**N. Y., New York**—Practical Garage Co., 822 Undercliff Ave., Edgewater, N. J., will build 1 story, 50 x 99 ft. brick and steel garage, rein.-con. flooring and concrete foundation, on 144th St. near Lenox Ave., here. About $25,000. Work will be done by day labor.

★**N. Y., New York**—Standard Oil Co., 26 Bway., let contract building 2 story, 72 x 100 ft., rein.-con. and steel stable, rein.-con. flooring, concrete foundation, on 120th St. and Pleasant Ave., to H. D. Best Co., Flatiron Bldg. About $25,000; cost plus percentage.

★**N. J., Kearney** (Arlington P. O.)—Pure Oil Co., 423 Passaic Ave., East Newark, let contract building 1 story, 37 x 120 ft., brick warehouse and office, to Salmond Bros., 526 Elm St., Arlington. About $27,000.

★**N. J., Newark**—Coco-Cola Bottling Co., 173 Ogden St., let contract building 3 story, 39 x 56 ft., rein.-con. and brick addition, rein.-con. flooring, on Ogden and 4th Sts., to Butler Co., 18 West 34th St., New York City, about $25,000.

★**Pa., Phila.**—Clark & Craighead, 1736 North Broad St., plans to build 2 story, 100 x 200 ft. garage, stores and office by day labor. About $150,000. Noted Feb. 6.

★**Md., St. Helena** (Baltimore P. O.)—Raymond Concrete Pile Co., 922 Munsey Bldg., Baltimore, will build 1 story, rein.-con., steel and brick ship repairing and concrete pile casting plant, rein.-con. flooring, concrete foundation on Colgate Creek. About $100,000. Work will be done by day labor.

Mich., River Rouge — See "Industrial Work," proposed work.

★**Mich., River Rouge**—Ford Motor Co., Highland Park, let contract furnishing and erecting steel work for two 1 story, 50 x 300 ft. cast houses at blast furnace here and building high line trestle and bridge girders in connection with coal and ore storage pocket (comprising about 800 tons of steel), to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa.; also building 2 steel storage tanks, 300,000 gal. capacity each, and towers, to Pittsburgh-Des Moines Steel Co., 801 Curry Bldg., Pittsburgh, Pa.

★**Ore., Bay City**—Miami Lumber Co. will build addition to saw mill to increase capacity to 175,000 ft. daily. Plans include filling, dredging, building loading docks, etc. Work will be done by day labor.

★**Cal., Fresno**—Madray Planing Mill Co., Kern and H Sts., will build 1 story, 150 x 280 ft. rein.-con. planing mill on Santa Clara and H Sts. Work will be done by day labor. About $200,000. Noted Sept. 12.

★**Cal., Fresno**—San Joaquin Light & Power Co., H and Tulare Sts., will build 20,000 hp., rein. con. hydroelectric plant on San Joaquin River near Macy Flat, cost, $1,750,000, diversion dam 70 ft. high, 100 ft. long at base and 450 ft. long at top 2 mi. from present power house, 2 mi. tunnels and 2½ mi. concrete lined conduits to carry 600 second feet of water from dam to plant, 3 tunnels, largest 9000 ft. long, cut through solid rock; rock taken from tunnels will be used to build dam, penstock 800 ft. long, 1 short high tension transmission line, install equipment, etc.; also build roads to proposed power plant on Kings River where 20,000 hp. plant will be built on Dinkey Creek; 1 plant will be built each year on Kings River, ultimate plans calling for development of about 200,000-260,000 hp., cost to exceed $55,000,000. Work will be done by day labor. Noted Feb. 20.

★**Ont., Hamilton**—Hamilton-Toronto Sewer Pipe Co., Wentworth St., N. let contract building addition to factory, to Canadian Eng. & Contg. Co., Bank of Hamilton Bldg. About $25,000.

★**B. C., Victoria**—Hutchinson Bros. & Co., Ltd., 409 Bay St., let contract building foundry, to Cameron Investment & Securities Co., Ltd., Central Bldg. About $100,000. Noted Jan. 26.

Buildings

PROPOSED WORK

Mass., Cambridge (Boston P. O.)—Hotel—H. Harlow, archt., 101 Tremont St., Boston, receives bids in March, building 4 story, brick, steel and concrete apartment hotel, rein.-con. flooring, concrete foundation, for F. S. Harlow, c/o archt. About $100,000.

Mass., Dorchester (Boston P. O.)—Market—Upham Market Co. had plans prepared by W. Bacon, archt., 27 Kilby St., Boston, for 2 story, 84 x 117 ft. rein.-con. on Ramsey St. here. About $100,000.

Mass., Holyoke—School—Bd. Educ. had plans prepared by G. P. B. Alderman & Co., archts., 437 High St., building 2 story, brick, steel and rein.-con., rein.-con. flooring and concrete foundation. About $275,000.

Mass., Lowell—Office—See "Industrial Works."

Mass., Worcester — High School — Bd Educ. plans to build addition to high school on Irving St. to contain gymnasium, administration rooms, etc.

Conn., Hartford — Market — City having plans prepared by Whiton & McMahon, archts., 36 Pearl St., building public market on Connecticut Blvd. About $100,000. R. J. Kinsella, mayor and chn. comn.

Conn., Middletown—Armory—State Legislature, Hartford, petitioned to appropriate $250,000 to build state armory here.

Conn., New Haven — Hospital — Grace Hospital Assn., 1418 Chapel St., receives bids about May 1, for 5 story, 100 x 140 ft. brick, steel and rein.-con., rein.-con. flooring and concrete foundation on Orchard St. About $250,000. C. S. Palmer, 191 Church St., archt.

Conn., New Haven—Bank—Pallotti, Andretta Co., 630 Chapel St., soon receives bids building 3 story, 76 x 90 ft. brick, steel and concrete bank building, rein.-con. flooring and concrete foundation on corner Olive and Chapel Sts. About $100,000. D. Guerriero, 630 Chapel St., archt.

Conn., Norwalk—Hotel—Norwalk Realty & Impvt. Co., care of M. N. Maychoff, 31 West Ave., having plans prepared by G. F. Shepard, archt., 14 Kilby St., Boston, building brick and steel, concrete foundation, on Wall St. About $100,000.

Conn., Waterbury—Hospital—Bd. Health receives bids in March building 2 story, brick, steel and rein.-con. Isolation Hospital, rein.-con. flooring, concrete foundation, on Watertown Ave. Cost, including equipment, $200,000. Cross & Cross, 681 5th Ave., New York City, archts. Noted Jan. 23.

Conn., Waterbury—Hospital—St. Mary's Hospital, Franklin St., plans to build 2 story addition on Cole St.

N. Y., Albany—Office—State Legislature, Capitol, petitioned to acquire site and build senate and assembly office.

N. Y., Cortland—School—State Educational Dept., Capitol, Albany, petitioned to adopt site on Court House Hill and build new normal school here.

N. Y., Lake Placid—Hotel—Bowman Hotel Co., 405 Lexington Ave., New York City, plans to build 10 story, on Grand View Hill. About $300,000.

N. Y., Little Falls—Bank—Little Falls Natl. Bank, 1 West Main St., plans to build 1 story, on Main and Ann Sts. About $100,000.

N. Y., Manlius — Barracks — St. John School having plans prepared by J. M. Scrafford, archt., building additional barracks, cost $100,000. W. Verbeck, pres. War Dept., Wash., D. C., will furnish equipment to extend schools; curriculum to include artillery and cavalry; cost, $250,000.

N. J., Newark—Club—Newark Athletic Club, Ordway Bldg., had tentative plans prepared building 10 story, 100 x 125 ft. concrete, steel and brick, rein.-con., concrete foundation. About $600,000.

N. Y., New York—Office—H. Jaeckel & Sons, 16 West 32nd St., soon lets contract building 6 story, 25 x 155 ft. brick and steel addition, concrete foundation, at 546 5th Ave. About $75,000. Starrett & Van Vleck, 8 West 40th St., archts.

N. Y., Rochester—Music Hall—G. Eastman, plans to build 3 story, 186 x 227 ft., on Gibbs St. between Barrett Alley and Main St.

N. Y., Syracuse—Bank—Syracuse Trust Co., 328 South Warren St., plans to expend between $50,000 and $100,000 for converting present buildings at 509-511 North Salina St. into bank, also build new quarters in South Gennes St.

N. Y., Syracuse—Home—Onondaga Co. Orphan Home plans to build 10 frame or frame and brick cottages, installing heating and drainage systems, etc. B. J. Hotaling, supt.

N. Y., Utica—Theater—W. H. Linton, 40 Hancock St., Little Falls, having plans prepared by M. H. Hubbard, archt., 212 Paul Bldg., for 1 story, 70 x 104 ft., brick, concrete foundation, on Lafayette St. About $55,000.

N. Y., Utica—Theater—Wilmer & Vincent, 1451 Bway., New York City, having plans prepared by E. C. Horn & Sons, archts., 1476 Bway., New York City, altering existing building and constructing 3 story, 75 x 100 ft. addition to same, on Bleecher St. About $100,000.

N. J., Jersey City—Asylum—Bd. Freeholders, Hudson Co., having plans prepared by E. Rowland, archt., 100 Sip Ave., for new Insane Asylum. About $200,000.

Buildings (Continued)

N. J., Weehawken — Office — Township Com. plans to build new municipal building. About $150,000.

Pa., Allentown—Theater and Office—Wilmer & Vincent Theater Co., 33 West 42nd St., New York City, having plans prepared by Hoffman Co., archts., Finance Bldg., Phila., for 7 story, concrete, steel and brick, rein.-con. floor, concrete foundation, here.

Pa., Phila. — Theater — Palm Theater, Kensington Ave. and Norris St., plans to alter theater and build new rein.-con. balcony. About $50,000. R. Beard, Commonwealth Bldg., archt.

Pa., Pittsburgh—Offices and Store—McCann & Co., Market St., plans to build 8 story, on Market and Diamond Sts. About $200,000.

Md., Baltimore—Clinic—Johns Hopkins University received anonymous gift of about $400,000 to build 3 story, brick and steel woman's clinic as an adjunct to hospital on North Bway. Archer & Allen, Central Savings Bank Bldg., archts.

Md., Baltimore — School — City Council contemplates purchasing site at Fayette and Aisquith Sts. to build school; also establishing park adjoining school. Total cost, $250,000.

Md., Chestertown — Bank, etc. — Third Natl. Bank purchased site on High and Cross Sts., and plans to build 85 x 100 ft., steel, brick and concrete bank, office and store building, stone and concrete foundation. About $75,000. Address A. L. Sparks, Chestertown.

Md., Texas—Almshouse—Comrs. Baltimore Co., Towson, having plans prepared by W. H. Emory, Jr., archt., 827 Munsey Bldg., Baltimore, for concrete, steel and brick. Cost between $75,000 and $100,000. Noted Jan. 16.

N. C., Winston Salem—Cottages—See "Industrial Works."

S. C., Charleston—Citadel—State Assembly authorized building of "Citadel" (State Military School), on 43 acre site on Hampton Park, donated by city. First unit to cost $100,000; total cost, $300,000.

S. C., Charleston—School—A. B. Rhitt, supt. schools, having plans prepared building 16 room, brick grade school on King and Moultrie Sts.

Ga., LaGrange—Community House—International Cotton Mills plans to build 1 story community house, to include swimming pool and gymnasium. About $65,000. Lockwood, Greene & Co., Healy Blk., Atlanta, engrs.

Ala., Albany—High School—Bd. Educ. plans to build high school. About $150,000.

Ala., Birmingham—Schools—City plans to issue $3,000,000 bonds. Part proceeds will be used for rebuilding Central High school, also building high school in eastern end of city. J. Kendrick, city engr.

Tenn., Memphis—Auditorium and Market—City plans to issue $375,000 bonds to build auditorium and market house. H. H. Hull, city engr.

Tenn., Memphis—Hospital—State Legislature, Nashville, petitioned to appropriate $300,000 to build tuberculosis hospital here.

Tenn., Morristown—Memorial—Bd. Trade plans to build memorial building. About $75,000.

Tenn., Nashville—Market—E M. Gardner, archt., Nashville, submitted plans to Market House Assn. for new market house. Cost between $150,000 and $300,000.

O., Cleveland—Fire Stations—City having plans prepared by F. H. Betz, archt. 604 City Hall Bldg., for 3 two-story, brick, steel and rein.-con. fire stations, rein.-con. flooring, one on East 187th St. and Nottingham Rd. to cost $75,000; one on West 65th St. and Denison Ave. and one one East 131st St. and Corlett Ave., to cost $60,000 each.

O., Cleveland—Office—East 9th St. Euclid Co., c/o C. H. Beardslee, East 9th and Euclid Ave., plans to remodel 8 story, 70 x 163 ft. building at above address into office. About $100,000.

O., Cleveland—Police Station—City having plans prepared by F. H. Betz, archt., 604 City Hall Bldg., for 2 story, brick, steel and rein-con., rein.-con flooring, on West 100th St. and Denison Ave., also one on East 131st St. and Corlett Ave. About $75,000 each. Noted Mar. 7.

O., Cleveland—Theater—Rialto Amusement Co., c/o P. E. Essick, Stork Theater, West 25th St. and Lorain Ave., plans to build 2 story, 70 x 175 ft., concrete, brick and steel moving picture theater, rein.-con. flooring, concrete foundation. About $150,000.

O., Dayton—Business—Consolidated Automobile Co., 222 West 3rd St., plans to build 4 and 5 story, rein.-con. business block. About $300,000.

O., Dayton—L. F. Schwind Realty Co., Schwind Bldg., 25-27 Ludlow St., having plans prepared by Schenck & Williams, archts., Mutual Home Bldg., building 100 x 120 ft. rein.-con. theater, rein.-con. flooring, on 1st and Main Sts.

Ind., Decatur—Bank—Old Adams County Bank having plans prepared by C. R. Weatherhogg, archt., Hamilton Bank Bldg., Ft. Wayne, building here. About $65,000.

Ind., Elkhart—School—Bd. Educ. plans election to vote on $120,000 bonds to build new school.

Ind., Muncie — Store — Stillman Dept. Store, 305-7 South Walnut St., plans to rebuild 4-story structure recently destroyed by fire.

Mich., Detroit—Mercantile—Heyn's Bazaar. 147 Woodward Ave., having plans prepared by A. Kahn, archt., Marquette Bldg., for 8 story, 40 x 100 ft., brick, steel and rein.-con., rein.-con. flooring and concrete foundation, on Woodward Ave. E. Heyn, pres.

Mich., Detroit—Mercantile—E. Kern Co., Woodward and Gratiot Aves., having preliminary plans prepared by Smith, Hinchman & Grylls, archts., 710 Washington Arcade, for 8 story, 94 x 100 ft. brick, steel and concrete, rein.-con. flooring.

Mich., Detroit—Mercantile and Office—Book Estate, having preliminary plans prepared for 5 story, 60 x 100 ft., on Washington Blvd. and Grand River Ave. 1225 Book Bldg. H. S. Ellington, 1225 Book Bldg., engr.

Mich., East Lansing — Library — State Legislature Lansing, petitioned to appropriate $300,000 to build library at Michigan Agricultural College, here.

Mich., Flint—School—Bd. Educ. having plans prepared by Malcolmson & Higginbotham, archts., 404 Moffat Bldg., Detroit, for 2 story, brick and concrete grade school for Union School Dist. About $200,000.

Mich., Lansing—Office—Bd. State Aud., Lansing, soon receives bids building here. About $1,000,000. Noted Dec. 12.

Mich., Wyandotte — High School, etc. — City plans election to vote on $500,000 bonds to build high and elementary schools.

Ill., Chicago — Hospital — Passevant Memorial Hospital, 149 West Superior St., plans to build. About $1,000,000.

Ill., Chicago—Hotel—J. Vogelsang, 177 West Madison St., receives bids in summer building 17 story, 85 x 189 ft. hotel and restaurant, on Madison St. near Wells St. About $1,000,000. Holabird & Roche, 104 South Michigan Ave., archts.

Ill., Chicago—Theater—H. L. Newhouse, archt., 4630 Prairie Ave., soon lets contract building 1 story, 155 x 200 ft. brick and concrete moving picture theater, concrete foundation, on 92nd and Commercial Aves., for Ascher Bros., 220 South State St. About $250,000.

Ill., Gillespie—High School—J. W. Kennedy, archt., Cahokia Bldg., East St. Louis, soon receives bids building 2 story, 140 x 154 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, for Bd. Educ. About $125,000.

Ill., Woodriver—High School—J. W. Kennedy, archt., Cahokia Bldg., East St. Louis, soon receives bids building 2 story, 90 x 150 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, for Bd. Educ. About $90,000.

Wis., Madison—Vocational and High School—Bd. Educ. having plans prepared by F. L. Kroenberg, archt., 18 North Carroll St., building brick addition on Johnson and Carroll Sts. About $200,000.

Wis., Milwaukee — Police Station — City plans to build. About $225,000. W. D. Hayes, City Hall, engr.

Wis., Oshkosh—High School — Citizens petitioned City Council to build addition. About $150,000; $30,000 now available for project. N. G. Remmel, mayor.

Wis., Two Rivers — High School — Bd. Educ. having plans prepared by Van Ryn & De Gelleke, archts., Caswell Blk., Milwaukee, building addition. About $95,000.

Wis., Wales—Infirmary—State Bd. Control having plans prepared by A. Peabody, archt., Capitol, Madison, building 2 story, 40 x 140 ft. here. About $100,000.

Ia., Bloomfield—Memorial—Davis Co. Red Cross plans campaign to build county memorial for soldiers. About $100,000.

Ia., Chariton—Fair—Lucas Co. Agriculture & Live Stock Assn. having plans prepared by W. L. Perkins, archt., building here. About $65,000.

Ia., Council Bluffs—School—Independent School Dist. will hold election Mar. 10, to vote on $100,000 bonds to purchase site and build here. R. H. Williams, secy.

Minn., Duluth—Hall—City plans to build 4 story, rein. con., brick and steel rein. con. flooring, concrete and rock foundation on West 1st St. About $1,000,000. L. A. Ayres, City Hall, engr.

Minn., Faribault—Epileptic Colony—State Bd. Control, State House, St. Paul, plans to build here. About $150,000.

Minn., Virginia — Church — Presbyterian congregation plans to build 2 story, rein. con., brick and steel, rein. con. flooring, concrete and rock foundation. About $85,000. R. O. Pickering, chn. building com.

N. D., Grand Forks — Theater — J. Kavanaugh having plans prepared by Buechner & Orth, archts., Minneapolis, Minn., building 3 story, brick theater on De Mers Ave. About $100,000.

Mo., Jefferson City—Hospital—St. Mary's Hospital plans to rebuild hospital recently destroyed by fire. About $150,000.

Mo., St. Louis—Terminal—Corporation being formed to build terminal building on riverfront, modelled after Bush Terminal of Long Island. About $5,000,000. E. Gengenbach, Chamber of Commerce, engr.

Tex., De Leon—Hotel—Chamber of Commerce plans to build here. About $150,000.

Tex., Electra—Hotel—D. T. Cross plans to build here. About $70,000.

Tex., Ft. Worth—Office—W. T. Waggoner, 1st Natl. Bank Bldg., receives bids about Mar. 1, building 16 story, 75 x 95 ft. rein.-con. and steel on 8th and Houston Sts. Cost between $750,000 and $1,000,000. Sanguinett & Staats, 1st Natl. Bank Bldg., archts. Noted Jan. 9.

Tex., Paris — Church — First Methodist congregation having plans prepared by Van Slyke & Woodruff, archts., Burk Burnett Bldg., Ft. Worth, building here. About $100,000. Noted Jan. 2.

Okla., Bartlesville—Hospital—City plans election to vote on $150,000 bonds to build hospital here.

Okla., Enid—School—City plans to vote on $100,000 bonds to build grade school and addition to high school.

Okla., McAlester—School—City voted on $250,000 bonds to build high school. With $100,000 available in insurance money on former building $350,000 will be expended for same. W. G. Masterson, supt. educ. Noted Feb. 6.

Colo., Denver—Administration, etc.—City and Denver Co. plans election to vote on $1,500,000 bond issue for building city and county administration building, court house and county hospital.

Colo., Denver—Hotel—Albany Hotel Co., 17th and Stout Sts., plans to rebuild hotel. About $500,000. S. R. Dutton, mgr.

Nev., Winnemucca—Court House—Comrs. Humboldt Co. having plans prepared by F. J. De Longchamps, archt., Nixon Bldg., Reno, building 2 story, rein. con. and stone. About $150,000.

Ariz., Tucson—University—University of Arizona plans to build 12 new buildings and additions to dormitories, dining hall and library. About $425,000.

Wash., Olympia—Armories—State Legislature appropriated $325,000 to build new armories at Olympia, Everett and Aberdeen.

Wash., Walla Walla—Bank—First Natl. Bank purchased site and plans to build, 8 or 9 story, on 2nd and Alder Sts. J. H. Pedigo, atty.

Ore., Eugene—University—State Legislature, Salem, petitioned to appropriate $100,000 toward building women's building at University of Oregon. Cost, $200,000.

Cal., Catalina Island (Avalon P. O.)—Summer and Winter Resort—W. Wrigley, Jr., 5 North Wabash Ave., Chicago, purchased controlling interest in Santa Catalina Island consisting of 48,000 acre site and will expend several millions in constructing hotels, villages, wharves, etc., for summer and winter resort.

Cal., El Centro—Hospital—T. O. Luckett, W. L. Lyon, and associates, plan to build here. About $60,000.

Buildings (Continued)

Cal., Glendale—Church and School Group—Holy Family congregation having plans prepared by A. C. Martin, archt., 430 Higgins Bldg., Los Angeles, for group consisting of church, school, parish house, guild hall, etc., large building of brick, other of frame construction, rein. con. flooring, concrete foundation, on Louise St. and Lomita Ave. About $100,000. Noted Feb. 6.

Cal., Los Angeles—Civic Center—F. T. Woodman, mayor, appointed committee to formulate plans for civic center to include city hall, library, police headquarters, etc. About $10,000,000. W. Mulholland, ch. engr. pub. serv. dept., chn.

Cal., Los Angeles — Gymnasium — Bd. Educ., Security Bldg., having plans prepared by W. J. Bliesner, archt., 223 South Flower St., for brick gymnasium, concrete foundation, at Polytechnic High School. About $75,000 available for project.

Cal., Los Angeles—School—Bd. Educ., Security Bldg., having plans prepared by J. C. Austin, archt., 1125 Baker & Detwiler Bldg., for brick or hollow tile school, concrete foundation, on Nevin Ave. About $85,000 available for project.

Cal., Merced—High School—Merced Union High School Dist. having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., Los Angeles, for constructing group 1 and 2 story, brick buildings, concrete foundation, consisting of academic administration and assembly building, domestic science, manual training and commerce building, power house and gymnasium. About $130,000 available for project.

N. F., St. John's—Rescue Home—Salvation Army plans to build here. About $50,000. Address A. Burrows, owner.

N. S., Halifax — School — Bd. School Comrs. soon let contract building boys' school. About $150,000. S. J. Wilson, 81 Sackville St., secy. bd.

N. S., Sydney—Church—Church of England plans to build. About $100,000. H. Watson and P. Maxwell, rectors.

N. B., Moncton — Schools — School Bd. plans to build various schools. About $200,000. F. A. McCully, secy.

Que., Montreal — High School — Comr. Schools of Coteau St. Pierre, plans to build two 3 story wings to West Hill High School, concrete and brick, rein. con. flooring. About $180,000. D. J. Spence, 246 Beaver Hall, archt.

Que., Montreal—Office—Burland Estate, 2 Place D'Armes, soon lets contract building 3 story, on Notre Dame St., N. About $100,000. D. J. Spence, 246 Beaver Hall, archt.

Que., Montreal—Office—Canadian Car & Fdry. Co. soon lets contract building 5 story on Craig St., W. About $250,000. D. J. Spence, 246 Beaver Hall, archt.

Ont., Brantford — School — City having plans prepared by W. C. Tilley, archt., Dalhousie St., building here. About $75,000. Noted Jan. 30.

Ont., London—Seminary—St. Peter's Cathedral soon receives bids building stone seminary. About $400,000. Noted Jan. 30.

Ont., London—Theater—J. and J. J. Allen. c/o Allen Theater Co., Richmond St., E., Toronto, plans to build here. About $200,000.

Ont., Ottawa—Institute and Laboratory—Dominion government plans to establish Central Resources Institute here. About $600,000 for buildings and laboratory equipment.

Ont., Renfrew—School—School Bd. plans to build technical school. About $125,000. S. T. Chown, chn.

Sask., Battleford — Asylum — Battleford Asylum plans to build addition. About $155,000.

B. C., Vancouver—Hall—City having plans prepared by R. A. McKenzie, archt., City Hall, for 2 story, 60 x 80 ft., brick and stone addition to City Hall on Main and Pender Sts. About $50,000.

B. C., Victoria—See "Industrial Works."

BIDS DESIRED

N. Y., Bath—Barracks—Until Mar. 25 by J. S. Maxwell, pres. bd. mgrs., New York State Soldiers' & Sailors' Home, building Barracks "H" and "I",2 story, 44 x 151 ft., with rear wing, 44 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation, at State Institution. About $100,000. Noted Jan. 30.

La., Baton Rouge—Until Mar. 15, by B. B. Taylor, pres. Y. M. C. A., building 4 story brick building, consisting of gymnasium, swimming pool, etc. About $75,000. Shattuck & Hussey, 19 South La Salle St., Chicago, archts. Noted Feb. 6.

O., West Unity—School—Until Mar. 28, by Bd. Educ. and Howard & Marriam, archts., 8 East Broad St., Columbus, building 2 story, 74 x 134 ft. brick and rein. con. About $125,000. Noted Feb. 20.

Ill., Chicago—Library—Until Mar. 10, by Chicago Pub. Library, building branch library on Crawford Ave. and West Monroe St. H. G. Wilson, secy. Noted June 27.

Colo., Center—School—Until Mar. 3, by Bd. Educ. building 2 story, 60 x 275 ft. brick and concrete, rein.-con. flooring, concrete and brick foundation. About $80,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts. Noted Feb. 13.

B. C., Esquimalt—Hospital—Until Mar. 18, by Dept. Pub. Wks. building addition to hospital on military hospital grounds. A. A. Cox, 213 Hastings St., E., engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Bridgeport—Hotel—Progressive Bldg. Co., 1215 Main St., will build 4-story, 72 x 125 ft., brick and concrete apartment hotel, concrete foundation, on Lafayette and Liberty Sts. Work will be done by day labor. About $150,000.

★Conn., New Haven—Hotel—C. W. Ratner, 1476 Chapel St., will build 4 story, 90 x 101 ft., brick, rein.-con. and steel apartment hotel, rein.-con. flooring, concrete foundation, on Chapel St. and Winthrop Ave. Work will be done by day labor. About $90,000.

★N. Y., Brooklyn—Riding Academy—Bedford Riding Academy, 13 Ocean Pkway., will build 1 story, 102 x 189 ft., brick and concrete, concrete foundation. About $60,000. Work will be done by day labor.

★N. Y., Sonyea—Kitchen—Craig Colony for Epileptics let contract building 1 story, 42 x 114 ft. and 42 x 80 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, to A. E. Stephens Co., 318 Main St., Springfield, Mass., $49,300. Noted Jan. 23.

★N. Y., Syracuse—School—Bd. Educ. let contract building 3 story, 100 x 150 ft., steel and brick, concrete foundation, on Madison Ave. and Walnut St., to Schaefer Constr. Co., 5 West 31st St., New York City. About $230,000.

★N. J., Newark—Hotel—H. & J. Kruvant, 31 Walnut St. let contract building 5 story, 68 x 150 ft., concrete, steel and brick, concrete foundation, at 24-26 Park St., to H. Kruvant, 189 Bloomfield Ave. About $300,000.

★Pa., Phila.—Stores and Office—See "Industrial Works."

★Pa., Phila.—Store—L. W. Hirsch Co., 923 Market St., let contract remodeling 5 story, 46 x 200 ft. building adjoining present store into addition for its own use, to Melody & Keating, 1322 Race St. About $195,000. Noted Feb. 6.

★Mich., Detroit— Mercantile —Newcomb-Endicott Co., 190-200 Woodward Ave., let masonry contract for 12 story, 60 x 110 ft. steel building on Woodward and Grand River Aves., to Batchelder-Wasmund Co., Jefferson Ave. W.; structural steel, to Russel Wheel & Fdry. Co., Chene St. and Belt Line R.R. Noted Jan. 2.

★Ia., Washington—Church—United Presbyterian congregation let contract building 2 story, brick, to Shrader, Worlary & McKeane, Washington. About $50,000.

★Cal., Cutler—Bank and Store—Natl. Bank of Cutler let contract building brick and concrete bank and store building, to R. Pedersen & Co., Fresno. About $150,000 (including fixtures).

★Cal., Los Angeles—Theater—A. Pantages, Pantages Bldg., will build 8 story, 150 x 150 ft., rein.-con., steel and brick, theater, office and store, 7th and Hill Sts. About $600,000. Work will be done by day labor. Noted Dec. 12.

★Alta., Ponoka—Dormitory, etc.—Trustees Provincial Hospital let contract building rein.-con. and brick dormitory and dining hall, to T. Jamieson-McKenzie, Ltd., 107 Travis Bldg., Calgary. About $144,000. Noted Nov. 28.

Federal Government Work

PROPOSED WORK

New York—Congress petitioned to appropriate sum to deepen St. Lawrence River down as far as Ogdensburg and Prescott, instead of providing deep water way to sea.

N. Y., Ft. Lafayette—Dredging—Bureau Yards & Docks, Navy Dept., Wash., D. C., received no bids Feb. 24, dredging here; Spec. 3579. Noted Feb. 20.

N. Y., Long Island City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 15; same were in excess of the appropriation. Noted Jan. 23.

N. Y., Ithaca—Post Office—U. S. Government, Wash., D. C., had plans prepared for 30 x 68 ft. addition to post offices here. About $115,000.

N. Y., Lowville—Post Office—U. S. Government, Wash., D. C., plans to build here. About $65,000.

N. Y., New York—Harbor Improvements—Rivers & Harbors Comn., Wash., D. C., appropriated $1,475,000 to improve harbors at Olcott, Charlotte, Pultneyville, Great Sodus Bay, Little Sodus Bay, Oswego, Cape Vincent, Ogdensburg and Oswego.

N. Y., Oneida—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., plans to build. About $75,000 available for project.

N. Y., Ward's Island—Electric Conduit and Switchboard—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3819. About $7500.

New Jersey—Deepening Channel—U. S. Senate, Wash., D. C., passed amendment to Rivers and Harbors Bill appropriating $88,000 to deepen channel of Hackensack River to 16 ft. and 300 ft. wide from Newark Bay channel to Jersey Central bridge, about 1 mile.

Pa., Phila.—Pumping Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in Naval Home; Spec. 3816. Bids will be opened at local yard.

D. C., Wash.—Flood Control—U. S. Dept. of Agriculture having surveys made in North Dakota, South Dakota and Minnesota to improve flood control in Red River Valley. P. G. Simons, Moorehead, Minn., engr.

D. C., Wash. — Sewers — Dist. Comrs., Dist. Bldg., rejected all bids received Jan. 14, building sewer involving 140 lin.ft. 7 x 7 ft. and 1065 lin.ft. 6 x 6 ft. concrete sewer; same were in excess of appropriation. Noted Jan. 23.

Va., Hampton Roads—Hangars, Landing Pier, Pavement and Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 3 hangars, landing pier, pavement and roads, here; Spec. 3818.

Ind., Ft. Wayne—Post Office—Government plans to appropriate $350,000 to build post office here.

Ind., Terre Haute—Post Office—Government appropriated $225,000 to build post office here.

Ill., Rock Island—Dredging—U. S. Engr. Office, Rock Island, plans to dredge 6 ft. channel 5 mi. long, in Mississippi River between Le Clair and Davenport, Ia. About $250,000 appropriated for project.

Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 16; same were in excess of appropriation. Noted Jan. 23.

Ore., Astoria—Post Office—Congress petitioned to appropriate $500,000 to build new post office here.

Ore., Klamath Falls—Bungalows and Houses—U. S. Congress, Wash., D. C., appropriated $500,000 to build bungalows and houses for Indians on Klamath Indian Reservation. R. H. Bradley, Klamath Falls, in charge of construction.

Cal., Mare Island—Motor and Blading—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install for turbo-alternators; Spec. 3817. About $7500.

Federal Government Work (Continued)

BIDS DESIRED

R. I., Providence—Remodeling Post Office, etc.—Until Mar. 25, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., remodeling post office, court house and custom house.

Pa., Easton—Hoistway, etc.—Until Mar. 14, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing hoistway, hydraulic mail lift, pump, etc., in post office here; advertised in this issue.

Del., Wilmington—Dredging—Until Mar. 24, by U. S. Eng. Office, Old Federal Bldg., dredging Smyrna River; advertised in this issue.

Md., Annapolis—Building—Until Mar. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building steamship and navigation building; Spec. 3760. About $800,000; $30 deposit required for plans and specifications.

D. C., Wash.—Condensers—Until Mar. 10, by Bureau Yards & Docks, Navy Dept., installing condensers, after coolers and pumps, in various Navy Yards; Spec. 3797. About $388,000.

D. C., Wash.—Paving—Until Mar. 6, by Dist. Comrs., Dist. Bldg., paving various streets with sheet asphalt.

Va., Hampton Roads—Grandstand and Bleachers—Until Mar. 3 (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Operating Base; Spec. 3795. Addendum will be issued to include grading and piers. Noted Feb. 20.

Va., Norfolk—Grandstand and Bleachers—Until Mar. 3, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Operating Base; Spec. 3795. Plans include grading and building piers.

Va., Yorktown—Wooden Pier and Approach—Until Mar. 17, by Bureau Yards & Docks, building here; Spec. 3820. About $270,000; $10 deposit required for plans and spec.

La., New Orleans—Earthwork—Until Mar. 1, by U. S. Eng. Office, 519 Canal St., building 2,368,000 cu.yd. earthwork in Lower Tensas, Atchalafaya and Pontchartrain Dists.

Tenn., Memphis—Coal—Until Mar. 31, by Dist. Eng., Missisippi River Dredging Dist., U. S. Dredge Depot, Memphis, furnishing 14,000 tons coal in barges; advertised in this issue.

Alaska, Nome—Dredging, etc.—Until Mar. 15, by U. S. Eng. Office, Seattle, Wash., building bank revetment and jetties and dredging in Nome Harbor; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Portsmouth—Piping and Circulating System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in power house at Navy Yard here, to Carroll Electric Co., 724 12th St., N. W., Wash., D. C., $42,800 (120 days). Noted Feb. 20.

Mass., Chatham—Dredging, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, dredging, filling and grading at Naval Air Sta.:

(1) unit price per cubic yard (measured in original position) for dredging and disposing of 100,000 cu.yd. of material in accordance with drawings and specification, including all necessary dikes, spillways, etc., to retain fill.

(2) unit price per cubic yard (measured in original position) for dredging and disposing of material as outlined in Scheme 2 (complete), in accordance with drawing and specification.

(3) unit price per cubic yard (measured in original position) for dredging and disposing of material in excess of 100,000 cu.yd. from

Boston Dredging Co., 172 Conder St., East Boston, (1) $0.96 (120 days); (2) $0.94 (120 days); (3) $0.62.

J. S. Packard Dredging Co., 1004 Turk's Head Bldg., Providence, R. I., (1) $1.24 (120 days) (2) $1.24 (120 days); (3) $0.74. Noted Feb. 6.

N. Y., New York—Piping and Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, installing in extension "A" of power plant at Navy Yard, here, from Lord Constr. Co., 105 West 40th St., $42,069 (120 days); W. K. Moran, 405 Lexington Ave., $44,713 (90 days); Gillis & Gehagen, 537 West Bway., $44,675 (120 days). Noted Feb. 6.

N. Y., Rockaway—Addition to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, building additions to dispensary at Naval Air Sta., from Rangely Constr. Co., 405 Lexington Ave., New York City, $22,444 (120 days); J. C. Jorgensen, 1037 White St., Far Rockaway, $23,468 (90 days); Oscawanna Bldg. Co., 101 Park Ave., New York City, $23,470 (100 days). Noted Feb. 6.

N. Y., Rockaway—Seaplane Hangar—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, (1) work complete, (2) amount to be deducted from (1) if all sheathing material is furnished to contractor on site of building by government, from Post & McCord, 101 Park Ave., (1) $43,390 (60 days); (2) $3200; Barney Ahlers, 110 West 40th St., (1) $46,200 (60 days); (2) $2500; J. K. Turpin, 101 Park Ave., (1) $49,899 (60 days); (2) $2637. Contractors all of New York City. Noted Feb. 20.

Pa., Phila.—Addition to Shipbuilding Slip—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building addition to shipbuilding slip No. 283.

(1) net price and time of completion of all work except foundations for extensions to crane runways, complete, in accordance with Bureau Drawings Nos. 79892 to 79897, and 81124, both inclusive, and such portions of this specification as apply to this part of work.

(2) net price and time of completion for crane runway footings, Nos. 2, 30, 31, 32 and 33, complete, in accordance with Bureau Drawings No. 83158, and such portions of this specification as apply to this part of work.

(3) net price and time of completion for crane runway footings Nos. 20, 30 to 36 inclusive and 42 to 44 inclusive, complete, in accordance with Bureau Drawing No. 83158, and such portions of this specification as apply to this part of work.

(4) net price and time of completion for all footings for extension to crane runways complete, in accordance with Bureau Drawing No. 83158, and such portions of this specification as apply to this part of work.

(5) net price and time to be added to, or subtracted from, net price, and time stated under (1) for construction of foundations for passageways of Slips Nos. 2 and 3 on concrete piles instead of timber piles, in accordance with Bureau Drawing No. 83159, and such portions of this specification as apply to this part of work.

(6) net price and time to be added to or deducted from net price and time stated under (1) for construction of foundations for driveway, offices and store-rooms of Slip No. 2, on concrete piles instead of timber piles, in accordance with Bureau Drawing No. 83157, and such portions of specification as apply to this part of work. (Supplementary prices stated under (5) and (6) should take cognizance of all changes of design and construction shown on the Bureau Drawing mentioned or referred to in this specification.)

(7) net price to be added to, or deducted from net prices stated under (1), (2), (3) and (4), for each wood pile in excess of, or less than number shown on drawings, based on length of each pile of 45 ft. from point to cut off.

(8) net price to be added to, or deducted from net prices stated under (1), (2), (3) and (4), for each linear foot of wood pile in excess of, or less than length specified in (7).

(9) net price to be added to, or deducted from net prices stated under (1), (5) and (6) for each concrete pile in excess of, or less than number shown on the drawings, based on length of each pile of 35 ft. from point to cut off.

(10) net price to be added to, or deducted from net prices stated under (1), (5) and (6) for each linear foot of concrete pile in excess of, or less than length specified in (9).

Modifications—(a) modification or modifications proposed. (b) change to be made in price named in proposal by reason of proposed modification, from

W. Linker Co., 831 Cherry St., (1) $256,000 (129 days); (2) $11,000; (3) $18,700 (52 days); (4) $30,000 (59 days); (5) add $6347; (6) add $22,330; (7) add $40, deduct $10; (8) add $.80, deduct $.08; (9) add $.50, deduct $.15; (10) add $2.00, deduct $.50.

Work Co., 1737 Filbert St., (1) $256,860 (130 days); (2) $10,945 (45 days); (3) $19,130; (4) $31,920; (5) add $5725; (6) add $13,225; (7a) deduct $19; (7b) add $24; (8a) deduct $.15; (9) deduct $26.25, add $56; (10) deduct $.75, add $2.00

H. S. McClosky, 1620 Thompson St., (1) $257,392, as specified; (2) $10,652; (3) $18,934; (4) $31,743; (5) $5797; (6) $5917; (7) add $30, deduct $15; (8) add $1.10, deduct $.10; (9) add 47, deduct $25; (10) add $1.60, deduct $.60.

D. C., Wash.—Headhouse and Sheds—Dist. Comrs., Dist. Bldg., received bids building on Water St.,

(1) headhouse, (2) shed A, (3) shed B, (4) shed C, (5) alternate A, (6) alternate B, (7) alternate C, (8) alternate D, (9) alternate E.

W. E. Mooney, Evans Bldg., (1) $28,342, (2) $52, (3) $77, (4) add $3273, (5) add $100, (6) add $200, (7) deduct $150, (8) deduct $250, (5 months).

A. C. Moses Constr. Co., 916 New York Ave., N. W., (1) $30,950, (2) $45, (3) $85, (4) $20, (5) add $3700, (6) deduct $2150, (7) deduct $2090, (8) deduct $50, (9) deduct $50, (5 months).

S. R. Harris, 710 14th St., (1) $32,828, (2) $59, (3) $84, (4) $20, (5) $3795, (6) $2270, (7) deduct $2210, (8) deduct $50, (9) deduct $50, (5 months).

D. C., Wash.—Laboratory—U. S. Constr Quartermaster, War College, Wash., Barracks, received bids Feb. 15, building photographic laboratory at Army War College, from H. S. Roberts, Wash., (1) $77,950, (1b) $1900, (1c) $3700, (1d) $1200, (1e) $350, (1f) $475, (1g) $900, (1h) $750; Singer Pentz Co., 500 Equitable Bldg., Baltimore, Md., (1) $61,807, (1a) $8993, (1b) 1837, (1c) $5713, (1d) $2675, (1e) $740, (1f) $850, (1g) $1200, (1h) $1067; Boyle & Robertson Constr. Co., 601 Evans Bldg., (work complete) $82,640. Noted Feb. 6.

★D. C., Wash.—Mechanical Equipment—Bureau Yards & Docks, Navy Dept., let contract installing mechanical equipment in hygienic laboratory, to J. E. Granberry, Fendal Bldg., $43,224 (6 months). Noted Feb. 6.

D. C., Wash.—Piping and Equipment—Bureau Yards & Docks, Navy Dept., received bids installing piping and equipment for 3200 k.w. turbo alternator, at Navy Yard, here, (work complete) from Baker, Dunbar, Allen Co., Stock Exch. Bldg., Phila., Pa., $10,180 (90 days); Gillis & Gehagen, 537 West Bway., New York City, $10,900 (120 days); Almiral & Co., 1 Dominick St., New York City, $11,550.

★Va., Petersburg—Altering Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to J. L. Robinson Constr. Co., 66 Knickerbocker Bldg., Baltimore, Md., $7373. Noted Jan. 16.

Mont., Great Falls—Roads—Dist. Engr., U. S. Dept. Agriculture, 413 Montana Bldg., Missoula, received only bid Feb. 15, building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co., from Cliffton & Applegate, Anaconda, $142,828. Work involves 79,000 cu.yd. earth excav., 10,000 cu.yd. rock excav., clearing and grubbing 30 acres, building ten 8-40 ft. span bridges, etc. Noted Feb. 6.

Mont., White Sulphur Springs—Roads—Dist. Engr., U. S. Dept. Agriculture, 413 Montana Bldg., Missoula, received bids Feb. 15, building in Meagher Co., (1) 5 mi. Sect. 1 Sheep Creek Natl. Forest Rd., involving 350,000 cu.yd. earth excav., 1600 cu.yd. rock excav., clearing and grubbing 18 acres, etc.; (2) 5.3 mi. Sect. 2, Sheep Creek Natl. Forest Rd., involving 28,000 cu.yd. earth excav., 1000 cu.yd. rock excav., 1 log truss bridge, clearing and grubbing 10 acres, etc., from W. L. Tillman, Roundup, (1) $27,605, (2) $21,811; White & Brown, (1) $41,325, (2) $33,172. Noted Feb. 6.

★Mo., St. Louis—Hospital—U. S. Government let contract building 3-5 story, reinf.-con., steel and brick hospital group, 5800 Arsenal St., to Murch Bros. Constr. Co., Ry. Exch. Bldg., $150,000.

Tex., North Ft. Worth—Cooling Pond—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, building at argon production plant, (1) price and time for design of cooling pond and furnishing and installing all pumps, motors, piping spray nozzles, valves and fittings, complete, to points indicated on drawings, from Carroll Electric Co., 714 12th St., Wash., D. C., (1) $21,640 (150 days); Cooling Tower Co., 15 John St., New York City, (1) $18,000 (145 days); Krahl Constr. Co., 350 North Clark St., Chicago, (1) $27,816 (140 days). Noted Feb. 20.

Federal Government Work (Continued)

Tex., North Ft. Worth—Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C. received only bid Feb. 24, installing at argon production plant, (1) work complete in accordance with specification; (2) under this, bidders may submit proposals for work complete, in accordance with spirit of specification, but with such modifications and details as they desire, provided all such modifications are fully described in proposal, from W. H. Cater, 2843 Monroe St., Chicago, (1) $110,225 (150 days); (2) $75,400, (3) $75,994, (120 days); (4) $70,321, (129 days). Noted Feb. 6.

Cal., Mare Island (Vallejo P. O.)—Fuel Oil Storage Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Feb. 24, building at Navy Yard, here, (1) 44,560 cu.yd. excav., (2) 4200 cu.yd. rein.-con., (3) 450,000 cu.yd. reinforcement for concrete, (4) miscellaneous metal work, (5) buildings, including piles, (5a) addition or deduction for each foot of pile more or less than 40 ft. length specified, (6) mechanical and electrical equipment, (7) piping, except piping in boiler house, (8) piping in boiler house, (9) lighting and power systems, (10) alternative foam fire protection system, amount to be deducted from the summation of (5, 6, 7, 8 and 9), (11a) tests as required by (1 to 9) inclusive, (11b) tests B, as required by (1 to 10) inclusive.

John W. Danforth, 72 Ellicott St., Buffalo, N. Y., (1) $.95; (2) $17.40; (3) $.0614; (4) $2,260; (5) $41,985; (5a) add $.35, deduct $.22; (6) $123,428; (7) $142,660; (8) $16,506; (9) 13,900; (10) $25,900; (11a) $2500; (11b) $2250, 240 days.

C. C. Moore & Co., Shelden Bldg., San Francisco, (1) $.765; (2) $17.01; (3) $6.25; (4) $24,000; (5) $37,800; (5a) $.37; (6) $157,400; (7) $131,740; (8) $13,650; (9) $8500; (10) 30,522; (11a) $1500; (11b) $1500, (210 days).

Almiral & Co., 1 Dominick St., New York City, (1) $1.02; (2) $15.90; (3) $.06; (4) $2118; (5) $43,467; (5a) deduct $.24, add $.42; (6) $141,603; (7) $115,367; (8) $15,929; (9) $18,935; (10) $32,350; (11a) $1500; (11b) $1500. (210 days). Noted Jan. 30.

★**Cal., San Diego**—Flood Lighting System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in fuel depot, here, to F. E. Newberry Electric Co., 724 South Olive St., Los Angeles, $3147 (75 days). Noted Feb. 6.

Miscellaneous

PROPOSED WORK

Grounds Improvements—Boston, Mass.—State Legislature petitioned to appropriate $35,000 to improve State House grounds to include building wall.

Dam—Kent, R. I. (Hope P. O.)—City plans to build rein.-con. dam in connection with new supply of water for Providence. F. E. Winsor, c/o water supply bd., engr.

Flagging, etc.—Brooklyn, N. Y.—E. Riegelmann, boro. pres., rejected all bids received Feb. 11, furnishing and delivering 10,000 sq.yd. blue stone flagging with 2 in. thickness. Noted Feb. 20.

Swimming Pool, Merry-go-Round and Recreation Grounds—Endicott, N. Y.—Endicott, Johnson & Co., 753 Bleecker St., Utica, plans to install swimming pool and build merry-go-round at Ideal Park, here. About $10,000 each. Company also plans to improve recreation grounds connected with their factories here and in Johnson City.

Recreation Grounds—Johnson City, N. Y.—See Endicott, N. Y.

Swimming Pool—La Grange, Ga.—See "Buildings."

Paving Materials—Detroit, Mich.—Dept. Purchases & Supplies, 1302 Real Estate Exch. Bldg., soon lets contract furnishing 75,000 bbls. Portland cement; also 3000 sq.yd. creosoted blocks. J. A. Martin, comr.

Subway—Decatur, Ill.—Illinois Pub. Utilities Comn. plans to build subway under tracks of Wabash Ry. on 7th St., 1700 to 1800 ft. long, 14 ft. head room, 2 driveways each 14 ft. wide and 2 sidewalks each 5 ft. wide. Cost between $300,000 and $500,000.

Park Improvements—Denver, Colo.—Comr. Parks & Impvts. organizing district to acquire lands for park; plans include construction, driveways, subway, and roads. About $100,000 bonds to be voted for project. J. H. Hunter, city engr.

Levee—Palestine, Tex.—Comrs. Levee Dist. No. 2, Anderson Co., plan to issue $200,000 bonds to build levee along east bank Trinity River, 7½ mi. long, 20 ft. high. E. V. Swift, co. judge.

Fill and Bulkhead—Astoria, Ore.—Sanitary & Recl. Comn. having plans prepared improving 3rd Recl. Dist., including filling of tide flats, building retaining wall and 1 bulkhead. About $400,000. Noted Feb. 13.

Dry Dock, etc.—Portland, Ore.—Dock Comn. had plans prepared building 12,000 ton drydock and wooden pontoon, No. 6, at foot St. Johns drydock. About $900,000 will be expended for project. J. B. Hegardt, engr. Noted Jan. 23.

Stadium—Los Angeles, Cal.—City Park Comn., Normal Hill Center, having preliminary plans prepared by J. Parkinson, consult. archt., 420 Title Insurance Bldg., for 260 x 600 ft. concrete stadium in Exposition Park.

Garbage Disposal Plant—Scarborough, Ont.—See "Water Works."

BIDS DESIRED

Electric Fixtures—Hudson, N. Y.—Until Mar. 14, by A. W. Allen, pres. bd. mgrs., New York State Training School for Girls, installing in cottages 5, 7 and 10; advertised in this issue.

Cocks—New York, N. Y.—Until Mar. 6, by N. J. Hayes, comr. of water supply, gas and electricity, Municipal Bldg., furnishing and delivering corporation cocks.

Stone and Screenings—New York, N. Y.—Until Mar. 6, by Dept. of Parks, Bronx Boro., furnishing and delivering broken stone and screenings for parks. F. D. Gallatin, pres.

Tractors—New York, N. Y.—Until Feb. 28, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 7 tractors.

Miscellaneous Supplies—Newark, N. J.—Until Mar. 11, by Passaic Valley Sewerage Comn., 31 Clinton St., furnishing f.o.b. cars, 500 tons c.i. pipe, curves and special castings, 16-42 in. diam.

Seawall—Detroit, Mich.—Until Mar. 5, by Windmill Point Land Co., 2258 Penobscot Bldg., filling and grading back of seawall at Windmill Point, 200 ft. wide, 4200 ft. along shore, involving 250,000 to 500,000 cu.yd. hydraulic or floating dredgework. T. M. Campau, 502 Whitney Office Bldg., engr. Noted Feb. 20.

Elevated Roadway—Portland, Ore.—Until Mar. 10, by Bd. Supervs. Multnomah Co., building elevated roadway at Sauvies Island, at north approach to Burlington Ferry.

Culverts—Montreal, Que.—Until Mar. 15, by Bd. Comrs., building additional concrete culverts in connection with aqueduct. About $28,000.

Chimney—Sarnia, Ont.—Until Mar. 14, by I. D. Stewart, city engr., building radial brick chimney, 4 ft. diameter, 125 ft. high, also brick building with rein.-con. approaches furnace, flumes, etc. About $300,000.

Pipe, etc.—York, Ont.—Until Mar. 8, by York Twp., furnishing and delivering following: 6535 lengths 6-24 in. c.i. pipes, 397 Nos. 6-24 in. c.i. specials, 73 Nos. 6-24 in. gate valves, 3 No. 12 in. pressure regulating valves, 1 No. 16 in. pressure regulating valve, 200 hydrants, 200 round c.i. valve covers and frames, and 10 3 piece c. i. valve covers and frames. F. Barber, 40 Jarvis St., Toronto, twp. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Asphalt, etc.—Brooklyn, N. Y.**—E. Riegelmann, boro. pres., let contract to Warner Quinlan Asphalt Co., 79 Wall St., New York City, furnishing and delivering 240,000 gal refined asphalt in liquid form and 50 tons refined asphalt in containing packages, $17,712; Hastings Paving Co., 25 Broad St., New York City, 50,000 asphalt paving blocks with depth of 2½ in., $3845; J. Leopold & Co., Woolworth Bldg., New York City, 40,000 grade 1 granite paving blocks, $5000; 40,000 grade 1 wood paving blocks, $2230; L. Finkelstein, 1071 Lafayette St., New York City, 6000 bbl. Portland cement, $16,800; New York Trap Rock Co., 17 Battery Pl., New York City, 1500 tons limestone, $12,975; Newtown Supply Co., Varick Ave., 800 cu.yd. paving gravel, $2537; Barrett Co., 17 Battery Pl., New York City, 250 tons paving pitch, $4750; Amer. Bldg. Material Co., Neptune Ave., 7000 cu.yd. asphalt sand, $10,290; J. J. Quinlan, 1633 Shore Rd., 4000 cu.yd. paving sand, $5320; 3000 cu.yd. binder stone, $8370. Noted Feb. 20.

★**Gasolene—New York, N. Y.**—F. L. Dowling, boro. pres., let contract furnishing and delivering 40,000 gal. gasoline, to Tidewater Oil Co., 11 B'way, $9800. Noted Feb. 13.

Truck, Tractor, etc.—New York, N. Y.—C. D. Van Name, pres. Richmond Boro., received only bid Feb. 18, furnishing and delivering 2½ ton automobile truck and 3 ton automobile tractor and semi-trailer, from J. B. Truck Co., 1832 Bway. Noted Feb. 13.

★**Coal Pocket—Rochelle Park, N. J.**—Pennsylvania Coal Co. let contract building concrete coal pocket, to Linde & Griffith, foot 4th Ave., Jersey City. About $20,000.

★**Pier—Phila., Pa.**—Gulf Refining Co., Frick Annex, Pittsburgh, let contract building rein.-con. and steel pier here, to Raymond Concrete Pile Co., 90 West St., New York City. About $150,000.

★**Gas Holder—Baltimore, Md.**—Consolidated Gas, Electric Light & Power Co., Lexington Bldg., will build steel gas holder on concrete foundation, at Spring Gardens. Work involves 7720 steel plates with necessary angles, channels and beams, 1,090,000 riveted, etc. About $125,000. Work will be done by day labor.

★**Coal and Ore Pockets—River Rouge, Mich.**—See "Industrial Works."

Fill—Seattle, Wash.—Bd. Pub. Wks. received only bid Feb. 14, filling and bulkheading land in Elliott Ave., Sanitary Fill No. 1, from Tacoma Dredging Co., Natl. Bank of Tacoma Bldg., $149,078. Former bids rejected. Noted Jan. 30.

Gantry Crane—Seattle, Wash.—Port Comn. of Port of Seattle, Bell St. Warehouse, Bell St., received bids Feb. 19, furnishing and installing gantry crane, Smith's Cove Impvt. Pier B, from Lakeside Eng. & Steel Co., Milwaukee, Wis., $64,450, alternate, $63,000; Fulton Engine Works, 1000 Alhambra St., Los Angeles, Cal., $65,435, alternate $58,935; Pacific Derrick & Hoist Co., Seattle, $70,075; Brown Hoist & Machy. Co., 4403 St. Clair St., N. E., Cleveland, O., alternate, $54,600. Noted Jan. 2.

Dam, Tunnels, etc.—Fresno, Cal.—See "Industrial Works."

Dam—Los Angeles, Cal.—Bd. Supervs. Los Angeles Co. received bids Feb. 19, building concrete masonry arch dam, 125 ft. high, northwest of Pasedena, for county flood control districts, from Bent Bros., Central Bldg., $169,907; McPeak & Dillon, Los Angeles, $199,595; W. C. Crowell, 440 Chamber of Commerce Bldg., Pasadena, $224,850. Work involves 6000 yd. rock excav., 5000 yd. earth excav., 33,000 yd. concrete with stone embedded, 300 ft. concrete outlet tunnel, 120 ft. concrete spillway, concrete arches supporting roadway on top, etc. County furnishes cement. Noted Feb. 6.

Automatic Sprinkler System—Portland, Ore.—Dock Comn. received bids installing automatic sprinkler system on pier No. 1, from Automatic Sprinkler Co., Ry. Exch. Bldg., $54,904; Pacific Fire Extinguisher Co., Ry. Exch. Bldg., $57,800; Rockford Sprinkler Co., Bd. of Trade Bldg., $58,840.

APPROPRIATION FOR BUILDINGS BY TREASURY DEPARTMENT

The following are additional appropriations for post offices and court houses, some new, others enlargements and still others are for additional funds on post offices for which bids have been opened recently but no awards made owing to insufficient funds.

		Approximate Appropriation
Aberdeen, Miss..........	Post Office and Court House...	$25,000
Adams, Mass............	Post Office......	85,000
Aiken, S. C.............	Post Office and Court House...	85,000
Albany, N. Y............	Post Office and other government offices....	10,000
Albemarle, N. C.........	Post Office......	50,000
Albert Lea, Minn........	Post Office......	85,000
Alexandria, Va..........	Post Office and other government offices....	115,000
Algona, Ia..............	Post Office......	65,000
Alva, Okla..............	Post Office......	60,000
Alvin, Tex..............	Post Office......	45,000
Anadarko, Okla..........	Post Office......	45,000
Appleton, Wis...........	Post Office......	50,000
Asheville, N. C.........	Post Office......	95,000
Athens, Ala.............	Post Office......	50,000
Atlantic City, N. J.....	Post Office......	350,000
Attalla, Ala............	Post Office......	40,000
Aurora, Mo..............	Post Office......	65,000
Baltimore, Md...........	Post Office......	1,000,000
Barbourville, Ky........	Post Office and other offices....	40,000

Miscellaneous (Continued)

Bath, N. Y	Post Office	$50,000
Beaver Falls, Pa	Post Office	58,000
Benton Harbor, Mich	Post Office	80,000
Binghamton, N. Y	Post Office and court house	500,000
Blackfoot, Idaho	Post Office	90,000
Bloomington, Ill	Post Office and other offices	350,000
Bogalusa, La	Post Office	75,000
Boise, Idaho	Post Office	40,000
Boston, Mass	Post Office and subtreasury	300,000
Boston, Mass	Post Office and other offices	3,500,000
Bowling Green, Mo	Post Office	50,000
Boyne City, Mich	Post Office	40,000
Brinkley, Ark	Post Office	40,000
Bristol, Va	Post Office	80,000
Brownsville, Tex	Post Office	305,000
Bronx, N. Y	Post Office	1,000,000
Brunswick, Maine	Post Office	90,000
Bucyrus, O	Post Office	115,000
Butte, Mont	Post Office	275,000
Caldwell, Idaho	Post Office	85,000
Canajoharie, N. Y	Post Office	60,000
Canon City, Colo	Post Office and other offices	85,000
Canton, Ga	Post Office and other offices	40,000
Canton, O	Post Office and other offices	630,000
Cape Charles, Va	Post Office	50,000
Carbondale, Ill	Post Office	75,000
Carlinville, Ill	Post Office	45,000
Carrollton, Ill	Post Office	40,000
Catskill, N. Y	Post Office	85,000
Central City, Ky	Post Office and other offices	40,000
Clare, Mich	Post Office	45,000
Claremont, N. H	Post Office	55,000
Clarksburg, W. Va	Post Office	300,000
Clayton, N. Y	Post Office	85,000
Circleville, O	Post Office	65,000
Clearwater, Fla	Post Office	45,000
Coleman, Tex	Post Office and other offices	40,000
Columbia, Mo	Post Office	102,000
Columbus, Kan	Post Office	50,000
Conway, Ark	Post Office and other offices	50,000
Coraopolis, Pa	Post Office	75,000
Corning, Ia	Post Office	50,000
Council Grove, Kan	Post Office	45,000
Crockett, Tex	Post Office	50,000
Cumberland, Md	Post Office	120,000
Cuthbert, Ga	Post Office	45,000
Dallas, Tex	Post Office and other offices	1,400,000
Dansville, N. Y	Post Office	100,000
Decatur, Ill	Post Office	106,000
De Funiak Springs, Fla	Post Office	40,000
De Ridder, La	Post Office	40,000
Detroit, Minn	Post Office	75,000
Dillon, S. C	Post Office	40,000
Dover, N. J	Post Office	90,000
Duluth, Minn	Post Office (remodeling)	500,000
Dunn, N. C	Post Office	45,000
Duquesne, Pa	Post Office	100,000
Eagle Grove, Ia	Post Office	45,000
East Moline, Ill	Post Office	45,000
Easton, Md	Post Office	45,000
Eaton, O	Post Office	45,000
Edenton, N. C	Post Office	40,000
Effingham, Ill	Post Office	65,000
El Campo, Tex	Post Office	25,000
Eldorado, Ark	Post Office	55,000
Elizabethton, Tenn	Post Office	40,000
Elko, Nev	Post Office	59,000
Elkton, Md	Post Office	65,000
Eminence, Ky	Post Office	40,000
Erie, Pa	Post Office	250,000
Fairfield, Iowa	Post Office	75,000
Falmouth, Ky	Post Office	40,000
Fargo, N. D	Post Office and other offices	400,000
Farmington, Mo	Post Office	45,000
Findlay, O	Post Office	50,000
Flint, Mich	Post Office	100,000
Forest City, Ark	Post Office and other offices	50,000
Ft. Scott, Kan	Post Office	5,000
Ft. Valley Ga	Post Office	50,000
Ft. Wayne, Ind	Post Office	350,000
Ft. Worth, Tex	Post Office	600,000
Framingham, Mass	Post Office	150,000
Galesburg, Ill	Post Office	110,000
Galva, Ill	Post Office	70,000
Gardner, Mass	Post Office	125,000
Gatesville, Tex	Post Office	45,000
Georgetown, Del	Post Office	40,000
Georgetown, Tex	Post Office and other offices	45,000
Geneva, Neb	Post Office	45,000
Gloucester, Mass	Post Office and offices	150,000
Grand Rapids, Wis	Post Office and offices	70,000
Great Barrington, Mass	Post Office and offices	85,000
Green River, Wyo	Post Office and other offices	45,000
Greensburg, Ind	Post Office and other offices	$75,000
Greenville, Ala	Post Office and other offices	40,000
Harrisonburg, Va	Post Office	80,000
Havana, Ill	Post Office and other offices	50,000
Highland, Ill	Post Office and other offices	45,000
Hobart, Okla	Post Office and other offices	60,000
Holton, Kan	Post Office and other offices	50,000
Houlton, Maine	Post Office	65,000
Houston, Tex	Repair and improvements to old Post Office	75,000
Huntingdon, Tenn	Post Office and other offices	35,000
Huntsville, Tex	Post Office and other offices	40,000
Iowa City, Iowa	Post Office and other offices	100,000
Ithaca, N. Y	Post Office and other offices	115,000
Jackson, Miss	Post Office and Court House	125,000
Jackson, O	Post Office and other offices	40,000
Jamestown, N. Y	Post Office and other offices	210,000
Jefferson City, Mo	Post Office and other offices	50,000
Kansas City, Mo	Post Office and Court House	410,000
Kissimmee, Fla	Post Office and other offices	50,000
Lake City, Fla	Post Office and other offices	50,000
Lancaster, Pa	Post Office and other offices	500,000
Lawrence, Kan	Post Office	50,000
Lebanon, Ind	Post Office and other offices	65,000
Lenoir, N. C	Post Office and other offices	45,000
Linton, Ind	Post Office and other offices	50,000
Logansport, Ind	Post Office	100,000
Long Beach, Cal	Post Office and other offices	200,000
Lowell, Ind	Post Office	500,000
Lumberton, N. C	Post Office and other offices	40,000
Lynn, Mass	Post Office	600,000
Lyons, N. Y	Post Office and other offices	55,000
Madisonville, Ky	Post Office and other offices	65,000
Manchester, Conn	Post Office	40,000
Manchester, N. H	Post Office and other offices	85,000
Marengo, Iowa	Post Office	30,000
Mason, Ga	Post Office and other offices	180,000
Missoula, Mont	Post Office and Court House	160,000
Mobile, Ala	Court House	100,000
Modesto, Cal	Post Office	90,000
Monroe, Ga	Post Office and offices	40,000
Montrose, Colo	Post Office, Court House, Land Office and offices	350,000
Mt. Airy, N. C	Post Office and other offices	55,000
Morgan City, La	Post Office and other offices	50,000
Mountain Grove, Mo	Post Office	45,000
Mt. Olive, N. C	Post Office	40,000
Mt. Vernon, Ind	Post Office	50,000
Murray, Ky	Post Office	40,000
Nampa, Idaho	Post Office	85,000
Nephi, Utah	Post Office	30,000
Newark, Del	Post Office	40,000
Newcastle, Wyo	Post Office and other offices	40,000
New Martinsville, W. Va	Post Office and other offices	40,000
Newton, Iowa	Post Office	80,000
Niles, O	Post Office	90,000
Noblesville, Ind	Post Office	65,000
Norfolk, Va	Post Office and Court House	875,000
Norristown, Pa	Post Office	75,000
Nyack, N. Y	Post Office	80,000
Oak Park, Ill	Post Office	150,000
Oelwein, Iowa	Post Office	60,000
Oneida, N. Y	Post Office	75,000
Paintsville, Ky	Post Office	40,000
Passaic, N. J	Post Office	200,000
Petersburg, Va	Post Office and other offices	85,000
Philippi, W. Va	Post Office	40,000
Pikeville, Ky	Post Office, Dept. of Justice, and other offices	40,000
Plattsburg, N. Y	Post Office and Court House	80,000
Plymouth, Ind	Post Office	75,000
Poughkeepsie, N. Y	Post Office and other offices	106,000
Pottsville, Pa	Post Office and other offices	144,000
Provincetown, Mass	Post Office and other offices	$70,000
Reno, Nevada	Post Office and other offices	120,000
Roanoke, Va	Post Office and other offices	75,000
Rogersville, Tenn	Post Office	35,000
Rossville, Ga	Post Office	50,000
Saco, Me	Post Office	25,000
Sacramento, Cal	Post Office and other offices	60,000
Saginaw, Mich	Post Office and other offices	200,000
Saint Augustine, Fla	Post Office and other offices	100,000
Saint Cloud, Minn	Post Office and other offices	80,000
Saint Marys, O	Post Office	50,000
Salem, N. J	Post Office	65,000
Salem, Va	Post Office	5,000
Salisbury, Md	Post Office	15,000
San Antonio, Tex	Post Office and other offices	250,000
San Bernardino, Cal	Post Office and other offices	100,000
Sandersville, Ga	Post Office and other offices	30,000
Sandusky, O	Post Office	80,000
San Francisco, Cal	U. S. Marine Hospital	800,000
Saranac Lake, N. Y	Post Office	13,500
Savannah, Ga	Post Office and other offices	650,000
Sayre, Pa	Post Office	10,000
Scranton, Pa	Post Office and other offices	525,000
Seguin, Tex	Post Office	40,000
Shawnee, Okla	Post Office	10,000
Shelbyville, Ind	Post Office and other offices	15,000
Shelbyville, Ky	Post Office	$20,000
Shenandoah, Iowa	Post Office	45,000
Sioux City, Iowa	Post Office and other offices	350,000
Southbridge, Mass	Post Office	43,000
South Manchester, Conn	Post Office	75,000
Spanish Fork, Utah	Post Office	35,000
Springfield, Ill	Post Office and other offices	200,000
Spring Valley, Ill	Post Office	40,000
State College, Pa	Post Office	29,500
Sterling, Colo	Post Office	90,000
Sterling, Ill	Post Office	50,000
Steubenville, O	Post Office	150,000
Stuttgart, Ark	Post Office and other offices	55,000
Sunbury, Pa	Post Office	50,000
Sweetwater, Tex	Post Office and other offices	40,000
Sylacauga, Ala	Post Office and other offices	40,000
Tamaqua, Pa	Post Office	37,500
Tarentum, Pa	Post Office	30,000
Taylor, Tex	Post Office and other offices	75,000
Terre Haute, Ind	Post Office and other offices	225,000
Thomasville, N. C	Post Office	13,000
Tomah, Wis	Post Office	3,000
Trenton, Mo	Post Office	85,000
Trenton, N. J	Post Office and other offices	350,000
Tullahoma, Tenn	Post Office	5,000
Tyrone, Pa	Post Office and other offices	125,000
Union Springs, Ala	Post Office	40,000
Unionville, Mo	Post Office	40,000
Urbana, O	Post Office	50,000
Vermilion, S. D	Post Office	35,000
Vernal, Utah	Post Office	52,500
Vincennes, Ind	Post Office and other offices	90,000
Vineland, N. J	Post Office	26,000
Waco, Texas	Post Office	60,000
Walden, N. Y	Post Office	17,500
Waltham, Mass	Post Office	132,000
Warren, O	Post Office and other offices	128,000
Warren, R. I	Post Office	50,000
Warsaw, Ind	Post Office	75,000
Washington C. H., O	Post Office	30,000
Washington, Mo	Post Office	1,000
Washington, Pa	Post Office	90,000
Waterbury, Conn	Post Office	265,000
Waterloo, N. Y	Post Office	16,000
Water Valley, Miss	Post Office	15,000
Wausau, Wis	Post Office and other offices	65,000
Waynesboro, Ga	Post Office	40,000
Waynesburg, Pa	Post Office	52,000
West Plains, Mo	Post Office	40,000
West Point, Ga	Post Office	18,000
Wellington, Kan	Entomological Station	15,000
Williamsport, Pa	Post Office	110,000
Wilson, N. C	Post Office	140,000
Winchester, Mass	Post Office	22,500
Winnfield, La	Post Office	40,000
Woodbury, N. J	Post Office	20,000
Woodstock, Ill	Post Office	45,000
Woodward, Okla	Post Office	10,000
Wyandotte, Mich	Post Office	20,000
Yonkers, N. Y	Post Office	150,000
York, Pa	Post Office	25,000
Zanesville, O	Post Office and other offices	175,000

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00	....	$2.00	....	$1.25	$1.25
Denver	1.60	$1.50	1.60	$1.50	1.10	1.05
Chicago	2.00	1.50	....	1.50	1.10	1.50
Kansas City	2.50	2.15	3.00	2.60	1.00†	.90
St. Louis*	1.76	1.21	1.82	1.21	1.68	1.21
Seattle	1.25	.80	1.25	.80	1.25	.80
Dallas	2.00	2.00	2.00	2.00	*1.35*	1.35
St. Paul	1.25	1.00	1.35	1.40	.60	.50
San Francisco	*1.15*	1.00	*1.15*	1.00	*1.15*	1.00
Boston	2.75	1.50	2.75	1.60	2.00	1.10
New Orleans	2.82	1.95	....	....	1.88	1.95
Cincinnati	1.35	1.65	....	1.65	1.35‡	1.65
Atlanta	2.40	....	2.40	....	1.12	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.65–1.75	$1.60	$1.75–1.85	$1.75
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.35	1.35	1.35	1.35
Dallas	2.25	1.51	2.25	1.55
San Francisco	*1.15*	1.00	*1.15*	1.00
Boston	3.00*	1.50	3.00*	1.60
St. Paul	1.15	1.00	1.25	1.10
Denver		1.50	1.60	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle	1.50	1.10	1.50	1.10
Atlanta	2.60	1.50–1.75	2.60	1.75–2.00
Cincinnati	1.50	1.75	....	1.75

*Per ton in city.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	22.80	*21.00*	2.35*	2.20*
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	18.00	....	1.75*
Boston	22.20	*18.00*	3.75	3.40
Dallas	2.25*	1.25*	....	....
San Francisco	*19.00*	16.00	....	*2.00*†
St. Paul	25.00	19.50	1.97†	1.93†
New Orleans	*19.74*	16.45	1.974*	*1.927**
Atlanta	....	16.50	.....	1.65‡
Cincinnati	14.20	*11.95*	.....	......
Denver	.....	26.25	.....	2.50*
Seattle	30.00	.....	2.80†	......

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton.

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., exclusive of bags:

Cincinnati (Utica)	$1.50
St. Paul (Austin)	1.63
Boston (Rosendale)	none
Kansas City (Ft. Scott)	1.30
New Orleans	2.52

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Current	One Month Ago	One Year Ago
New York	$3.45	$3.45	$2.25
Jersey City	3.62	3.62	2.16
Boston	*3.57*	3.67	2.37
Chicago	3.05	3.05	2.21
Pittsburgh	3.15	3.15	2.31
Cleveland	3.32	3.32	2.44
Detroit	3.28	3.28	2.40
Indianapolis	3.22	3.22	2.38
Toledo	3.22	3.22	2.40
Milwaukee	3.16	3.16	2.33
Duluth	3.20	3.20	2.51
Peoria	3.16	3.16	2.33
Cedar Rapids	3.28	3.28	2.48
Davenport	3.24	3.24	2.40
St. Louis	3.30	3.30	2.45
San Francisco	3.60	3.03	2.80
New Orleans	3.77	3.77	2.70
St. Paul	3.40	3.40	3.20
Denver	3.67	3.67	3.20
Kansas City	3.30	3.30	2.44
Seattle	*3.13*	3.33	3.25
Dallas	2.93	2.93	2.60
Atlanta	3.75	....	....
Cincinnati	2.80	2.80	2.92

NOTE—Bag Refund is generally 25c. each; exceptions: Cincinnati, 9c.; Dallas, 10c.; San Francisco, 15c.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$1.09	$1.02	$1.03	$1.13	$21.36
049	0.049	1.22	1.40	1.30	1.32	1.43	1.72
068	0.068	1.52	1.73	1.62	1.64	1.79	3.15
093	0.093	1.96	2.23	2.09	2.11	2.41	2.77
126	0.126	2.48	2.82	2.63	2.67	2.92	3.50
153	0.153	2.96	3.38	3.15	3.19	3.48	4.18
180	0.180	3.39	3.85	3.60	3.66	3.99	.....
245	0.245	4.48	5.10	4.75	4.83	5.27	.....
287	0.287	5.18	5.90	5.50	5.58	6.10	7.31
336	0.336	6.00	6.83	6.37	6.47	7.06	.....
395	0.395	6.96	7.89	7.40	7.50	8.19	.....
PAVING							
036	0.036	$0.74	$0.84	$0.84	$0.80	$0.80	....
053	0.053	1.04	1.25	1.25	1.12	1.12	....
072	0.072	1.35	1.58	1.53	1.46	1.46	....
097	0.097	1.74	1.98	1.98	1.88	1.88	....
049	0.049	1.04	1.25	1.25	1.12	1.12	....
067	0.067	1.35	1.53	1.53	1.46	1.46	....
089	0.089	1.80	1.98	1.98	1.88	1.88	....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$30.97	$31.00	$34.00	$38.00	$34.75
26	250	35.23	32.03	32.00	35.00	40.00	36.25
25	300	36.51	33.19	33.25		42.50	38.15
24	340	37.73	34.30	34.50	37.00	......	40.10
22	450	40.48	36.38	......	......	......	43.10

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Year Ago	Chicago	St. Louis	Dallas	San Francisco
¾ and larger	$2.90	$4.12	$4.09½	$3.97	$4.04	*$4.75*	$5.15
⅝	2.95	4.18	4.14½	4.02	4.08	*4.80*	5.20
½	3.00	4.23	4.19½	4.07	4.14	*4.90*	5.25
⅜	3.15	4.38	4.34½	4.22	4.29	*5.00*	5.40
¼	3.40	4.62	4.59½	4.67	4.42	*5.25*	5.65

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas
¾ in. and larger	$2.97	$2.80	*$4.75*
⅝	3.02	2.85	*4.80*
½	3.07	2.90	*4.90*
⅜	$3.22	$3.05	*$5.00*
¼	3.37	....	*5.25*

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$15.00	$10.25	No Quotations	
Chicago	12.00	12.00	8.00	$31.00	*$33.00*
St. Louis, selected	18.00	18.00	11.00	......	....
St. Louis, salmon	12.00*	12.00	9.00	28.00	....
Denver	12.00†	12.00	8.50	......	....
Dallas	16.07	16.07	11.00	26.50	...
San Francisco	12.50	12.00	10.00	......	....
Boston ......(on job)	18.00	18.00	13.25	30.00	45.50
New Orleans	15.98	15.98	10.60	16.92	....
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	14.00	11.00	52.00	....
Seattle	15.00	15.00	10.00	*36.00*	‡...
Cincinnati	*16.50*	16.75	13.50	....	....
Atlanta	16.00	.....	10.00	.....	.....

* Hard brick, $16. † Salmon is $10. ‡ Water-struck; sand-struck is $21.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$0.11925	.....	$0.07	$0.08	$0.1125	$0.1072	....
6x12x12	.159	.....	.095	.105	.15	.1474	$0.1512
8x12x12	....	.....	.12	.15	......	.2010	.1944
10x12x12	....	.....	.14	.173	......	.2546	.2263
12x12x12	....	.....	.195	.208		*.3082*	.2916

	4x12x12	8x12x12	12x12x12
Boston	$0.11	$0.20	$0.29
St. Paul	.056	.11	.162
Cincinnati	.086	.165	.218
Kansas City	.0786	.15	.205
Seattle	.09	.175	.30
Atlanta	.095	.13	.205
New Orleans	.16	.22	.32

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	$2.80	$4.07	$4.195	$4.14	$4.07	$5.25	*$5.50*
Channels, 3 to 15 in	2.80	4.07	4.195	4.14	4.07	5.25	*5.50*
Angles, 3 to 6 in., ¼ in. thick	2.80	4.07	4.195	4.14	4.07	5.25	*5.50*
Tees, 3 in. and larger	2.80	4.12	4.195	4.14	4.07	5.25	*5.50*
Plates	3.00	4.27	4.445	4.14	4.27	5.50	*5.70*

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	$4.40	$5.67	$7.00	$5.57	$4.74	$6.70	$7.00
CONE HEAD BOILER							
¾ in. and larger	4.50	5.77	7.10	5.67	4.84	6.80	7.10
⅝ and 11/16	3.65	5.92	7.25	5.82	4.99	6.95	7.25
½ and 9/16	5.00	6.27	7.60	6.17	5.24	7.30	7.60

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $2.10 per roll in carload lots and $2.35 for smaller quantities.

Shingles, red and green slate finish, cost $5.50 per square in carloads, $5.75 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots		Less Than Carload Lots	
	N. Y.	Chicago	N. Y.	Chicago
Tar felt (14 lb. per square of 100 sq. ft.)	*$54.00*	*$52.00*	*$55.00*	*$53.00*
Tar pitch (in 400-lb. bbl.)	21.00	18.00	22.00	19.00
Asphalt pitch (in barrels)	36.00	36.00	41.50	41.50
Asphalt felt	67.50	67.50	72.00	72.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	—New York— Current	One Yr. Ago
Blue Annealed						
No. 10	3.90	5.04	6.50	6.50	5.17	5.45
No. 12	3.95	5.09	6.55	6.55	5.22	5.50
No. 14	4.00	5.14	6.60	6.60	5.27	5.55
Black						
Nos. 18 and 20	4.50	5.84	6.02	7.30	6.02	6.25
Nos. 22 and 24	4.55	5.89	6.07	7.35	6.07	6.30
No. 26	4.60	5.94	6.12	7.40	6.12	6.40
No. 28	4.70	6.04	6.12	7.50	6.27	6.45
Galvanized						
No. 10	5.05	6.39	6.57	....	6.57	6.70
No. 12	5.15	6.39	6.67	7.85	6.62	6.80
No. 14	5.15	6.39	6.67	8.00	6.67	6.80
Nos. 18 and 20	5.45	6.59	6.97	8.15	6.97	7.10
Nos. 22 and 24	5.60	6.44	7.12	8.30	7.12	7.25
No. 26	5.75	6.74	7.27	8.45	7.27	7.40
No. 28	6.05	7.19	7.57	8.75	7.57	7.70

LINSEED OIL—These prices are per gallon:

	—New York—		—Cleveland—		—Chicago—	
	Current	One Year Ago	Current	One Year Ago	Current	One Year Ago
Raw in barrel	$1.50	$1.39	$1.65	$1.40	$1.66	$1.41
5-gal. cans	*1.65*	1.49	1.80	1.50	1.88	1.51

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	—Red—				—White—	
	Current		1 Year Ago		Current	1 Yr. Ago
	Dry	In Oil	Dry	In Oil	Dry and In Oil	Dry and In Oil
100-lb. keg	13.00	14.50	11.25	11.00	13.00	11.00
25 and 50-lb. kegs	13.25	14.75	11.50	11.25	13.25	11.25
12½-lb. keg	13.50	15.00	11.75	11.50	13.50	11.50
5-lb. cans	15.00	16.50	13.25	13.00	15.00	13.00
1-lb. cans	16.00	17.50	13.25	13.00	16.00	13.00

500 lb. lots less 10% discount; 2000 lb. lots less 10–2½% disconnt.

LUMBER

San Francisco—Prices of rough Douglas fir, No. 1 common, in more than carload lots:

Lumber Prices in Yards at San Francisco

	6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	22 and 24 Ft.	25 to 32 Ft.
3x3 and 4	$26.00	$26.50	$27.50	$29.50
3x6 and 8	27.00	27.50	28.50	30.50
4x4–6 and 8	28.50	29.50	30.50	32.50
3x10 and 12	27.50	28.50	29.50	31.50
3x14	28.00	29.00	30.00	32.00
4x10 and 12	28.50	29.50	30.50	32.50
4x14	29.50	30.50	31.50	33.50

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	$28.50	$30.50	$31.50
6x14	30.00	32.00	33.00
8x10	31.50	33.50	34.50
8x14	33.00	35.00	36.00

New York, Chicago and St. Louis	Southern Pine —New York*— 20-24 Ft.	34 Ft.	—Chicago— 20 Ft. and Under	22-24 Ft.	Yellow Pine —St. Louis— 20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$40.50	$46.50	$45.00	$46.00	$35.00	$37.00
3x10 to 10x10	44.00	50.00	48.00	49.00	38.50	40.00
3x12 to 12x12	46.00	52.00	50.00	51.00	40.00	41.50
3x14 to 14x14	51.00	57.00	55.00	56.00	45.00	47.00
3x16 to 16x16	57.00	63.00	60.00	61.00	48.00	50.00
3x18 to 18x18	62.00	68.00	64.00	65.00	52.00	53.50
4x20 to 20x20	65.00	71.00	70.00	71.00	...	...

* From Lumbermen's Bureau.

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities

	—8 x 8-In. x 20-Ft. and Under— P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under P.	Fir
Boston	$46.50	$45.00	$45.00	$46.00	$52.00	$46.00
Cincinnati	37.00	...	36.00	.	41.00	40.00
Kansas City	40.50	41.50	41.50	39.50	*45.50*	43.50
Seattle	17.50	17.50	17.50	17.50	17.50	17.50
New Orleans	48.00		....	.....	50.00	
St. Paul	.	*50.00*	*46.00*	*46.00*	.....	53.00
Denver	44.00	34.50	34.50	.....	49.00	39.00
Atlanta	38.00	....	.....	.....	*45.00*	....

	1-In. Rough, 10 In. x 16 Ft. and Under P.	Fir	Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. P.	Fir
Boston	$50.00	......	*$40.00*	$45.00	$48.50
Cincinnati	43.00	.....	39.00	42.00	38.00
Kansas City	50.00	$55.75	55.75	53.50	61.00
Seattle	17.50	17.50	17.50	17.50	17.50
New Orleans	54.00	...	.....	60.00	...
St. Paul	*50.50*	*40.00*	....	.....	44.50
Denver	45.00	33.50	33.50	38.00	*30.00*
Atlanta	28.80	......	......	30.50	....

Dallas—Yellow Pine:

2x4 to 2x12—12, 14 and 16	$38.80
2x4 to 2x12—10, 18 and 20	*40.90*
2x4 to 2x12—22 and 24	43.20
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
1x10, 10x10 and 3x10	*52.00*
12x12 and 3x12	*54.25*

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.50	$4.37	$4.37	$5	$4.75
Cut	5.00	6.50	6.50	5.75	.....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl.	$0.0[illegible]½	None
Hypochlorite of lime (bleaching powder), in 700-lb. drums	*.01¾– .02¾*	0.05¼
Soda ash, in 400-lb. bbl.	.03½	.03½
Liquid chlorine in 100-lb. cylinders Lime is quoted separately	*.10– .12*	.12

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$3.50	$4 to $5	$4 to $5

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	+17½%
Galvanized cast steel rigging	2½%
Bright plow steel	30%
Bright cast steel	17½%
Bright iron and iron tiller	List

San Francisco: Galvanized, +5%; bright, 12½% off.
Chicago: Galv., +20%; bright, 20% off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft., ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.32	Atlanta	$0.24
New York	.30½	Denver	.32
Cincinnati	.33	Kansas City	.32½
Chicago	.30½	New Orleans	.31½
St. Paul	.32	Seattle	.24
San Francisco	.29	St. Louis	.21½

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	—Gelatin— 40%	60%	80%	Black Powder
New York	......	$0.29½	$0.34½	$0...	$2.40
Boston	*$0.22½*	.26½	.31½	.37½	*2.40*
Cincinnati	.18½	.22½	.26½	.....	2.35
Kansas City	.20¼	.25½	.30½	.38½	2.45
New Orleans	.20½	.26¼	.31¼	.37¼	2.60
Seattle	*.14½*	*.20¼*	*.25¼*	*.31¼*	*1.90*
Chicago	.18½	.22½	.30	.36	2.35
St. Paul	.19	.25½	.30½	....	2.45
St. Louis	.19	.25½	.30½	.36½	.....
Denver	.17½	.24	.29	.35	2.45
Dallas	.25	.31	.36	.42	.....

POLES—Price of Western red cedar poles is as follows:

	—New York— Current	One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft.	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft.	7.65	7.45	6.85	6.10	6.85
7-in. x 35-ft.	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft.	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft.	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft.	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft.	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$9.00
12-in. butts, 6-in. tops, length 30-40 ft.	11.50
12-in. butts, 6-in. tops, length 41-50 ft.	12.50
14-in. butts, 6-in. tops, length 51-60 ft.	21.00
14-in. butts, 6-in. tops, length 61-71 ft.	23.50

	Dallas
6-in. x 20-ft.	*$3.00*
6-in. x 30-ft.	*5.00*
8-in. x 30-ft.	*7.50*
8-in. x 35-ft.	*7.50*

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	Chicago	St. Louis
No. 1 railroad wrought	*$17.00–18.00*	*$15.00*	$17.00
Stove plate	15.00–17.00	*15.00*	16.00
No. 1 machinery cast	22.00–24.00	*20.00*	20.00
Machine shop turnings	*6.50– 7.50*	*6.00*	7.00
Cast borings	*9.50*–10.50	*7.00*	10.50
Railroad malleable cast	*13.50*–14.50	*15.50*	17.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	Black	Seattle Black
½	$10.50	$8.50	$8.55
⅝	9.85	7.85	8.25
¾	9.70	7.70	8.30

Pittsburgh base, $5. per 100 lb.

PROPOSALS

For Proposals Advertised See Pages 79-83 inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Mar. 10	Junction City, Kan.	Feb. 27
Mar. 10	Underwood, N. D.	Feb. 27
Mar. 11	Baxter Springs, Kan.	Mar. 6
Mar. 18	Wyandotte, Mich.	Feb. 20
Mar. 19	Hartford, Conn. Adv. Feb. 27 and Mar. 6.	Mar. 6
Mar. 20	Milwaukee, Wis. Adv. Mar. 6.	Mar. 6
Mar. 24	Minot, N. D.	Mar. 6
Mar. 25	Jersey City, N. J. Adv. Feb. 27 and Mar. 6.	Feb. 20

SEWERS

Bids Close		See Eng. News-Record
Mar. 10	Durham, N. C. Adv. Feb. 27 and Mar. 6.	Feb. 27
Mar. 10	Underwood, N. D.	Feb. 27
Mar. 14	Trenton, N. J.	Feb. 27
Mar. 19	Greenfield, Ind.	Mar. 6
Mar. 21	Granite City, Ill. Adv. Mar. 6.	Mar. 6
Apr. 1	Harrison, N. J.	Mar. 6
Apr. 1	Newark, N. J.	Mar. 6

BRIDGES

Bids Close		See Eng. News-Record
Mar. 10	Walkerton, Ont.	Feb. 27
Mar. 11	Falls, Pa.	Feb. 27
Mar. 15	Charleston, Miss.	Feb. 27
Mar. 15	Montreal, Que.	Feb. 27
Mar. 17	Stuart, Va.	Mar. 6
Mar. 17	Minot, N. D.	Mar. 6
Mar. 18	Knoxville, Tenn. Adv. Mar. 6.	Mar. 6
Mar. 19	Visalia, Cal.	Mar. 6
Mar. 20	Springfield, Mass. Adv. Feb. 27.	Feb. 27
Mar. 23	Buckhannon, W. Va.	Feb. 13
Mar. 24	Middlebourne, W. Va.	Mar. 6
Mar. 27	Janeville, Wis. Adv. Mar. 6.	Mar. 6
Apr. 16	Ottawa, Ont.	Feb. 20

STREETS AND ROADS

Bids Close		See Eng. News-Record
Mar. 8	Louisa, Va.	Mar. 6
Mar. 8	Wauseon, O.	Mar. 6
Mar. 10	Olathe, Kan.	Mar. 6
Mar. 10	Lafayetteville, W. Va. Adv. Feb. 27.	Feb. 27
Mar. 10	Mt. Vernon, O. Adv. Feb. 20 and 27.	Feb. 27
Mar. 10	Indiana	Feb. 27
Mar. 10	Salem, N. J. Adv. Feb. 20 to Mar. 6.	Feb. 27
Mar. 10	Clifton, Ariz.	Feb. 27
Mar. 10	Selma, Ala.	Feb. 27
Mar. 10	New Iberia, La.	Feb. 20
Mar. 10	Bridgeton, N. J.	Mar. 6
Mar. 10	Mason, Tex.	Mar. 6
Mar. 10	Long Island City, N. Y.	Mar. 6
Mar. 11	Maryland	Mar. 6
Mar. 11	Eutaw, Ala.	Feb. 27
Mar. 11	Wichita, Kan.	Mar. 6
Mar. 11	Pascagoula, Miss.	Mar. 6
Mar. 11	Brighton (Boston P. O.)	Mar. 6
Mar. 11	Buffalo, N. Y.	Feb. 27
Mar. 11	Michigan	Feb. 27
Mar. 11	Grand Rapids, Mich.	Mar. 6
Mar. 12	Baltimore, Md. Adv. Feb. 27.	Feb. 27
Mar. 12	Ivanhoe, Minn.	Mar. 6
Mar. 12	Thiboudaux, La.	Mar. 6
Mar. 15	Atlanta, Ga.	Feb. 27
Mar. 15	Yazoo, Miss.	Mar. 6
Mar. 17	Washington	Mar. 6
Mar. 17	Riverside, Cal.	Feb. 27
Mar. 17	Tuscumbia, Ala.	Mar. 6
Mar. 17	Tunica, Miss.	Mar. 6
Mar. 17	Steubenville, O.	Mar. 6
Mar. 18	Dravosburg, Pa.	Mar. 6
Mar. 18	Kansas City, Mo. Adv. Feb. 27 and Mar. 6.	Feb. 27
Mar. 18	Santa Ana, Cal.	Feb. 27
Mar. 18	St. Louis, Mo.	Feb. 27
Mar. 18	Kansas City, Mo.	Feb. 27
Mar. 18	St. Louis, Mo.	Feb. 20
Mar. 18	St. Cloud, Minn.	Mar. 6
Mar. 20	Logan, Ia. Adv. Mar. 6.	Mar. 6
Mar. 20	Philippi, W. Va. Adv. Feb. 27 and Mar. 6	Mar. 6
Mar. 20	Edgerton, Wis.	Mar. 6
Mar. 20	Williston, N. D.	Mar. 6
Mar. 20	Pennsylvania Adv. Feb. 27 and Mar. 6.	Mar. 6
Mar. 22	Oregon	Feb. 27
Mar. 24	Rugby, N. D.	Mar. 6
Mar. 25	Bottineau, N. D.	Mar. 6
Mar. 26	Fairmont, W. Va. Adv. Mar. 6.	Mar. 6
Mar. 26	Delaware, N. J.	Mar. 6
Mar. 27	Devils Lake, N. D.	Mar. 6
Mar. 27	Center City, Minn.	Mar. 6
Mar. 28	Dayton, O.	Mar. 6
Mar. 28	Pennsylvania Adv. Mar. 6.	Mar. 6
Mar. 31	Lockport, N. Y.	Feb. 6
Mar. 31	Ottawa, Ont.	Feb. 27
Apr. 7	Moulton, Ala.	Feb. 20

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Mar. 10	Waseca, Minn.	Feb. 27
Mar. 11	Harrisburg, Ark.	Feb. 27
Mar. 11	Rochester, N. Y. Adv. Feb. 13 to Mar. 6.	Feb. 20
Mar. 13	Tyler, Minn.	Feb. 6
Mar. 18	El Centro, Cal.	Mar. 6
Mar. 19	Carthage, Ill.	Feb. 20
Mar. 19	Quincy, Ill.	Feb. 20
Mar. 20	Osceola, Ark.	Feb. 27
Apr. 4	Whiteside, Ill. Adv. Mar. 6.	Mar. 6
Apr 8	Hollandale, Miss.	Feb. 13

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Mar. 10	Hibbing, Minn.	Feb. 27
Mar. 10	Albany, N. Y.	Mar. 6
Mar. 10	Lake Edward, N. B.	Mar. 6
Mar. 14	New York, N. Y.	Mar. 6
Mar. 19	Brooklyn, N. Y.	Feb. 20
Mar. 20	La Crosse, Wis.	Feb. 20
Mar. 20	Macon, Mo. Adv. Mar. 6.	Mar. 6
Mar. 21	Philadelphia, Pa.	Mar. 6
Mar. 25	Charleston, S. C.	Mar. 6
Mar. 31	Orillia, Ont.	Mar. 6
Apr. 1	Sioux City, Ia.	Jan. 16

BUILDINGS

Bids Close		See Eng. News-Record
Mar. 10	Chicago, Ill.	Feb. 27
Mar. 10	Kenmore, Ohio	Mar. 6
Mar. 13	Kingston, Ont.	Mar. 6
Mar. 14	Humboldt, Ariz.	Feb. 20
Mar. 14	Dallas, Tex.	Feb. 20
Mar. 14	Palmerton, Pa.	Mar. 6
Mar. 14	St. Agathe, Que.	Mar. 6
Mar. 14	Pittsburgh, Pa.	Mar. 6
Mar. 15	Albany, N. Y. Adv. Mar. 6.	Mar. 6
Mar. 15	Hamilton, Ont.	Mar. 6
Mar. 15	Dallas, Tex.	Mar. 6
Mar. 15	Baton Rouge, La.	Feb. 27
Mar. 15	Levis, Que.	Mar. 6
Mar. 15	Culver, Ind.	Dec. 26
Mar. 15	Duluth, Minn.	Feb. 13
Mar. 15	Calgary, Alta.	Mar. 6
Mar. 17	Johnstown, Pa.	Feb. 20
Mar. 17	Brooklyn, N. Y.	Mar. 6
Mar. 18	Esquimalt, B. C.	Feb. 20
Mar. 19	Kingston, Ont.	Mar. 6
Mar. 20	Ottawa, Ont.	Mar. 6
Mar. 25	Bath, N. Y.	Feb. 27
Mar. 27	West Point, N. Y. Adv. Mar. 6.	Mar. 6
Mar. 28	West Unity, O.	Feb. 27
Mar. 31	Ottawa, Ont.	Mar. 6
Apr. 2	Lansing, Mich.	Mar. 6
Apr. 2	New York, N. Y.	Jan. 23
Apr. 10	Newaygo, Mich.	Feb. 6
Apr. 15	Newark, N. J.	Feb. 6

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Mar. 10	Condensers—Spec. 3797—Washington, D. C.	Feb. 27
Mar. 11	Dredging — Philadelphia, Pa. Adv. Feb. 6 to Mar. 6.	Feb. 13
Mar. 12	Enlarging Levees — St. Louis, Mo. Adv. Feb. 13 to Mar. 6.	Feb. 20
Mar. 12	Boathouse, etc.—Charlotte, N. Y. Adv. Feb. 13 and 20.	Feb. 20
Mar. 14	Hoistway, etc. — Easton, Pa. Adv. Feb. 27.	Feb. 27
Mar. 15	Dredging, etc.—Nome, Alaska Adv. Feb. 27.	Feb. 27
Mar. 17	Wooden Pier and Approach — Spec. 3820 —Yorktown, Va.	Feb. 27
Mar. 17	Building—Spec. 3760—Annapolis, Md.	Feb. 27
Mar. 17	Fuse and Primer House—Spec. 3737—Bellevue, D. C.	Mar. 6.
Mar. 17	Cranes—Spec. 3770—Philadelphia, Pa.	Mar. 6
Mar. 17	Incinerator—Spec. 3790—Indianhead, Md.	Mar. 6
Mar. 19	Post Office, etc., Woodward, Okla.	Feb. 20
Mar. 21	Post Office, Akron, O.	Mar. 6
Mar. 24	Dredging — Wilmington, Del. Adv. Feb. 27 and Mar. 6.	Feb. 27
Mar. 24	Valve Operating Machinery —Wheeling, W. Va. Adv. Feb. 27 and Mar. 6	Mar. 6
Mar. 24	Boatshead—Spec. 3472—Pensacola, Fla.	Mar. 6
Mar. 25	Remodeling Post Office, etc. —Providence, R. I.	Feb. 27
Mar. 26	Drainage—St. Louis, Mo. Adv. Feb. 27 and Mar. 6	Mar. 6
Mar. 29	Lock and Abutment-Greenup, Ky. Adv. Mar. 6.	Mar. 6
Mar. 31	Coal—Memphis, Tenn. Adv. Feb. 27 and Mar. 6.	Feb. 27
Mar. 31	Drdeging—Wilmington, Del. Adv. Mar. 6.	Mar. 6
Apr. 2	Post Office—Honey Grove, Tex.	Mar. 6
Apr. 4	Post Office—Eldorado, Kan.	Mar. 6
Apr. 4	Bear Trap Leaves—Cincinnati, O. Adv. Mar. 6.	Mar. 6
Apr. 15	Pumps, etc.—Omaha, Neb. Adv. Feb. 27 and Mar. 6	Mar. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Mar. 10	Elevated Roadway — Portland, Ore.	Feb. 27
Mar. 11	Miscellaneous Supplies — Newark, N. J.	Feb. 27
Mar. 14	Electric Fixtures—Hudson, N. Y.	Feb. 27
Mar. 14	Radial Chimney — Sarnia, Ont.	Feb. 27
Mar. 18	Miscellaneous Supplies—Albany, N. Y.	Mar. 6
Mar. 20	Subway, Foundation, etc.—St. Boniface, Man.	Mar. 6

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Middleport—City election Mar. 18, to vote on $20,000 bonds to improve water supply. Plans include installation of filtration plant and equipment, using water from Barge Canal.

N. Y., Watertown—City will petition State Legislature, Capitol, Albany, to make surveys and prepare plans for building impounding dams on Black and Beaver Rivers for water storage.

N. J., Bound Brook—Elizabethtown Water Co., 68 Broad St., Elizabeth, having plans prepared by M. Sherrerd, archt., 68 Broad St., Elizabeth, for pumping station and filter house near Milltown here.

Pa., Kutztown—Boro. voted $15,000 bonds to improve waterworks plant.

Md., Baltimore—City plans to install 30, 36 and 48 in. suction mains to improve operating conditions in Mt. Royal Pumping Sta., cost, $30,000; install about 20 mi. water mains, various sizes, and install house connections in advance of improved paving, $100,000; erect 30,000,000 gal. centrifugal pump, driven by steam turbine having waterworks condenser, $75,000; also prepare plans for new filtration plant, 120,000,000 gal. per day capacity as addition to existing filtration plant at Lake Montebello and probable erection of experimental filters for comparing efficiency of mixing coagulents at Montebello filters. W. E. Lee, city water engr.

Fla., Winter Garden—City plans to hold election to vote on from $30,000 to $35,000 bonds to build complete water supply system, consisting of elevated steel tank with capacity of 50,000 gals., oil pumping engines, brick pumping station and 16,000 ft. 2-8 in. c. i. pipe. W. Ginn, Sanford, engr.

Ala., Union Springs—City voted $10,000 bonds to improve waterworks system.

Waterworks (Continued)

La., Arcadia—City having plans prepared for building water-works system. About $50,000. X. A. Kramer, Magnolia, Miss., engr.

La., Kaplan—Town having plans prepared for water-works and electric light plant. About $40,000. X. A. Kramer, Magnolia, Miss., engr.

La., Marksville—City having plans prepared for water-works system. About $40,000. X. A. Kramer, Magnolia, Miss., engr.

La., Slidell—City having plans prepared for building water-works system. About $75,000. X. A. Kramer, Magnolia, Miss., engr.

La., Winnsboro—See "Sewers."

O., Elyria—City election Apr. 30, to vote on $1,000,000 bond issue to improve waterworks. C. M. Theobald, city engr.

O., Silver Lake—(Bellefontaine P. O.)—Village plans election Mar. 11, to vote on $25,000 bonds to build waterworks system. E. A. Tewksbury, clk.

Minn., Albert Lea—City receives bids about Mar. 25 building 1,500,000 gal. reservoir and 75,000 gal. pressure tank, 50 ft. high. About $50,000. J. H. A. Brahtz, Civic and Commerce Bldg., St. Paul, engr.

Kan., Claflin—City plans to install waterworks system.

Kan., Lawrence—City having surveys made by Black & Veatch, engrs., 400 Interstate Bldg., Kansas City, Mo., for new waterworks system.

Kan., Lyons—City plans to extend waterwork system and install pumps in 2 new wells.

Kan., Parsons—City plans to build new waterworks system. W. J. Kutz, city engr.

Neb., Oshkosh—City plans election to vote on $45,000 bonds to improve waterworks and sewerage systems.

Neb., Scottsbluff—City plans to extend waterworks, to include tank and tower. About $25,000. J. W. Bly, city clk.

Mont., Polson—City election Apr. 7, to vote on $15,000 bonds to extend water mains in additions south of G St. F. F. Faucett, Polson, engr.

Mont., Plattsburg—City having plans and estimates prepared by E. E. Harper, engr., Kansas City, for improving waterworks system. Election soon to vote on bonds for project.

Tex., Ranger—City plans to build distilled water plant. About $10,000. W. M. Powell, mgr.

Tex., Waxahachie—See "Streets and Roads."

Okla., Muskogee—City voted $130,000 bonds to improve waterworks system. H. H. White, city engr.

Wash., Seattle—City instructed Bd. Pub. Wks. to proceed with development of Swan Lake water supply system. About $750,000 available for project. Plans include construction of large impounding reservoir at Swan Lake, additional pipe line to city and additional storage reservoir at Volunteer Park. Noted July 25.

Wash., Walla Walla—City plans to build reservoir to improve waterworks system. About $100,000. W. Rehorn, city engr.

Cal., Melones—Oakdale Irrigation Dist., Oakdale, having surveys and preliminary estimates prepared by C. H. Nickerson, engr., Oakdale, for reservoir and dam to impound 100,000 acre feet of water. About $1,000,000. H. Crowe, Oakdale, dir.

Que., Three Rivers—City plans to issue $150,000 debentures to improve waterworks system. L. Lambert, City Hall, engr.

Ont., Oshawa—Council passed by-law to build water-works system. About $250,000. M. Mason, Oshawa, engr.

Ont., Timmins—Town receives bids in spring for extending waterworks system.

BIDS DESIRED

Conn., Hartford—Until Mar. 19, by Comrs. Water Bd., building slow sand filtration plant to include two 26 x 65 ft. regulator houses and 40 x 40 ft. laboratory. Work involves 8½ acres filter beds, concrete groined arch roofs and floors, aerator 5.0 ft. diam. by 7.0 ft. deep, connecting pipe lines, 40,000 cu.yd. excav. and 16,000 cu.yd. concrete. C. M. Saville, 1026 Main St., mgr. and ch. engr.; advertised in this issue.

Wis., Milwaukee—Until Mar. 20, by Dept. Pub Wks., building water pipe tunnel under Menomonee River, West Water St. to Reed St. and 2 shafts; also laying connecting water pipe line. Work involves 181 lin.ft. steel encased concrete shafts, 10 ft. internal diameter, 268 lin.ft. rein.-con. lined tunnel under bed of Menomonee River, 7 x 9 ft. internal dimensions, placing 440 lin.ft. 24 in. c.i. water pipe in shafts and tunnel, 765 lin.ft. 20-24 in. c.i. water pipe laid in trenches from shafts to connecting water mains in Reed and 3rd Sts.; advertised in this issue.

Kan., Baxer Springs—Until Mar. 11, by city, for (1) furnishing and erecting machinery and pumping equipment for one or more units; (2) constructing power house, oil house and concrete work; (3) erecting tower and tank of 100,000 gal. capacity, not more than 125 ft. high. Separate bids will be received on 3 sections.

N. D., Minot—Until Mar. 24, by City Comrs. building 3,000,000 gal. rein.-con. supply reservoir. F. Bass, 244 Plymouth Bldg., Minneapolis, Minn., engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Md., Brunswick—City let contract building gravity water supply system including trenching, building river crossing, etc., to H. C. Brooks & Co., Martinsburg, W. Va., $79,837. Work involves furnishing and placing 26,400 ft. 4-10 in. wood stave pipe and 8-10 in c.i. pipe. Noted Feb. 13.

★W. Va., Clarksburg—Water Bd. let contract building addition of 3,000,000 gal. daily capacity to existing mechanical filtration plant, to Amer. Water Softener Co., 1011 Chestnut St., Phila. Noted Jan. 30.

★O., Akron—H. S. Morse, dir. pub. serv., Delaware Bldg., let contract furnishing 400 tons 6-16 in. Class "C" pipe, 170 tons 6-12 in. Class "B" pipe and 15 tons special castings, to Hardware Supply Co., Hower Bldg. About $36,837. Noted Feb. 6.

Okla., Wewoka—City received bids Feb. 19 for building extension to waterworks system, from N. S. Sherman Iron Wks., 18-32 East Main St., Oklahoma, $116,360. Noted Feb. 13.

★Cal., Redlands—Yucaipa Water Co. No. 1, let contract lining reservoir, involving 124,000 sq.ft. 4 in. concrete, to G. A. Abrahamson, Redlands. Owner will furnish cement.

Que., Montreal—City received bids building concrete conduit necessary to increase water supply from aqueduct by 20,000,000 gals. daily, from Atlas Constr. Co., 37 Belmont St., $53,300; Laurin & Leitch, 367 Beaver Hall Sq., $58,000; J. Quinlan & Co., 1165 Greene Ave., $62,000.

Sewers

PROPOSED WORK

N. Y., Buffalo—City soon receives bids building 2 mi. Sloans Drain. About $300,000. Plans include building 6-8 ft. trunk sewer for flood relief, brick, segment block or rein.-con. pipe. G. H. Norton, city engr. Noted Dec. 5.

N. Y., Rochester—City plans to improve Clifford Ave. Dist. sanitary and storm sewer, $90,000; Chili Ave. outlet sewer $18,700. A. C. Poole, city engr.

N. Y., Schenectady—Bd. Contract soon lets contract building storm sewer in Erie Canal Bed from Union St., southerly. L. B. Sebring, city engr.

N. Y., Watertown—City petitioned to build new sanitary sewer in Sherman St. and extend Holcomb St. sewer; latter would necessitate extension to Western Outfall sewer. About $17,000. E. W. Sayles, city engr.

N. J., Dover—City election Mar. 11, to vote on $45,000 bonds to install sewerage system. C. Potts, Morristown, engr.

Pa., Ellwood City—City plans to issue $18,000 bonds to build sewers in various streets.

La., Winnsboro—City having plans prepared building sewerage and waterworks system. About $80,000. X. A. Kramer, Magnolia, Miss., engr. Noted Sept. 5.

O., Columbus—City plans to build sewer in 11th Ave. from Cleveland to St. Clair Aves. H. Maetzel, city engr.

O., Silver Lake—(Bellefontaine P. O.)—Village election Mar. 11, to vote on $26,000 bond issue to build sewage disposal plant. E. A. Tewksbury, clk.

Ill., Batavia—City plans to build east side sewerage system. About $140,000.

Wis., North Milwaukee—Village voted $100,000 bonds to build sewers. H. C. Webster, 490 Morse Ave., Milwaukee, engr.

Neb., Geneva—City receives bids about May building sanitary sewerage system. Bonds for $35,000 voted for project. Grant & Fulton, 505 Bankers Life Bldg., Lincoln, engrs.

Neb., Lincoln—City election Apr. 8, to vote on $100,000 bonds to build [illegible] mi. collecting and intercepting sewer and unit of disposal plant. A. Dobson, 945 D St., Lincoln, engr.

Neb., Oshkosh—See "Waterworks."

Tex., Waxahachie—See "Streets and Roads."

Colo., Denver—City plans to enlarge 16th St. sewer from Lawrence to Welton Sts., present 15 in. pipe to be replaced with 1900 ft. 18-24 in. vitr. pipe. J. B. Hunter, city engr.

Ariz., Holbrook—City plans to build sewerage and water systems. About $100,000. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, Cal., engrs.

Cal., San Diego—Olmsted & Gillelen, engrs., 1112 Hollingswood Bldg., Los Angeles, submitted report on sewage disposal plant for city. Plans include intercepting sewer, cost, $320,000; small pumping stations, $32,500; screening plant, $225,000 screen at 32nd St. plant, $25,000; pumps at 32nd St. plant, $4000. Total cost, $606,500. A. H. Wright, city clk.

Que., Levis—City plans to issue $29,000 debentures to build sewerage and waterworks systems in Villemay Wards.

Que., Montmagny—City plans to issue $100,000 debentures to improve and extend sewerage system.

Ont., Brantford—City plans to build sewers in various streets. About $185,000.

BIDS DESIRED

N. J., Harrison—Until Apr. 1, by Passaic Valley Sewerage Comn., 820 Essex Bldg., Newark, building Sect. 27, South 4th St., of Kearny-Harrison-Newark Branch intercepting sewer, involving 2800 lin.ft. earth, rock, or earth and rock excav., 2500 cu.yd. concrete masonry, 100 cu.yd. brick masonry and 16,000 lb. steel. W. M. Brown, ch. engr.

N. J., Newark—Until Apr. 1, by Passaic Valley Sewerage Comn., 820 Essex Bldg., building Sect. 30 of Newark Branch Sewer, (a) tunnel method, involving 3310 lin.ft. earth, rock, or earth and rock excav., 3000 cu.yd. concrete masonry, 50 cu.yd. brick masonry, 27,000 lb. steel (b) open trench method, involving 3310 lin.ft. earth excav., 50 cu.yd. rock excav., 3100 cu.yd. concrete masonry, 100 cu.yd. brick masonry and 27,000 lb. steel. W. M. Brown, ch. engr.

Miss., Pascagoula—See "Streets and Roads."

Ind., Greenfield—Until Mar. 19, by city, building sanitary sewer in West Main St C. Boone, city engr.

Ill., Granite City—Until Mar. 21, by Bd. Local Impvts., building 18,000 lin.ft. concrete sewer. E. Hall, 1st Natl. Bank Bldg., engr.; advertised in this issue.

Ia., Logan—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Bridgeport—City let contract building combined tile sewer in East Washington Ave., and Main St., to Dambrosio & Delbalzo Co., 84 Silver Lane, East Hartford, $13,950. Noted Feb. 13.

Pa., Pittsburgh—City received bids Feb. 20 laying sewers in (a) McCandless Ave. from east line of 53rd St. to existing sewer on McCandless St. at Celadine St., involving 628 ft. 15 in. terra cotta pipe, 3 manholes, 5 catch basins, (b) Reiter St., from Larimer Ave. to existing sewer on Hamilton Ave., 392 ft. 12 in. terra cotta pipe, (c) Pear Way and private properties to Saw Mill Run, 962 ft. 8-15 in terra cotta pipe, 17 manholes, from Manells Constr. Co., 1507 North Lang Ave., (a) $2617, (b) $1300; T. Cronin Co., 17th St., (a) $3571; F. and F. Dinius, Boundary St., (a) $3562; Pittsburgh Paving Co., Bakewell Bldg., (b) $1295, (c) $17,994; M. Mannella (b) $1375; M. Ott & Co., Warrington Ave., (c) $14,433; G. S. White & Co., Jenkins Arcade, (c) $16,438.

★Fla., St. Petersburg—City let contract building two 1 story septic tank units and installing 15,410 ft. sanitary sewers in alleys between 9th and 10th Aves. N., 10th and 11th Aves. N, 11th and 12th Aves. N., and 12th to 13th Aves. N. from 4th St. N. to Bay,

Sewers (Continued)

to Southern Constr. Co., St. Petersburg. $21,395. Contract divided into 2 portions as follows: No. 1, 8750 ft. 8 in., vitr. pipe at $.86 per ft. 360 ft. 6 in., $.84 per ft., 26 manholes. $76 each and 2 flush tanks $90 each; portion No. 2, 6000 ft. 8 in. vitr. pipe, $.87 per ft., 300 ft. 6 in., $.80 per ft. and 27 manholes, $76 each.

★**Ala., Florence**—City let contract building 10 mi. sewers in various streets, to C. G. Kershaw, Woodward Bldg., Birmingham. About $100,000.

O., Columbus—City received bids building 2 mi. sewer in Franklin Park from Donnelly, McKeen & Sheets, $144,441, J. B. Sheets, $148,251, W. D. Winchell, $154,026; 9000 ft. in Grace St. alley west of Burgers St. to alley west of Hague St. from J. G. Clifford, $15,827, I. O. Jones, $14,911, J. B. Sheets, $16,359. Contractors all of Columbus. Noted Feb. 13.

O., Columbus—City received bids excavating and building Clintonville Main Trunk Sewer, Walhalla branch, ¾ mi. long, from I. O. Jones, $12,538; Ames Bros., $13,930; J. B. Sheets Co., $14,164. Contractors all of Columbus. Noted Feb. 13.

★**Mo., St. Louis**—Bd. Pub. Serv. let contract building sewer in Arloe Sewer Dist. No. 1 to G. G. Prendergast Constr. Co., Chemical Bldg., $52,522. Work involves 14,895 lin.ft. 8-33 in. c. i., or common brick pipe, 126,000 bricks, 14,360 cu.yd. earth trenching, 250 cu.yd. rock trenching, 50 manholes and 47 catchbasins; Arloe Sewer Dist. No. 2, to Bates & Martin, St. Louis, $10,000. Work involves 6055 lin.ft. 10-24 in. c. i., or common brick pipe, 36,000 bricks, 3400 cu.yd. earth trenching and 40 cu.yd. rock trenching. Noted Jan. 30.

★**Mo., St. Louis**—Bd. Pub. Serv. let contract building sewers and appurtenances in Oakland Ave., Sewer Dist. No. 2, to Bates & Martin, St. Louis, $15,028. Work involves 5715 lin.ft. 8-30 in. c. i., w. i. or common brick pipe, 53,000 bricks, 4830 cu.yd. earth trenching, 50 cu.yd. rock trenching, 28 manholes and 28 catch basins. Noted Jan. 30.

Bridges

PROPOSED WORK

N. Y., Watertown—City election in May to vote on $60,000 bonds for concrete bridge on Pearl St. and $125,000 bonds for concrete bridge at Diamond Island, both over Black River. E. W. Sayles, city engr. Noted Jan. 9.

N. J., Jersey City—Hudson Blvd. Comn. plans to repair Pennsylvania R.R. bridge over Hudson Co. Blvd. About $50,000. Plans include removing roadway, buckle plates, stringers, etc.

N. J., Jersey City—Hudson Co. Blvd. Comn. having plans prepared repairing Hudson Blvd. bridge over Newark and New York branch of Central R.R. of New Jersey. About $10,000.

N. J., Newark—Essex and Hudson Counties plan to build new bridge over Hackensack River from here to Bayonne. About $500,000.

Va., Stuart—Supervs. Patrick Co. having plans prepared for 4 bridges; cost, $80,000. Will also spend $40,000 to rebuild and repair existing structures.

Miss., McComb—City soon lets contract building steel or concrete approach to viaduct across Illinois Central R. R. About $14,000. X. A. Kramer, Magnolia, engr.

Mich., Ferrysburg—See "Spring Lake."

Mich., Spring Lake—State Highway Dept., Lansing, soon receives bids building 65 ft. trunnion lift bridge here, 20 ft. roadway and two 5 ft. walks, to connect with Ferrysburg. About $40,000. C. V. Dewart, bridge engr.

Wis., Manitowoc—City receives bids in April building 396.9 ft. bascule bridge on 10th St., consisting of 100 ft. draw, rein.-con. approaches, 24 ft. drive and 8 ft. walk. Klug & Smith, 69 Wisconsin St., Milwaukee, engrs. Noted Jan. 30.

Wis., Milwaukee—City voted $250,000 bonds to build bridge on Cedar St. G. Staal, city engr.

South Dakota—Pierre, "See Streets and Roads."

Colo., Denver—City soon receives bids building rein.-con. bridge over Cherry Creek on Logan St., involving 450 cu.yd. rein.-con., cost $30,000; rein.-con. bridge over Cherry Creek on Colfax Ave., involving 750 cu.yd. concrete, $30,000. J. B. Hunter, city engr.

Oregon—See "Streets and Roads."

Que., Waltham—Town plans to build bridge over Ottawa River to connect Lower Aliumette Island with mainland here. Federal and provincial governments will contribute toward cost. G. St. Michel, care Dept. Pub. Wks., Quebec, engr.

Ont., Spencerville—Spencerville Co. had plans prepared for steel bridge. About $10,000.

BIDS DESIRED

Va., Stuart—Until Mar. 17, by Patrick Co., building concrete bridge 67½ ft. long, 12 ft. wide, over Clarks Creek, Pediges Mill, base to be of plain concrete, top of rein.-con.

W. Va., Middlebourne—Until Mar. 24, by Tyler Co., building 55 ft. rein.-con. arch bridge, 10 ft. rise, 16 ft. roadway, across Sugar Creek, Meadville Twp.; also bridge across Indian Creek, McElroy Dist., Alvy Twp. J. E. Smith, clk.

S. C., Orangeburg—See "Excavation and Dredging."

Tenn., Knoxville — Until Mar. 18, by Bd. Comrs., building rein.-con. viaduct over Southern Ry. tracks at Gay St. About $200,000. J. B. McCalla, city engr.; advertised in this issue.

Wis., Janesville — Until Mar. 27, by Bd. Pub. Wks., building rein.-con. bridge over Rock River on Jackson St. six 54 ft. spans, 55 ft. wide. C. L. Valentine, chn.; advertised in this issue. Noted Jan. 23.

N. D., Minot—Until Mar. 17, by Comrs. Ward Co. building 79 ft. timber bridge at Carpio Twp. and 48 ft. timber bridge at Donnybrook Twp.

Cal., Visalia—Until Mar. 19, by Bd. Supervs. Visalia Co. Twp.; building 2 concrete bridges between here and Dinuba Twp.; also 4 concrete bridges, 3 concrete culverts and 7 culvert wings between Porterville and Tipton Twps.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Kan., Topeka**—City let contract building 90 ft. rein.-con. bridge over Shunganunga Creek on 8th St., cantilevered sidewalks, 20 ft. roadway and 5 ft. sidewalks, also 109 ft. bridge over Shunganunga Creek, on 4th St., 20 ft. roadway, 5 ft. sidewalks, to N. T. Hopkins, $21,993 and $21,998 respectively. Noted Jan. 30.

★**Ark., Ft. Smith**—Comrs. Sebastian Bridge Dist. let contract building rein.-con. arch bridge and approaches over Arkansas River on Garrison Ave., to M. M. Elkan, Amer. Natl. Bank Bldg., Macon, Ga., about $500,000. Work involves 20,000 cu.yd. concrete, 1,550,000 lbs. rein.-steel, 8270 sq.yd. wood block or asphalt pavement, 25,000 miscellaneous metal and 22,000 cu.yd. earth embankment. Noted Jan. 2.

★**Cal., Eureka**—State Highway Comn., Forum Bldg., Sacramento, let contract building timber drawbridge 712 ft. long, 21 ft. wide, with concrete trestle approach including movable span, tower and fenders, complete, etc., over Eureka Slough, Humboldt Co., to Mercer-Fraser, Eureka, $61,999. Noted Feb. 20.

Ont., Peterboro—City received bids building bridge over Otonabee River, here, from Canadian Eng. & Constr. Co., Peterboro, $337,338; I. O'Toole, Ottawa, $351,710; R. Sheehy, 751 George St., Peterboro, $381,474. Noted Nov. 28.

Structural Steel

PROPOSED WORK

N. J., Newark—See "Buildings."

Reinforced Concrete

PROPOSED WORK

N. Y., Rochester—See "Industrial Works."

N. Y., Watertown—See "Bridges."

La., Shreveport—See "Buildings."

Wis., Milwaukee—See "Buildings."

B. C., Vancouver—See "Industrial Works."

BIDS DESIRED

Tenn., Knoxville—See "Bridges."

Va., Stuart—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Md., Baltimore**—See "Industrial Works."

★**Va., Petersburg**—See "Miscellaneous."

Streets and Roads

PROPOSED WORK

Mass., Pittsfield—City having plans and specifications made paving North St. from Burbank to Tyler Sts., South St. from Bank Row to West Housatonic St., Summer St. from North St. to Armory, Union St. from North to Northrup Sts., Hurlburt St. from Eaton, Crane and Pike Plant to New West St., and Tyler St. from North to Myrtle Sts. About $80,000. A. B. Farnham, city engr.

Conn., New Britain—City appropriated $35,000 to pave various streets. W. H. Hall, city engr.

New York—Town Bds. Gouverneur, Edwards, Talcville, York and Fullerville petitioned State Highway Comn., Capitol, Albany, to complete Fullerville-Edwards State Highway, in St. Lawrence Co., bituminous macadam.

N. Y., Brockport—State Highway Dept., Albany, petitioned to improve East Canal Rd. from village line to East Lake Rd.

N. Y., Dundee—Yates Co. petitioned State Highway Dept., Capitol, Albany, to build Dundee-Wayne Rd. About $135,000 available.

N. Y., Ogdensburg—Bd. Supervs. St. Lawrence Co., petitioned State Highway Dept., Capitol, Albany, to improve Heuvelton-Gouverneur Post Rd.

N. Y., Rochester—Bd. Supervs., Monroe Co. petitioned State Highway Dept., Capitol, Albany, to build road from Alton to Wolcott, from Honeoye Falls to Lima, from Lima to Hemlock, from East Avon to Lakeville and from Bergen to Batavia Twps.

N. Y., Rochester—Bd. Supervs. Monroe Co. petitioned State Highway Dept., Capitol Albany, to build Fairport Village Rd., Industry Rd., Rochester-Syracuse Rd. through Lyons, Sodus-Wolcott Rd., road from Sweden to Walker and road from Bergen to Batavia.

N. Y., Rochester—City considering paving Tryon Park, cost, $56,200; Driving Park Ave., $17,600; Smith St., $32,000; grading, building sidewalks, installing sewers, etc., in Federal, Jersey, Wisconsin and Sodus Sts., $88,800; repairing various pavements, $10,000. A. C. Poole, city engr.

N. Y., Rochester—New York Central R.R. Grand Central Terminal, New York City, has been granted appropriation to extend Colby St. under tracks; also abolish Blossom Rd. grade crossing. G. W. Kittredge, New York City, ch. engr.

N. Y., Schenectady—City appropriated $20,000 to extend, grade and pave Green and Jefferson Sts. and eliminate bridges over abandoned Erie Canal. L. B. Sebring, city engr.

N. Y., Troy—Rensselaer Co. petitioned State Highway Dept., Capitol, Albany, to improve 4 mi. Hoosick Rd. from Hoosick Twp. to Vermont State Line; 3½ mi. Petersburg-Pownal Rd., connecting Hoosick Rd. with Mohawk Trail; extending 4 mi. Boston Post Rd. from Castleton to Columbia Co line to join New York Post Rd., extending 2½ mi. Northern Turnpike from Oil Mill Hill through Oakwood Ave. to city pavement in Oakwood Ave. near Frear Park. H. Dahl, co. clk.

N. J., Elizabeth—Bd. Freeholders Union Co. plan to improve Mountain Ave., Springfield Twp. and Stuyvesant Ave. and Chestnut St., Roselle Twp. Noted June 20. A. Bauer, engr.

N. J., Elizabeth—City plans to pave Elizabeth Ave. from 7th St. to Staten Island Sound and 1st St. from Elizabeth Ave. to Port Ave. About $376,000. T. E. Collins, city engr.

N. J., Newark—See "Miscellaneous."

N. J., Newark—Bd. Freeholders Essex Co. plans to pave Grove St., Stuyvesant Ave., Avondale Rd., Nutley Twp.; Rutgers St., Belleville Twp., bituminous on 6 in. concrete; Avondale Rd., Nutley Twp., from River Rd. to Nutley bridge, Rutgers St., Belleville Twp. from Washington Ave. to Erie R.R., granite block on 6 in. foundation; Stuyvesant Ave., Irvington Twp., from Lyons Ave. to Union Co. line, Center St., Nutley Twp., from Franklin Ave. to East Passaic Ave., Gregory Ave., West Orange Twp., Watchung Ave., Montclair Twp., East Passaic St., Nutley Twp., bituminous concrete; Central Ave., West Orange Twp., asphalt block on concrete base.

N. J., Trenton—City plans to widen 1 block Perry St. from Warren to Broad Sts., 25 ft. About $100,000. J. R. Fell, 134 North Clinton Ave., city engr.

N. J., Trenton—City plans to pave Calhoun St. from West State St. to water power station. J. R. Fell, Jr., city engr.

Streets and Roads (Continued)

N. J., Trenton—Mercer Co. plans to widen 1 block South Montgomery St. from State to Front Sts., from 18-80 ft. About $150,000. A. Swan, co. engr.

N. J., Verona—Town having plans prepared improving entire length of Bloomfield Ave. About $30,000. Work involves 19,362 ft. concrete curbing and nosing.

N. J., Weehawken—Town having plans prepared extending and improving Oak St., 2300 ft., to Gregory Ave. McClave & McClave, Cliffside, engrs.

N. J., West Orange—Bd. Freeholders Essex Co. (Newark), having plans prepared altering line and lowering grade of Eagle Rock Ave. About $133,933.

Pa., Bradford—City plans to pave Seward Ave., 2100 ft. long, 30 ft. wide. Work involves 6000 sq.yd. vitr. brick pavement on 6 in. concrete base and 4100 lin.ft. concrete curbing. About $25,000. B. A. Wise, city engr.

Pa., Ellwood City—City plans to issue $42,000 bonds to pave and improve various streets.

Pa., Mercer—Mercer Co. election May 1, to vote on $800,000 bonds to build various roads.

Pa., Mt. Olive—City plans to issue $100,000 bonds to pave various streets.

Pa., Newcastle—Comrs. Lawrence Co. plan to issue $800,000 bonds to improve various roads.

Pa., Pittsburgh—City passed ordinance to pave and curb 3170 ft. Marshall Ave. from Linwood Ave. to Brighton Rd., 60 ft. wide; cost $117,000; grade, pave and curb 330 ft. Stevenson St. from Bluff St. to end of present pavement, 36 ft. wide, involving 1330 sq. yd. stone block on 6 in. concrete base, 565 lin.ft. concrete curbing and 904 cu. yd. earth excav., $12,000. T. N. Reed, City County Bldg., engr.

Pa., Warren—Warren Co. plans election Apr. 5 to vote on $750,000 bond issue for road work. This amount is in addition to $1,500,000 aid promised by state in next four years. State will build 8 mi. road from Warren to Youngsville during 1919, 16 mi. from Warren to Sheffield and from Youngsville to Pittsfield in 1920, 13 mi. from Pittsfield to Erie Co. line in 1921, and 8 mi. from North Warren to New York state line in 1922. County will expend $750,000 to be voted on feeders to above roads.

W. Va., New Cumberland—Hancock Co. Butler Dist. election Mar. 29, to vote on $100,000 bonds to build Chester-Pughtown-New Cumberland Weirton Rd. C. E. Grafton, co. engr.

N. C., Kingston—Comrs. Lenoir Co. plans to issue $1,000,000 bonds to build various roads.

N. C., Mount Olive—City plans to issue $75,000 bonds to pave streets and $25,000 bonds to build sidewalks.

N. C., Raleigh—Western Wake Highway Com. plans to build road from here to Cary. About $130,000. F. McNeill, chn.

Ga., Brunswick—City election Apr. 2, to vote on $150,000 bonds to pave and improve roads. L. T. Morgan, city engr.

La., Slidell—City having plans prepared for improving various streets. About $30,000. X. A. Kramer, Magnolia, Miss., engr.

O., Akron—Comrs. Summit Co. soon receive bids grading and paving 2 mi. Springfield Rd. from Springfield Center to Portage Co. line, 17 ft. wide, cost, $100,000; 2.9 mi. Arlington Rd. south of East Liberty, 17 ft. wide, brick, concrete or asphaltic concrete, $100,000.

O., Akron—Comrs. Summit Co. plan to grade and pave 8½ mi. Akron-Cleveland Highway, 18 ft. wide, either monolithic brick on 8 in. concrete or 10-in. concrete base. About $425,000. C. Costigan, co. engr.

O., Columbus—City plans to pave Brier Alley from Long to Spring Sts.; alley west of 18th St., from Bryden Alley to Cherry St., and Grant Ave. from 5th to 11th Aves. H. Maitzel, city engr.

Mich., Grand Rapids—City plans to pave 1107 ft. Hilton Ave. from Prescott to Grant Sts., brick on concrete base, 26 ft. wide, cost $12,290; repave 1900 ft. Fulton St. from Division Ave. to Grand River, brick on present foundation, 28 and 42 ft. wide, $21,905; 1466 ft. Shawmut Ave. from Front to Seward Aves., brick, 42 ft. wide, $22,490; removing old gravel roadway and repaving 759 ft. Grand Ave. from Fulton to Fountain Sts., rein.-con. including necessary curbing and underground work, 30 ft. wide, $7050 and 21[illegible] ft. Clancy Ave. from Cedar to Fairbanks Sts., 2 in. bituminous concrete on 6 in. concrete base, catch basins and curbing, 26 ft. wide, $21,400. G. J. Wagner, city engr.

Mich., Grand Rapids—City plans to pave and drain 2272 ft. College Ave. from Carrier to Sweet Sts., 38 ft. wide, involving 10,125 sq.yd. vitr. brick on 6 in. concrete base, 4066 lin.ft. concrete curbing, cost $43,500; grading, curbing and paving 3152 ft. 7th St. from Turner to Stocking Aves., rein.-con., 30 ft. wide, $31,450; repaving 3153 ft. Crescent St. from Bostwick to Union Aves., with 2½ in. sheet asphalt, 30 ft wide, $18,512; 1819 ft. Fulton St. from Grand River to Lexington St., brick on present concrete base, 42 ft. wide, $30,050; removing old gravel roadway and repaving 759 ft. Grand Ave. from Fulton to Fountain Sts., 2 in. bituminous concrete on 6 in. concrete base, 30 ft. wide, $7515; 2570 ft. Eastern Ave. from Franklin to Hall Sts., bituminous concrete on concrete base, including necessary curbing and underground work, 30 ft. wide, $28,650. G. J. Wagner, city engr.

Mich., Grand Rapids—Comrs. Kent Co. soon receive bids grading and paving 3½ mi. Knapp St. Rd. from ½ mi. east of city limits to 4 mi. east, 16 ft. wide; 2 mi. Kalamazoo Ave. Rd. near Dutton Twp., 16 ft wide; 3 mi. Alpine Ave. from north city limits to 3 mi. north, concrete, 16 ft. wide. C. K. Whiting, Court House, engr.

Ill., Edwardsville—Bd. Supervs. Madison Co. sold $600,000 bonds to build hard surface road from Granite City to Alton, from East St. Louis to here and from Staunton and East St. Louis to Highland.

Ill., Lockport—City plans to pave with concrete 14th St. from State to Division Sts., Madison St. from 9th to Division Sts., and 11th St. from Madison St. to east city limits. A. S. Calkins, engr.

Ill., Robinson—Bd. Local Impvts. receives bids about June 1, paving curbing and guttering various streets, brick and concrete. About $28,000. J. P. Lyons, engr.

Ill., Rockford—Bd. Local Impvts. plans to pave 9th St. between 14th and Harrison Aves., cost $77,000. S. B. Hand, pub. engr.

Ill., Winnetka—Bd. Local Impvts. soon lets contract paving various streets, involving 58,860 sq.yd. 1 course rein.-con. pavement with integral curbs, 30 ft. joints and asphaltic felt filler, 36,500 cu.yd. excav., 1950 sq.ft. sidewalk to be adjusted, 2010 ft. concrete sidewalk approach, sewers, catchbasins, inlets, etc. About $185,753. Windes & Marsh, engrs.

Ill., Zion City—City plans to pave 2 mi. road with concrete, to connect Chicago-Milwaukee Rd. W. H. Clendinen, mayor and chn. com. local impvts.

Kan., Kansas City—Comrs. Wyandotte Co. receive bids about Mar. 15, paving 1 mi. Kaw Valley Rd., concrete, 18 ft. wide. O. K. Williamson, engr. Noted Dec. 5.

Kan., Kansas City—Comrs. Wyandotte Co. receive bids about Mar. 15 paving 3¼ mi. Fort to Fort Highway, concrete, 18 ft. wide. O. K. Williamson, engr.

South Dakota—State Highway Comn., Pierre, receives bids about May 1, grading and draining 11.8 mi. Belle Fourche-Alzada Rd., 36 ft. wide, involving 2330 lin.ft. corrugated culverts, 228 cu.yd. concrete culverts, 1072 lin.ft. wooden guard rail, 54,500 cu.yd. earth excav. About $31,000.

South Dakota—State Highway Dept., Pierre, plans to grade, gravel and drain roads in following counties:

Devel Co., 8.6 mi. Millbank, Clear Lake and Canby Rds., 18 ft. wide, involving 28,300 cu.yd. earth excav., 8,592 cu.yd gravel, 950 lin.ft. corrugated culverts, 153 cu.yd. concrete culverts, 8480 lbs. steel reinforcement and 1100 lin.ft. wooden guard rail, cost, $28,500.

Lincoln Co., 10 mi. Canton-Parker Rd., 16 ft. wide, 5 in. deep, involving 758 lin.ft. corrugated culverts, 186 cu.yd. concrete culverts, 14,800 lbs. reinforcing steel, 12,600 cu.yd. earth excav. and 7500 cu.yd. gravel, $41,600.

Brookings Co., 6.5 mi. Brookings-Dell Rapids Rd., 18 ft. wide, and building abutments to 2 river bridges, involving 388 lin.ft. corugated culverts, 353 cu.yd. concrete for culverts and abutments, 14,600 lbs. reinforcing steel, 20,834 cu.yd. earth excav. and 6461 cu.yd. gravel, $261,000.

Brown Co., 12,6 mi. Alberdeen-Webster Rd., 18 ft. wide, and building two 20 ft. span bridges, involving 1000 lin.ft. corrugated culverts, 308 cu.yd. concrete culverts and bridges, 16,000 lbs. steel reinforcement, 31,600 cu.yd. earth excav. and 18,600 cu.yd. gravel, $72,500.

Moody Co., 13.8 mi. Flandreau-Madison Rd., 16 ft. wide, 5 in. deep, over 5.2 mi., involving 744 lin.ft. corrugated culverts, 1762 lin.ft. wooden guard rail, [illegible] lin.ft. drain tile, 24,000 lbs. steel reinforcement, 405 cu.yd. concrete culverts, and abutments. 73,900 cu.yd. earth excav. and [illegible] cu.yd. gravel, $41,000.

Mont., Roundup—Musselshell Co. plans to grade and build drainage structures on 12 mi. Roundup-Lavina Rd. About $10,000. R. E. Bushnell, co. engr.

Mo., Charleston—Mississippi Co. plans to improve 15 mi. of present road from here through Wyatt to Birds Point. About $160,000. Address Business Men's League, Charleston.

Mo., Clayton (St. Louis, P. O.)—State Legislature, Jefferson City, petitioned to authorize St. Louis Co. to issue $3,000,000 to improve roads. W. Elbring, Clayton, co. engr.

Mo., Kansas City—Jackson Co. having plans prepared for macadamizing 4½ mi. dirt road from end of Holmes St. to Red Bridge. O. C. Sheley, co. engr.

Ark., Conway—State Legislature, Little Rock, petitioned to appropriate $25,000 to improve portions of Bruce St. and Donaghey Ave., adjacent to Arkansas State Normal School grounds.

Ark., Marion—Comrs. Crittenden Co. plans to build system of hard roads in 6 districts throughout county, radiating from point opposite Memphis Roads. Cost between $2,000,000 and $3,000,000.

Texas—State Highway Comn., Austin, plans to extend highway No. 20, 80 mi., also macadamize same.

Tex., Dallas—City having plans prepared paving Ann St. from Santa Fe Ry. to Stonewall St., Allen St. from Ross St. to Dallas Branch, Worth St. from Fulton to Paulus St., Clarence St. from Lattimer to Oakland St., Peak St. from Eastside to Forney Aves., Uvalde rock asphalt; also Knight St. from Ceader Springs Rd. to Brown St., Forest Ave. from Meadows St. to 2nd Ave., Colonial Pl. from Colonial Ave. to Holmes St., Sunset Ave. from Bishop Ave. to Polk St., Reagan St. from Ceader Springs Rd. to Maple Ave., Shelby St. from Dickason to Maple Aves., and Thromkmorton St. from Ceader Springs Rd. to Maple Ave., bitulithic. G. D. Fairtrace, city engr.

Tex., Dallas—Dallas Co. election Apr. 1, to vote on $2,000,000 bonds to improve roads. J. F. Witt, co. engr.

Tex., Waxahachie—City voted $60,000 bonds to pave streets and extend water and sewer mains. Noted Jan. 30.

Oklahoma—State Highway Comn., Oklahoma, plans to issue $50,000,000 bonds for construction and maintenance of roads.

Okla., Antlers—Comrs. Pushmataha Co. voted $100,000 bonds to build roads in Antler Twp. and $29,000 for roads in Kiamichi Twp.

Okla., Idabel—Comrs. McCurtain Co. voted $50,000 bonds to build roads. D. Flenniken, secy.

Wash., Seattle—King Co. had plans prepared by S. Humes, co. engr., for 4.7 mi. hard surfaced highway to Bothell, 38 ft. wide. About $100,000.

Oregon—State Highway Comn., Multnomah Co. Court House, Portland, soon lets contract grading and paving 6.9 mi. Pacific Highway from Jefferson to Albany, Linn Co., involving 31,000 cu.yd. excav., 65,000 sq.yd. surfacing; macadamizing 4.9 mi. Pacific Highway, from Wolf Creek to Grave Creek Sect., Josephine Co., involving 10,500 cu.yd. gravel and rock; grading and graveling 7.2 mi. John Day Highway, from John Day to Fisk Creek Sect., Grant Co., involving 42,000 cu.yd. excav. and 20,000 cu. yd. gravel; grading and macadamizing 2.7 mi. Yamhill-Nestucca Highway, Grande Ronde Sect., Yamhill Co., involving 20,000 cu.yd. excav., 4300 cu.yd. broken stone macadam. H. Nunn, state highway engr.

Oregon—State Highway Comn., Salem, petitioned by Wasco, Jefferson, Deschutes and Klamath counties for $500,000 appropriation to build Dalles-California Highway. Commercial Club of Bend, interested.

Oregon—State Highway Comn., Salem, plans election to vote on $2,500,000 bonds to build Roosevelt Memorial Highway along Pacific coast, across state from California to Washington state line.

Oregon—State Highway Comn., Salem, soon receives bids for grading 1000 mi. roads. Main line roads, 25 ft. wide, forestry and postroads, 20 ft. wide; also building 40 new bridges. About $10,000,000 available for work.

Streets and Roads (Continued)

Oregon—State Legislature, Capitol, Salem, plans to issue $10,000,000 bonds for following roads: Pacific Highway from Portland to California line and Columbus Highway from The Dalles to Astoria cost, $7,500,000; road from Bend to The Dalles from Medford to Klamath Falls and Lakeview, from Coos Bay to Roseburg, from McMinnville to Tillamook, from Nahalem to Seaside, from Eugene to Pacific coast and from Burns to Bend and Ontario, $2,500,000.

Ore., Enterprise—City plans to issue $25,000 bonds to pave street intersections.

Ore., Eugene—State Highway Comn., Salem, will survey land for new highway from Willamette to Lake Creek Valleys. State and county will pay 50% of cost and balance will be borne by Federal Government.

Ore., Hood River—Hood River Co. plans election to vote on $450,000 bonds to build roads.

Ore., Klamath Falls—City plans to improve Spring St., cinders, $3795, water bound macadam, $3975; Lincoln St., cinders, $2206, oil macadam, $4234; Grant St., cinders, $1158, oil macadam, $1695.

Ore., Marshfield—City plans to improve North Bway., bitulithic, Market Ave., concrete, and Park Ave., 36 ft. wide concrete. About $45,000. E. K. Burton, city engr.

Ore., North Bend—City plans to build 6 and 14 ft. sidewalks on Sherman Ave.; pave Sherman Ave. hill, 15 ft. center parking, from Maryland to Washington Sts.; Maryland St. from Sherman to Sutherlin Sts., 14 ft. wide, also 14 ft. center parking on Sutherlin St. from Ohio to Maryland Sts. About $100,000.

Ore., Pendleton—Umatilla Co. plans to issue $1,050,000 bonds to build following highways: Oregon Washington Highway from Milton to Oregon-Washington state line, cost $50,000; Hudson Bay Highway, from Sunnyside to Umapine, $30,000; Pendleton-Cold Springs Highway from Cold Springs Sta. to Pendleton, $185,000; Oregon-Washington Highway from Pendleton to Pilot Rock, $70,000, from Weston to Milton, $80,000; from Pilot Rock to Nye, $20,000; from Nye to Morrow Co. line, $15,000; from Athena to Weston, $30,000; from Blakeley to Athena, $65,000; Old Oregon Trail from Pendleton to Umatilla Union Co. line, $100,000; from Morrow-Umatilla Co. line to Pendleton, $250,000; Pendleton-John Day Highway from Nye to Grant-Umatilla Co line, $65,000; Helix Highway from Helix to Havana Sta., $90,000.

Ore., Reedsport—Umpqua Valley Dist. plans to build auto beach highway from Drain to Reedsport via Scotsburg and connecting with Elkton-Drain highway.

Ore., Warrenton—Commercial Club petitioned State Highway Comn., Capitol, Salem, to build road from Smiths Point to Warrenton Twps. across Youngs Bay; also bridge running parallel with Spokane, Portland & Seattle R.R. trestle.

California—Committee representing over 250 civic municipal and commercial organizations plan election to vote on $35,015,000 bonds; $15,015,000 to be used to grade and pave 1150 mi. new highway, and $20,000,000 to complete original highway. Plans include road from Barstow to Needles, cost, $350,000; from Oxnard to San Juan Capistrano, $4,000,000; from Barstow to Mojave, $150,000; from Santa Maria to Bakersfield, $1,000,000; Skyline Blvd. from San Francisco to Santa Cruz, $2,471,000; from Rio Vista to Fairfield, $384,000; from Auburn to Verdi, $1,000,000; from Ukiah to Tahoe City, $2,700,000; Crescent City to Oregon line, $400,000; from Santa Rosa to Shellville, $450,000; Big Pine to Fasis $300,000; Placerville to Sportsmans Hall, $100,000; Feather River Canyon Rd. from Oroville to Quincy, $85,000; Kings River Canyon Rd., $100,000; Calistoga to Lowa Lake, $200,000; Mecca to Blythe, $300,000; Rumsey to Lower Lake, $254,000. A. B. Fletcher, Sacramento, state highway engr.

Cal., Brawley—City soon receives bids grading and paving 1 mi. Main and 8th Sts., 24 ft. wide, 7 in. concrete.

Cal., Holtville—City Trustees retained H. J. Burk, engr., El Centro, to supervise paving in 2 districts; Dist. No. 1 will encompass portions 5th, 6th, Palm, Pine and Holt Sts. and involve 252,220 sq.ft. paving; Dist. No. 2, portions 6th, 7th, Olive, Pine, Palm and Holt Sts. and involve 244,800 sq.ft. paving. Noted Jan. 23.

Cal., Maricopa—City plans to pave 1¼ mi. streets.

Cal., Pasadena—H. Dyer, city clk., receives bids in April improving Warengo Ave. from Colorado to Walnut Sts., including cement curbs, concrete gutters, cement walks and Warrenite pavement. R. V. Orbison, city engr.

Cal., Riverside—Bd. Supervs. Riverside Co. plan to make appropriation in next year's budget to assist in constructing 15 mi. highway between Fertilla and Palo Verde via Blythe, probably macadam. About $75,000. A. B. Pilch, co. clk. Property owners will raise $50,000 by direct tax.

Cal., San Diego—City plans to improve Howard and Lincoln Ave. from Park Blvd. to east city limits: Polk Ave. from Georgia St. to east city limits. Plans include grading, cement curbing and sidewalks, draining, etc. G. Cromwell, city engr.

Cal., Santa Barbara—City having plans prepared by A. B. Cook, city engr., paving East Mission St. between Bath St. and Modoc Rd. and improving East Montecito St. between State and Milpas Sts.

Que., Quebec—City plans to pave Charlesbourg and Beauport Rds. About $200,000. W. D. Baillargee, City Hall, engr.

Que., Three Rivers—City plans to pave and macadamize various streets. About $50,000. L. Lambert, City Hall, engr.

Ont., L'Original—Prescott Co. soon receives bids building various roads. About $200,000. F. A. Senecal, L'Original, engr.

Ont., Oakville—City passed by-law authorizing construction of macadamized pavement. About $200,000.

BIDS DESIRED

Mass., Brighton (Boston P. O.)—Until Mar. 11, by T. F. Sullivan, comr. pub. wks., for paving Justin Rd. from Bigelow to Atkins Sts. and Perthshire Rd. and Matchett St. from Bigelow to Matchett Sts., sheet asphalt, Topeka, bitulithic or filbertine.

N. Y., Buffalo—Until Mar. 11, by A. G. Hinkley, clk. bd. supervs. Erie Co., surfacing 4 groups of improved roads.

N. Y., Long Island City—Until Mar. 10 M. E. Connolly, pres. Queens Boro., regulating, grading, curbing and paving, with bituminous macadam, 87th St. from 80th to 85th Sts., Skillman Ave. from 3rd to 5th Sts., Mount St. from Hunterspoint to Thomson Ave., Gamma Pl. from Surburban St. to Myrtle Ave., 85th Rd. from 83rd to 91st St., Sanford Ave. from Boerum Ave. to Murray St., 87th Rd. from 78th to 80th Sts., Hillside Ave. from North Morris to Metropolitan Aves.

N. J., Bridgeton—Until Mar. 10, by Bd. Freeholders Cumberland Co., improving 4.102 cu.yd. Port Norris-Mauricetown Rd., gravel surface on sand and earth foundation. W. M. Sharp, Bridgeton, engr. Noted Feb. 20.

Pennsylvania — Until Mar. 28, by State Highway Comn., Harrisburg, rebuilding roads in following counties:

Armstrong Co., 21,680 lin.ft. rein.-con. and Hillside vitr. brick.

Berks Co., 10,800 ft. rein.-con. and Hillside vitr. brick.

Bradford Co., 31,700 ft. rein.-con.

Cambria Co., 4983 ft. vitr. brick.

Center Co., 32,100 ft. rein.-con. and Hillside vitr. brick.

Clinton Co., 13,740 rein.-con.

Crawford Co., 17,693 ft. rein.-con.

Elk Co., 29,667 ft. rein-con. and Hillside vitr. brick.

Erie Co., 15,918 ft. bituminous on concrete foundation.

Franklin Co., 20,086 ft. rein-con.

Mercer Co., 23,912 ft. rein.-con.

McKean Co., 1957 ft. vitr. brick.

Northumberland Co., 28,791 ft. rein.-con.

Potter Co., 11,800 ft. rein.-con.

Warren Co., 7783 ft. rein.-con., Hillside vitr. brick. L. S. Saddler, state highway comr.; advertised in this issue.

Pennsylvania—Until Mar. 20 by State Highway Comn., Harrisburg, building roads in counties as follows:

Adams Co., 27,520 ft. rein-con. road, Strabane Twp.

Berks Co., 8984 ft. bituminous road on concrete foundation, Spring Twp.

Clarion Co., 1842 ft. vitr. block road, Clarion Boro.

Clinton Co., 12,636 ft. bituminous road on concrete foundation, Pine Creek Twp.

Columbia Co., 8420 ft. vitr. block road, Millville Boro.

Delaware Co., 5745 ft. bituminous and vitr. block road on concrete foundation, Clifton Heights Boro.

Elk Co., 4566 vitr. block road, St. Mary's Boro.

Erie Co., 8760 ft. rein.-con. road, Springfield Twp.; 25,872 ft. rein.-con. road, Harbor Creek and Northeast Twps.; 15,327 ft. rein.-con. road, Fairview and Girard Twps.

Fayette Co., 26,112 ft., rein.-con. and hillside vitr. block road, Georges, Nicholson and Springfield Twps.

Greene Co., 34,259 ft. rein.-con. hillside vitr. block road, Jefferson, Morgan and Franklin Twps.

Lancaster Co., 5600 rein.-con. road, Coleraine Twp.

Lawrence Co., 4906 ft. rein.-con. road, Union and Taylor Twps.

Lehigh Co., 35,035 ft. rein.-con. road, U. and L. Macungie Twps.

Monroe Co., 23,510 ft. rein.-con. road, Coolbough Twp.

Tiogo Co., 7824 ft. rein.-con. road, Elkland Boro.

Warren Co., 26,862 ft. rein.-con. road, Conewango and Broken Straw Twps. L. S. Saddler, highway comr.; advertised in this issue.

Pa., Dravosburg—Until Mar. 18, by Boro and Comrs. Allegheny Co. (Pittsburgh) for improving Richland Ave., 20 ft. wide, brick block on concrete base. Entire cost to be borne by Allegheny Co. J. P. Moore, co. controller.

Delaware—Until Mar. 26, by State Highway Dept., Dover, building 0.5 mi. State Highway, vitr. brick, in New Castle Co. Work involves 3400 cu.yd. grading, 800 lin. ft. pipe underdrain, 5000 lin.ft. concrete curb, 1800 cu.yd. concrete foundation, 11,500 sq.yd. vitr. brick pavement, etc. C. M. Upham, ch. engr.

Maryland—Until Mar. 11, by State Rds. Comn., 601 Garret Bldg., Baltimore, for grading 19,000 cu.yd. Ferry Bar, foot of Light St., to elevation of mean low tide, to distance of 500 ft. from end of Old Light St. bridge. F. H. Zouck, chn.

Va., Louisa—Until Mar. 8, by Louisa Co. building 1.72 mi. Kents Shore Rd., soil, 20 ft. wide, between Louisa and Bells Cross Rd.; 2.52 mi. Bibbs Store Rd., soil, 20 ft. wide, between Louisa and Forks. S. L. Liggett, Gordonsville, engr.

W. Va., Fairmont — Until Mar. 26, by Comrs. Marion Co. building 8.73 mi. brick-concrete roads in Paw Paw, Lincoln and Mannington Dists. A. C. Martin, co. clk.; advertised in this issue.

W. Va., Philippi—Until Mar. 20, by S. F. Hoffman, clk. Barbour Co., building 6.5 mi. Fairmont and Beverley Turnpike, Federal Aid Projects No. 16 and 27, 14 ft. wide, 2.85 mi. Junior Rd., bituminous macadam, 14 ft. wide; advertised in this issue. Noted Jan. 23.

Ala., Tuscumbia—Until Mar. 17, by Comrs. Colbert Co., graveling 7.71 mi. Jackson Highway, State Rd. No. 8, between Tuscumbia and Russellville Twps., involving 800 cu.yd. earth excav., 12,440 cu.yd. clay gravel, 7.71 mi. machine dressing, 72 cu.yd. concrete, etc. W. S. Keller, Montgomery, state highway engr. Noted Aug. 15.

Miss., Pascagula—Until Mar. 11, by city, paving and building sanitary and storm sewers in various streets, involving 6250 cu-yd. earth excav., 26,750 sq.yd. pavement, vitr. pipe, manholes and catchbasins. About $165,000. X. A. Kramer, Magnolia, engr. Noted Jan. 16.

Miss., Tunica—Until Mar. 17, by Bd. Comrs. Tunica Co., grading and graveling about 12 mi. road in Special Rd. Dist. No. 1, 9 ft. wide. L. W. Mashburn, Clarksdale, engr. Noted Feb. 27.

Miss., Yazoo—Until Mar. 15, by Comrs. Yazoo Co. grading, graveling and draining 31 mi. road, Beat. No. 1, 12 ft. wide, involving 130,000 cu.yd. grading, 11,000 cu.yd. graveling, 24 mi. clearing, 175 cu.yd. plain concrete and 200 cu.yd. rein.-con. M. Faulkner, Yazoo, chn. W. H. Bradley, Flora, engr.

La., Thibodaux—Until Mar. 12, by Lafourche Parish Police Jury, building hard surfaced roads in Dist. No. 2 and 3. J. A. Lovell, engr.

O., Dayton—Until Mar. 28, by State Highway Dept., Columbus, building brick, concrete or macadam roads to include 2.64 mi. Dayton-Chillicothe Pike, 16 ft. wide, cost, $50,000; 3.25 mi. Cincinnati Pike, 16 ft. wide, $95,000; 6 mi. Eaton Pike, 16 ft. wide, $95,000. Noted Jan. 9.

Streets and Roads (Continued)

O., Steubenville—Until Mar. 17, by City repaving 18,000 sq.yd. 5th St., from Franklin Ave. to 4th St., wood block, asphalt, brick or concrete. J. N. Leech, city engr. Noted May 2, 1918.

O., Wauseon—Until Mar. 8, by Comrs. Fulton Co. paving 5.01 mi. Sect. O, Toledo-Wauseon Rd. with monolithic brick macadam, cost, $97,285; 3.64 mi. Sect. G, Wauseon-Morienci Rd. waterbound macadam, $48,369; .51 mi. Sect. C-1, Swanton-Metamoree Rd., bituminous macadam, $6438.

Mich., Grand Rapids—Until Mar. 11, by C. K. Whiting, engr. Kent Co., grading and paving 3 mi. Dutton Rd., from Dutton Twp. 3 mi. east, 16 ft. wide, cost $60,000; 2½ mi. Alaska Rd. from Kraft School to Alaska St., concrete, 16 ft. wide, $60,000.

Wis., Edgerton—Until Mar. 20, by city improving various streets. About $70,000.

Ia., Logan — Until Mar. 20 by H. Wessels, city clk., building 60,000 sq.yd. concrete or monolthic brick pavement, 40,000 lin.ft. concrete curb and gutter and storm sewerage system; advertised in this issue. Noted Feb. 27.

Minn., Center City—Until Mar. 27, by Comrs. Chicago Co., for following road work: Job. No. 1801, State Rd. No. 8, clearing and grubbing 6 acres, involving 12,085 cu.yd. excav., 100 lin.ft. tiling, 396 lin.ft. placing culvert, 500 lin.ft. guard rail, 1500 cu.yd. overhaul, 3712 cu.yd. gravel and 11,700 lin.ft. shaping and compacting; Job No. 1802, State Rd. No. 2, clearing grubbing, 4.10 acres, involving 14,415 cu.yd. excav., 40,000 cu.yd. overhaul, 1800 cu.yd. ditching, 600 lin.ft. cross waying, 530 lin.ft. hauling and placing culverts, 6748 cu.yd. gravel, 23,200 lin.ft. shaping and compacting; Job No. 1804, State Rd. No. 1, clearing and grubbing 5.30 acres, involving 18,010 cu.yd. excav., 7327 cu.yd. overhaul, 1200 cu.yd. ditching, 17,900 lin.ft. shaping and compacting; Job No. 1805, State Rd. No. 6, reshaping and leveling 10,000 lin.ft. involving 7189 lin.ft. gravel, 10,000 lin.ft. shaping and compacting; Job No. 1806, State Rd. No. 11, reshaping 8100 lin.ft. involving 290 lin.ft. placing culverts, 3048 lin.ft. gravel, 8100 lin.ft. shaping and compacting.

Minn., Ivanhoe—Until Mar. 12, by A. L. Swenson, aud. Lincoln Co., for following road work: Job No. 1901, State Rd. No. 2, involving 13,000 cu.yd. graveling; Job. No. 1902, State Rd. No. 5, involving 11,130 cu.yd. grading and 4486 cu.yd. graveling; Job. No. 1903, State Rd. No. 3, involving 2598 cu.yd grading, 13,050 cu.yd. leveling ditch bank, 3600 lin. ft. woven wire railing, 13,040 cu.yd. graveling, and 45.68 cu. yd. concrete in 1 concrete culvert, 8 x 8 x 24 ft., type W. 88.

Minn., St. Cloud—Until Mar. 18 by Comrs. Stearns Co. building 20 mi. Federal Aid Project No. 25, State Rd. Nos. 1 and 12. Work involves 16.4 acres clearing, 12.5 acres grubbing, 90,178 cu.yd. excav., 8680 lin.ft. guard rail, 2660 lin.ft. 12-36 in. concrete culverts, 24,026 cu.yd. loading and hauling, one 26 x 46 ft. and one 26 x 104 ft. rein.-con. culverts, 3 concrete bridges, one 30 ft., one 28 ft. and one 23 ft., all 20 ft. roadway. M. J. Cleveland, co. engr. Noted Feb. 27.

Kan., Olathe—Until Mar. 10, by Comrs. Johnson Co., resurfacing 11,745 ft. road near Shawnee, bituminous macadam, 18 ft. wide, 4 ft. shoulders. C. G. Payne, engr.

Kan., Wichita—Until Mar. 11, by L. R. Ash, city mgr., paving, curbing and guttering 1½ mi. Harry St., from Topeka Ave. to city limits, brick, 30 ft. wide. E. L. Brockway, city engr.

N. D., Bottineau—Until Mar. 25, by Comrs. Bottineau Co., grading 10 mi. State Aid Project No. 0582, 36 ft. wide. W. H. Robinson, Bismarck, state highway engr. Noted Dec. 19, under North Dakota.

N. D., Devils Lake—Until Mar. 27, by Comrs. Ramsey Co., grading 4.5 mi. Federal Aid Project No. 18, 36 ft. wide, from Churches Ferry east.; 17.1 mi. Federal Aid Project No. 19, 36 ft. wide, north west and south east from Devils Lake Twp.; 3 mi. Federal Aid Project No. 3672, East Devils Lake Twp. About $12,885; $20,123 and $4100 respectively. W. H. Robinson, Bismarck, state highway engr. Noted Feb. 27 under North Dakota.

N. D., Rugby—Until Mar. 24, by Comrs. Pierce Co., grading 5 mi. Federal Aid Project No. 10, 36 ft. wide. W. H. Robinson, Bismarck, state highway engr. Noted Dec. 19, under North Dakota.

N. D., Williston—Until Mar 20, by Comrs. Williams Co., grading 30.5 mi. Federal Aid Project No. 3, 36 ft. wide. W. H. Robinson, Bismarck, state highway engr. Noted Dec. 19, under North Dakota.

Tex., Beaumont — Until Mar. 24, by Comrs. Jefferson Co., building 5 mi. State Highway No. 3, and 11 mi. State Highway No. 8 W. M. Carroll, co. judge; advertised in this issue.

Tex., Mason—Until Mar. 10, by Comrs. Mason Co. improving State Highway No. 9 from Mason to Gillespie Co. line. Work involves 52,572 cu.yd. excav., 2534 cu.yd. surfacing, 82,678 lin.ft. road machine work, 910 ft. 24-36 in. metal pipe. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs.

Washington—Until Mar. 17, by State Highway Comn., Olympia, building 10 mi. road in Douglas Co., $100,000; 3½ mi. new highway from Uniontown to Idaho State line, $45,000; road from Spokane Co. line on Inland Empire Highway, 14 mi. north, $16,000; grading 9 mi. road from Oakesdale to Garfield, $50,000; 2 projects on State Rd. No. 10 Okanogan Co., $90,000; grading and graveling Olympic Highway near Lake Quinault, $20,000; 14 mi. new road between Cheney and Sprague, etc.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Pa., Phila.—Dept. Pub. Wks., City Hall, received lowest bid Feb. 18, from Union Paving Co., 30th and Locust Sts., repaving over openings in asphalt paved streets on cement concrete base, asphalt binder and surface, including 6 in. concrete base, Schedule "A" $3.46 per sq.yd., total, $35,462; repaving over openings in granite, vitr. and wood block paved streets on cement concrete base, granite block surface, including 6 in. concrete base, Schedule "B" $4.23 per sq.yd., vitr. block surface, 6 in. concrete base, $4.63 per sq.yd., wood block surface, 6 in. concrete base, $5.33 per sq.yd., total, $9535; from McNichol Paving & Constr. Co., 1923 Cherry St., building portion of Parkway from Cherry St. to point east of 18th St., $13,184.

Pa., Pittsburgh—City received bids Feb. 20, grading, paving and curbing (a) Moyer St. involving 552 sq.yd. vitr. brick on 6 in. concrete base, 378 lin.ft. concrete curbing and 214 cu.yd. earth excav.; (b) Fredonia St. 1755 sq.yd. vitr. brick on 6 in. concrete base, 1300 lin.ft. concrete curbing and 450 cu.yd. earth excav.; (c) Tweed St., 3060 sq.yd. vitr. brick on 6 in. concrete base, 2120 lin.ft. concrete curbing and 1709 cu.yd. earth excav.; (d) Camelia St., 3865 sq.yd. stone block on 6 in. concrete base, 2915 lin.ft. concrete curbing and 7664 cu.yd. earth excav.; (e) 53rd St., 706 sq.yd. stone block on 6 in. concrete base, 522 lin.ft. concrete curbing and 1000 cu.yd. earth excav.; (f) 56th St., 732 sq.yd. stone block on 6 in. concrete base, 449 lin.ft. concrete curbing and 795 cu.yd. earth excav.; (g) McCandless St., 1537 sq.yd. stone block on 6 in. concrete base, 973 lin.ft. concrete curbing and 3264 cu.yd. earth excav.; (h) McCandless St., 1915 sq.yd. stone block on 6 in. concrete base, 1495 lin.ft. concrete curbing, 3291 cu.yd. earth excav.; (i) Eggers St., 1200 sq.yd. vitr. brick and 285 sq.yd. stone block on 6 in. concrete base, 1165 lin.ft. concrete curbing, 963 cu.yd. earth excav.; (j) Francisco St., 2060 sq.yd. vitr. brick on 6 in. concrete base, 1568 lin.ft. curbing, 1282 cu.yd. earth excav., 590 ft. 15 in. terra cotta pipe; (k) Holmes St., 1300 sq.yd. vitr. brick and 100 sq.yd. stone block on 6 in. concrete base, 760 lin.ft. concrete curbing, 642 cu.yd. earth excav.; (l) Maple Ave., 1085 sq.yd. stone block on 6 in. concrete base, 386 lin.ft. concrete curbing, 1157 cu.yd. earth excav., 230 yd. french excav.; (m) Lakewood Ave., 1281 sq.yd. vitr. brick on 6 in. concrete base, 985 lin.ft. concrete curbing, 1107 cu.-yd. earth excav.; (n) Proxim Way, 1960 sq.yd. vitr. brick on 6 in. concrete base, 990 lin.ft. concrete curbing, 1168 cu.yd. earth excav., 635 sq.yd. concrete, (o) Mellon St., 924 sq.yd. asphalt on 6 in. concrete base, 488 lin.ft. curbing, 152 cu.yd. earth excav.; (p) Rosina Way, 583 sq.yd. asphalt on 6 in. concrete base, 339 cu.yd. earth excav., (q) Carson St., 3535 sq.yd. stone block, 1755 lin.ft. concrete curbing, 2400 cu.yd. earth excav., 310 cu.yd. french excav., 7425 yd. concrete sidewalk, 544 ft. 12 in. terra cotta pipe; (r) Boggs Ave., 1089 sq.yd. vitr. brick on 6 in. concrete base, 491 lin.ft concrete curbing, from T. Cronin, 17th St., (a) $31,686, (d) $38,061, (e) $6956, (f) $7525, (g) $22,094, (h) $17,948, (i) $9735, (j) $14,135, (k) $8090, (l) $13,694, (n) $13,672, (o) $4966, (p) $4145, (r) $5425; Pittsburgh Paving Co., Blakewell Bldg.; (a) $3305, (b) $9204, (c) $17,633, (i) $9403, (j) $14,310, (k) $7824, (m) $8366, (r) $4927; M. O'Herron, 1st and McKean St., (a) $3354, (b) $9781, (c) $17,590, (i) $10,326, (m) $8169, (q) $53,227; T. O'Toole, Pittsburgh, (b) $9042, (c) $17,519, (m) $8314; Booth & Flynn, 5th Ave., (d) $37,345, (e) $6381, (f) $6643, (g) $21,758, (h) $17,670, (l) $13,979, (o) $5581, (p) $4288, (q) $54,742; F. and F. Dinlus, Boundary St., (j) $14,505, (n) $12,804, (r) $5216; Dallas & Nardulli, 608 Larimer Ave., (k) $8588; Faber Eng. & Constr. Co., Bessemer Bldg., (l) $13,937.

★Md., Baltimore—Bd. awards let contract to Baltimore Asphalt Block & Tile Co., Monroe and Lorman Sts., at $2.68 per sq.yd. for paving and curbing 1 block each of Hillsdale, Norfolk, Ulman and Rock Rose Aves., between Reisterstown Rd. and Towanda Lane; Towanda Lane (16 ft. wide) from Hillsdale to Rock Rose Ave. Tioga Pl. from Liberty Heights Ave. to Reisterstown Rd., all 30 ft. wide, except Towanda Lane, sheet asphalt on 6 in. concrete base, 1½ in. binder and topping, placing armored concrete curbing, etc., also 1 block each of Boone St., Homewood, Oak Hill and Cecil Aves., between North Ave. and 20th St., sheet asphalt on cobbles, 40 ft. wide, each block 350 ft. long. Noted Feb. 20.

W. Va., Middlebourne—Comrs. Tyler Co. received bids building 1 mi. Middlebourne-Salem Rd. Federal Aid Project No. 18, 14 ft. wide, from C. Kennedy & Son, Parkersburg, $37,119; C. B. Kimberly Co., Wheeling, $37,729. Noted Jan. 30.

★Ga., Atlanta—Comrs. Fulton Co. let contract building macadamized pavement on South Moreland Ave. from Confederate Ave. to Paper Mills Rd., to Nichols Constr. Co., Trust Co. of Georgia Bldg. About $26,000. Work involves 8100 yd. excav., 7000 ft. rubble gutter and 10,000 ft. rubble curbing.

Fla., Jacksonville—City received only bid paving Tallyrand Ave. from Deer Creek to city limits, brick on concrete base, from J. Y. Wilson, Clark Bldg., $37,370. F. M. Edwards, city engr. Noted Feb. 6.

★Ky., Bowling Green — Comrs. Warren Co. let contract resurfacing 5.7 mi. macadam roads, to R. G. Price, Bowling Green, base price $1.75 per ton for first mile of haul.

Ohio—State Highway Comn., Columbus, received low bids Feb. 28, building roads as follows:

Athens Co., Sect. "K-2" Logan-Athens Rd., 7900 ft. grading roadway, building drainage structures, and paving with brick from Barthlow & Son, Logan, $50,825; W. B. Sutton & J. P. Mumaw, Huntington, W. Va., $51,247; F. H. Bekler, Athens, $51,807.

Butler Co., Sect. "A-1," Eaton-Middletown Rd., 3300 ft. grading roadway, building inlets and paving with brick, from John Hennessey, Piqua, $35,491; Bigler Bros., Middletown, $35,746; Mitchell & O'Hara, Cincinnati, $37,738.

Carroll Co., Sect. "G," Canton-Steubenville Rd., 12,340 ft. grading roadway, building bridges and culverts and paving with water bound macadam, from Dieffenbacher & Sons Co., Massillon, $39,998.

Clermont Co., Sect. "K-1," Cincinnati-Chillicothe Rd., 10,755 ft. grading roadway, building bridges and culverts and paving with water bound macadam, from L. Wright Cincinnati, $27,611. Sect. "J," Bethel-Chilo Rd., 4094 ft., grading roadway, building bridges and culverts and paving with water bound macadam, from H. C. Lamb, Amelia, $11,056.

Clinton Co., Sect. "A," Wilmington-Xenia Rd., 20,750 ft., resurfacing with 5 in. coarse water bound macadam, from Lunsford & Lunsford, Pedro, $27,402.

Fayette Co., Sect. "K," Springfield-Washington Rd., 13,717 ft. grading roadway, building bridges and culverts and paving with water bound macadam, from Neff & Rader, Circleville, $26,103; Brewer & Brewer Sons, Chillicothe, $26,190.

Lake Co., Sect. "J," Cleveland-Buffalo Rd., 40,738 ft., grading and paving roadway, building bridges and culverts, from H. T. York & Studebaker, Greenville, monolithic brick, $251,367, rein.-con. $244,364; E. A. Freshwater & Sons, Painesville, monolithic brick, $251,738; Williams & Little Co., 11810 Saywell Ave., Cleveland, concrete

Streets and **Roads (Continued)**

$236,178, rein.-con. $249,940; Masters & Mullen Constr. Co., 601 Electric Bldg., Cleveland, concrete, $239,100, rein.-con. $251,030. Sect "Q," Cleveland-Buffalo Rd., 28,685 ft. grading and paving roadway, building bridges and culverts, from Masters & Mullen Constr. Co., 601 Electric Bldg., Cleveland, concrete, $164,454, rein.-con. $172,648. Sect. "B," Euclid-Chardon Rd., 11,900 ft., grading roadway, building bridges and culverts and paving with concrete, from L. Garrett Constr. Co., Kent, $48,009.

Mahoning Co., Sect. "N-1," North Lima-East Palestine Rd., 8791 ft., grading roadway, building bridges and culverts and paving with water bound macadam, from L. T. Fletcher Co., Kent, $37,470; Gray Bros., Youngstown, $40,209; Smith Constr. Co., Youngstown, $40,287.

Marion Co., Sect. "I," Marion-Upper Sandusky Rd., 27,100 ft., grading roadway, building bridges and culverts and paving with water bound macadam, from L. L. Aller, La Rue, $84,652; Billiter & Connell, Cincinnati, $91,914; Brady & O'Connell, Marion, $92,882. Sect. "G," Marion-Galion Rd., 7698 ft., grading roadway, building bridges and culverts and paving with water bound macadam, from Brady & O'Connell, Marion $25,736; L. L. Aller, La Rue, $24,924; Carey & McEllroy, Ada, $27,036.

Muskingum Co., Sect. "M-2," Zanesville-Dresden Rd., 3150 ft., grading roadway, building drainage structures and paving with concrete, from Dunsweiller Constr. Co., Zanesville, $16,393; Adams Bros., Zanesville, $16,430.

Preble Co., Sect. "C," Eaton-Greenville Rd., 11,900 ft., grading roadway, building drainage structures and paving with bituminous macadam, from C. W. Conley, Eaton, $51,112; J. C. McCann, Columbus, $51,113; S. M. Bittler, Cincinnati, $51,683.

Vinton Co., Sect. "J-2," Chillicothe-McArthur Rd., 7400 ft., grading roadway, building bridges and culverts and paving with two course concrete, from W. C. Brown, Linden, $43,740; Reinick & Smith, Findlay, $43,762. Noted Feb. 20.

O., Columbus—Bd. Pub. Serv. received bids Feb. 26, paving, grading, curbing, draining. (a) 11,500 ft. Main St. from Allen St. to Alum Creek, 50 ft. wide involving 64,000 sq.yd. asphalt; (b) 5944 ft. 4th St. from Naghten St. to Livingston Ave., 52½ ft. wide, involving 35,780 sq.yd. asphalt; (c) 897 ft. Carpenter St. from Columbus to Schiller Sts., 26 ft. wide, involving 2600 sq.yd. asphalt; (d) 1707 ft. Broad St. from Ausin to Sandusky Sts., 60 ft. wide, involving 11,380 sq.yd. asphalt; (e) excavating and paving 925 ft. Gilbert St. from Columbus to Schiller Sts., brick or asphalt, 26 ft. wide; from Franklin Asphalt Paving Co. (a) $158,584; (b) $115,242; (c) $16,742; (d) $40,651; (e) asphalt $15,846; Andrews Asphalt Paving Co., Arcade Bldg., (a) $192,114; (b) $141,577; A. G. Pugh, Columbus, (a) $197,584; (c) $19,299; (d) $46,793; (e) asphalt $19,217; Cleveland Trinidad Paving Co., Arcade Bldg., Cleveland, (b) $136,817; (d) $48,347; (e) asphalt $19,280; A. W. Burns & Co., 55 East State St., (c) $17,825; (e) brick $19,381; H. E. Barthman, Columbus, (e) brick, $19,439; W. M. McLain, Columbus. (e) brick, $19,794. Noted Feb. 13.

★Ill., Paris—City let contract paving 2 mi. Preston Rd., brick, to A. J. Parrisa, $31,648.

★Minn., Aitkin—Comrs. Aitkin Co. let contract surfacing 6780 cu.yd. State Rd. No. 1, to Stevens Bros., McGregor, $14,915.

★Kan., Oswego—Labette Co. let contract building 9.14 mi. Sect. A, Federal Aid Project No. 2, 18 ft. wide, to W. C. Jucksch, Sapulpa, Okla., $81.078. Work involves 52,002 cu.-yd. grading, 86,164 sq.yd. gravel, 134.5 cu.yd. 1:2:4 concrete at $19 per cu. yd., 405.5 cu.yd. 1:3:5 concrete at $17.50 per cu.yd., 6900 lb. reinforced steel at $0.07 per lb.; 10.159 mi. Sect. B, 18 ft. wide to Elliot & Vance, Parsons, $112,135. Work involves 41,305 cu.yd. grading, 95,360 sq.yd. gravel, 41.1 cu.yd. 1: 2: 4 concrete at $20 per cu.yd., 346.5 cu.yd. 1: 3: 5 concrete at $16 and 8238 lb. reinforcing steel at $0.07 per lb. Noted Feb. 13.

★Neb., Lexington—City let contract grading, curbing and paving 3150 ft. Washington, Grand, 5th and 6th Sts., 50 and 56 ft. wide, to Omaha Structural Steel Bridge Co., 420 Bee Bldg., Omaha. About $81,894. Project involves 20,200 vertical fiber on 5 in. concrete base, 3525 lin.ft. 6 x 20 in. concrete curb and 6000 cu.yd. excav., 600 ft. oak headers at $.45 per ft., 2670 ft. 12 x 16 in. drain boxes, $1.75 per ft., and 24 manholes $3.00 each.

★North Dakota—State Highway Comn., Bismarck, let contract grading and building culverts on 31.5 mi. road north and west through Forman Twp., Sargent Co., to Larkin Constr. Co., Barry, Minn., $54,370. Noted Dec. 19.

★Mo., Kansas City—Bd. Pub. Wks. let contract paving Jackson Ave. from 15th to 24th Sts., Harrison St. from terminal viaduct to 21st St., sheet asphalt, Washington St. from 9th to 11th Sts., asphaltic concrete, to Gray Paving & Material Co.; Bway from 9th to 12th Sts., sheet asphalt, Walnut St. from 19th to 20th Sts., Harrison Ave. from 26th to 27th Sts. and Holly St. from 21st to 22nd Sts., asphaltic concrete, to F. P. McCormick; Myrtle Ave. from 23rd to 24th Sts. and Elmwood Ave. from 9th to 11th Sts., asphaltic concrete, to E. D. Tyner Constr. Co.; Jackson Ave. from 9th to 10th Sts., vertical fiber brick, to J. C. Lyle.

Mo., St. Louis—Pitzman's Co., engrs., 615 Chestnut St., received only bid for 96,000 cu.yd. grading on south line Euclid Ave. from Bircher Rd. to Florrisant Ave. from A. Manegold, Title Guaranty Bldg., at 20$\frac{9}{10}$c. cu.yd. Noted Feb. 27.

★Okla., Tulsa—Comrs. Tulsa Co. let contract building concrete road, to C. O. Frye, 312 East 14th St. and H. Frye, 1402 South Detroit St., $181,445.

★Utah—State Highway Comn., Salt Lake City, let contract macadamizing 9.5 mi. Ogden-Hooper Rd., 12 ft. wide, Weber Co., to Strange-Maguire Paving Co., Utah Savings & Trust Bldg., Salt Lake City, $65,192. Noted Jan. 23.

★Ore., Warrenton—Warrenton Rd. Dist. let contract building 3630 ft. Seaside Highway, 16 ft. wide, 1½ in. wearing surface, Topeka mixture on 5 in. concrete base, to M. O'Reilly Co., Blake-McFall Bldg., Portland, $17,796.

★California — State Highway Comn., Forum Bldg., Sacramento, let contract grading, graveling and draining 8.9 mi. road from near Shandon Pumping Sta. to East San Luis Obispo Co. line, 24 ft. wide, to C. H. Hudson, Marsh Strong Bldg., Los Angeles, $73,782. Work involves 78,200 cu.yd. earth excav., 465 cu.yd. concrete culverts, 3500 cu.yd. gravel, 1000 lin.ft. guard rail and 2710 lin.ft. 12-36 in. corrugated metal pipe. Noted Feb. 20.

★California — State Highway Comn. Forum Bldg.,Sacramento, let contract grading 15.1 mi. and paving 11.4 mi. road, 12 ft. wide on 4 in. base, between Tecade Divide and San Diego Co., to O. G. Ritchie, Niles, $233,273. Work involves 66,000 cu. yd. excav., 11,140 cu.yd. concrete pavement, 390 cu.yd. concrete culvert, 2949 ft. 18-30 in. corrugated pipe, etc. Noted Feb. 20.

Railways

PROPOSED WORK

Massachusetts—F. P. Huckins et al applied to State Legislature for authority to incorporate East Boston Waterfront Freight Ry. to build railroad in East Boston to connect with Boston & Albany R.R. About $250,000 will be expended.

New York—Northern New York Utilities Inc., Light & Power Bldg., Watertown, has secured options on land along north bank of Black River for possible interurban trolley system connecting Watertown with Cape Vincent and passing through Glen Park, Brownville, Dexter, Chaumont, Three Mile Bay, Rosiere and Cape Vincent. Total length 30 mi. J. B. Taylor, Watertown, pres.

Texas—Ft. Smith & Western Ry., Ft. Smith, Ark., plans to extend line 16 mi. in El Reno. A. L. Mills, Ft. Smith, Ark., mgr.

Quebec—Canadian Pacific Ry., Windsor St. Sta., Montreal, has appropriated $236,000 for improvements to freight yard at Three Rivers. C. I. Fairbairn, Montreal, ch. engr.

Quebec—Quebec Central Ry., Wellington St., Sherbrooke, plans to build branch line from Scott Junction to Quebec, about 20 mi. J. H. Walsh, Sherbrooke, genl. mgr.

British Columbia—Canadian Pacific Ry., Canadian Pacific Ry. Sta., Winnipeg, Man., having preliminary plans prepared for following improvements: locomotive washing plant at Revelstoke; transfer barge and new car slip at Okanagan Lake; modern coaling plant at North Bend; extension to engine house at Cranbrook; new engine house at Sidney; large steel turntables at Field and Revelstoke and additional trackage facilities at Revelstoke and Vancouver. J. G. Sullivan, Winnipeg, Man., ch. engr.

British Columbia—Esquimalt & Nanaimo Ry., Victoria, plans to extend line from Bainbridge on Alberni line north to Ucluelet and Clayoquot and from Rainbridge east to Comox Lake. R. A. Bainbridge, Victoria, engr.

Excavation and Dredging

PROPOSED WORK

Fla., Safety Harbor — Dredging — See "Miscellaneous."

Ill., Winnetka—Excavation—See "Streets and Roads."

S. D., Pierre—Excavation—See "Streets and Roads."

Cal., Coachella — Irrigation — Coachella Valley Water Dist. has been granted permit to divert water from Whitewater River and Snow Creek for irrigation and domestic uses on 25,000 acres in Coachella Valley, and for domestic needs in Coachella, Indio, Thermal and Mecca Twps. About $10,000.

BIDS DESIRED

S. C., Orangeburg—Drainage—Until Mar. 27, by C. P. Roberts and J. M. Johnson, Orangeburg, building drainage system here, consisting of 31 canals, 58 mi. of which have bottom width of from 2-6 ft., but most to have bottom width of 3 ft., canals to have side slope of ½ to 1 and average depth of 5 ft. totaling 303,000 cu.yd.; also building 20 mi. dredge canal, 16 ft. bottom width, side slope 1 to 1 averaging about 7 ft. deep., and 44 wooden bridges to be built across small canals and 12 across large canals. J. M. Brailsford, Orangeburg, comr.

Ill., Whiteside—Ditch—Until Apr. 4, at office of C. E. Sheldon, Sterling, for deepening and widening, etc., ditch, 37,765 ft. long, in D.D. No. 1, Hahnaman Twp., Whiteside Co., involving 101,211 cu.yd. excav.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., Petersburg—See "Miscellaneous."

★Minn., Mankato—Ditch—Blue Earth Co. let contract building Judicial Ditch No. 24 in Blue Earth, Martin and Faribault Counties, to North Star Concrete Co., Mankato, $66,924.

★Minn., St. James—Ditch—Comrs. Watonwan Co. let contract building Judicial Ditch No. 26, to E. Dahl & Co., Madelia, $10,279. Work involves 27,000 ft. 6-18 in. tile. Noted Dec. 19.

★Ark., Jonesboro—Ditch—Comrs. Cache River D. D., Craighead, Lawrence and Jackson Counties let contract building 22 mi. main ditch and 12 mi. lateral, to A. V. Wills & Sons, Boatman's Bank Bldg., St. Louis, Mo., $529,000. Work involves 5,000,000 cu.yd. excav. at 9¾c. per cu.yd. Noted Feb. 27.

Industrial Works

PROPOSED WORK

Mass., Malden—Boston Dye House, Malden, had plans prepared by A. Golden, engr., c/o company, for 2 story, 80 x 100 ft. brick and concrete addition to factory on Main and Eastern Sts. About $50,000.

R. I., Providence—City plans to build garage on Harris and Kingsley Aves. About $75,000. W. E. Hartwell, comr. pub. bldgs.

Conn., Ansonia—S. Yudkin, 403 Main St., having plans prepared by O. Frantzke, archts., c/o owner, building 1 story, 200 x 202 ft. concrete garage, rein.-con. flooring and concrete foundation, on Central St. About $50,000.

Conn., Cheshire—State Legislature, Hartford, appropriated $80,000 to build factory at Cheshire Reformatory for boys.

Conn., Stamford—H. and H. Fdry. Co., 770 Pacific St., soon receives bids building 1 story, 60 x 200 ft. brick foundry, rein.-con. flooring, concrete foundation, on Pacific St. About $30,000. N. E. Emmons, Washington Bldg., archt. Noted Jan. 2.

N. Y., Bath—County Dairymen's League plans to build rein.-con. and brick dairy plant here. About $150,000. M. W. Davison, dir.

Industrial Works (Continued)

N. Y., Black River—Northern New York Utilities, Inc., Light and Power Bldg., Watertown, having plans prepared building rein.-con. power house, 2200 lin.ft. power canal, dam, forebay, etc. J. B. Taylor, Watertown, pres.

N. Y., Brooklyn—A. Paolello, 810 4th Ave., had plans prepared by C. P. Cannella, archt., 1163 Herkimer St., for 1 story, 22 x 41 x 72 x 102 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on 27th St. and 4th Ave. About $45,000.

N. Y., Brooklyn—Shampan & Shampan, archts., 772 Bway., receive bids about Mar. 14, building 2 story, 100 x 100 ft. brick auto service station and show room, rein.-con. flooring, concrete foundation, on Montrose Ave. and Leonard St., for Lasky Motor Car Corp., 17 Graham Ave. About $75,000.

N. Y., Cortland—Local Dairymen's League plans to build milk plant here. About $50,000. N. F. Webb, pres.

N. Y., New York—Buick Auto Repair Shop, 244 West 49th St., had plans prepared by F. J. Bird, archt., 101 Park Ave., for 1 story, 100 x 200 ft., brick and steel garage, on 54th St. near 8th Ave. About $400,000.

N. Y., New York—State Legislature, Capitol, Albany, petitioned to appropriate $1,000,000 to provide for grain elevator at port of New York in connection with Gowanus bay canal terminal.

N. Y., Penn Yan—A. H. Burns plans to build concrete and brick grist and grinding mill on East Main St. About $60,000.

N. Y., Rochester—Eastman Kodak Co., Kodak Park, had plans prepared building 6 story, 162 x 182 ft., rein.-con. factory on Hanford Landing Rd. About $350,000.

N. Y., Rochester—Yawman & Erbe, 242 St. Paul St., having plans prepared for addition to plant. About $25,000. T. Hough, purch. agt.

N. Y., Syracuse—H. H. Franklin Automobile Co., 302 South Geddes St., purchased site at 215 Magnolia St., and plans to build addition to plant. Cost between $300,000 and $400,000.

N. Y., Utica—Utica Co-Operative Society, Inc., purchased site on Schuyler and Court Sts., and plans to build 2 story concrete bakery.

N. Y., Watertown—P. W. Devendorf, 145 Arsenal St., had plans prepared for 2 story, 72 x 150 ft., brick and tile garage and repair shop, concrete flooring. About $40,000.

N. Y., Watertown—New York Air Brake Co., Starbuck Ave., Northern New York Utilities Inc., Light & Power Bldg., J. B. Wise, 401 Mill St., and associates, plan to incorporate Beebee Island Corp. to develop power here. Plans include power house, new concrete dam, flumes and tailrace, installing 7500 hp generating units, etc. About $500,000 will be expended for work.

N. Y., Watertown—Northern New York Utilities, Inc., Light and Power Bldg., having plans prepared for addition to existing generating plant at Effley Falls, consisting of 30 x 38 ft. rein.-con. power house, 120 ft. of 7½ ft. steel penstock, revamping present dam, etc. J. B. Taylor, pres.

N. J., Ampere—General Electric Co. plans to build 1 story, 94 x 98 ft., concrete storage plant, concrete foundation. About $35,000. J. H. and W. G. Ely, Firemen's Bldg., Newark, archts.

N. J., Jersey City—Keystone Motor Car Co., Stegman St., plans to build concrete and brick plant on Communipaw and Bergen Aves. About $70,000.

Pa., Bethlehem—Traveler Tire Co., Traveler Bldg., Phila., plans to build 2 story, 80 x 250 ft. concrete, steel and brick factory near Reading R. R., here. About $250,000. J. O. Hunt, 114 North Montgomery St., Trenton, N. J., archt.

Pa., Phila.—Taubel Bros., Cedar and Huntingdon St., plans to build 3 story, 48 x 70 ft. brick and timber factory. About $30,000.

Md., Baltimore—Canton Air Brake Co., 563 Calvert Bldg., having plans prepared for 1 story, steel and concrete plant, stone and rein.-con. flooring. First unit to cost $180,000; ultimate cost, $1,000,000. R. Schoenwetter and C. A. Zarobsky, 563 Calvert Bldg., engrs.

Md., Cumberland—Berwin-White Coal Mining Co., Windber, near here, plans to build power plant. About $800,000.

Md., Curtis Bay (Baltimore P. O.)—Mexican Petroleum Co., 120 Bway., New York City, plans to build large refinery here. Plans include building bulkhead and filling in on 70 acre site. Total cost, $1,000,000.

Va., Norfolk—R. T. Lipscombe, 34 Virginia Natl. Bank Bldg., and associates, plan to build 100 x 400 ft., brick and steel, ice cold storage and dehydration plant. About $225,000. B. Mitchell, Seaboard Bank Bldg., archt.

W. Va., Huntington—Chesepeake & Ohio R. R., 9th and Main Sts., Richmond, Va., plans to build additions to its shops here. About $500,000. F. I. Cambell, ch. engr.

Fla., Pensacola—Texas Oil Co., Chipley St., plans to establish fuel oil station. About $1,000,000.

Ala., Florence—City retained Evans & Brown, engrs., P. O. Box, 94, to prepare plans for electric light plant.

La., Kaplan—See "Water-works."

O., Cleveland—Cleveland Automobile Co., East 131st St., plans to build brick and rein.-con. factory. About $500,000. E. McGeorge, 1900 Euclid Ave., archt.

O., Columbus—C. and E. Shoe Co., 56 East Fulton St., having plans prepared by Richards & McCarty, archts., Hartman Bldg., for 6 story, 87 x 120 ft. brick and rein.-con. factory on East Fulton St. About $100,000.

O., Dayton—See "Buildings.'

Ind., Carthage—Carthage Box & Paper Co. plans to build 1 story, 100 x 265 ft. rein.-con. factory. About $50,000.

Mich., Detroit—C. R. Wilson Body Co., Clay Ave., plans to rebuild plant recently destroyed by fire. Loss between $300,000 and $400,000.

Ill., Troy—Troy Grain Co. plans to build concrete grain elevator, rein.-con. flooring and concrete foundation, between here and Edwardsville Twp. About $25,000.

Wis., Beaver Dam—H. J. Esser, archt., Camp Bldg., soon receives bids building 4 story, 52 x 250 ft. factory with 38 x 60 ft. wing, mill construction, concrete foundation, for Weyenberg Shoe Co., 130 Reservoir Ave. About $75,000.

Wis., Janesville—Parker Pen Co. having plans prepared by F. A. Carpenter, archt., 420 Brown Bldg., Rockford, Ill., building 3 story, rein.-con. and brick factory and office on Court St. About $100,000.

Wis., Waubesa—Madison-Kipp Lubricating Co., Madison, acquired site here and had tentative plans prepared for 1 story, 150 x 200 ft., concrete, brick and steel machine shop here. T. E. Coleman, vice pres. and genl. mgr.

Ia., Des Moines—Blackhawk Tire & Rubber Co. soon lets contract building factory. About $250,000. Sawyer & Watrous, 401 Hippee Bldg., archts.

S. D., Sioux Falls—Dakota Iron Store, Weber Ave., having plans prepared by Perkins & McWayne, archts., 322 Paulton Bldg., for 2 story, 90 x 150 ft. brick and concrete factory, rein.-con. flooring and concrete foundation, on 6th St. About $40,000.

N. D., Dickson—State Budget Com., Capital Bismarck, plans to build heating plant at State Normal School here. About $35,000 appropriated for project.

Mo., Boonville—Hamilton-Brown Shoe Co., Jefferson and Rand Sts., St. Louis, plans to build 3 story, 50 x 250 ft. brick factory here. About $40,000.

Mo., Marshall—City receives bids about Mar. 10, building municipal electric light plant. About $75,000. Henrici-Lowry Eng. Co., Commercial Trust Bldg., Kansas City, engrs. Noted Dec. 19.

Tex., Dallas—C. R. Miller, 5112 Swiss Ave., and associates having plans prepared by Lockwood Greene Co., archts., 60 Federal St., Boston, Mass., building cotton mill. About $500,000.

Utah, Ogden—California Packing Corp., 101 California St., San Francisco, having plans prepared by P. Bush, archt., 101 California St., San Francisco, for packing plant and warehouse here. About $200,000.

Ore., Astoria—Pacific Power & Light Co., Spalding Bldg., Portland, plans to build 4500 hp. electric generating plant at foot of Astor St.

Cal., Hanford—California Packing Corp., 101 California St., San Francisco, plans to build 1 story, 110 x 250 ft., brick and frame factory and power house, also number of cottages here. P. Bush, 101 California St., San Francisco, archt.

Cal., Long Beach—City authorized W. T. Lisenby, mayor, to investigate feasibility of building electric lighting plant and purchasing distributing system owned by Southern California Edison Co., Los Angeles. D. S. Miller, city engr.

Cal., Wineville—C. Stern & Sons, Van Nuys Bldg., Los Angeles, having plans prepared by Krempel & Erkes, archts., 415 Henne Bldg., Los Angeles, for remodeling winery buildings into fruit and vegetable cannery. About $100,000. Present buildings are 1 story, rein.-con. and brick, cement flooring.

N. B., Moncton—J. Eaton & Co., Ltd., 190 Yonge St., Toronto, had plans prepared for new factory here. Cost including machinery, $1,500,000.

Ont., Ottawa—Bd. Control authorized to have plans prepared and submit report on advisability of establishing central heating plant on Albert St. for city hall, police station No. 8, fire hall and registry office. About $80,000. A. F. McCallum, City Hall, engr.

Ont., Ottawa—Colonial Hide Co., 95 York St., soon lets contract building 3 story concrete factory and warehouse. About $40,000.

Ont., Ottawa—P. Labelle, 90 Guigues Ave., receives bids in spring building 3 story, 30 x 130 ft. storage warehouse, rein.-con., rein.-con. flooring and concrete foundation, on Dalhousie St. About $65,000.

Ont., Port Arthur—J. J. Carrick, 13 Cumberland St., North Ontario, plans to build pulp and paper plant here to consist of several 1 and 2 story rein.-con. buildings, rein.-con. flooring, concrete foundation. About $3,000,000. H. S. Ferguson, 200 5th Ave., New York, consult. engr.

Ont., Port Arthur—Ontario Hydro Electric Comn., Toronto, having preliminary sketches prepared for 1 story, 100 x 250 ft. rein.-con., steel and brick power plant, rein.-con. flooring, concrete foundation, on Nipigon River, Cameron Falls, near here. About $6,000,000.

B. C., Cranbrook—See "Railways."

B. C., Field—See "Railways."

B. C., North Bend—See "Railways."

B. C., Okanagan-Lake—See "Railways."

B. C., Revelstoke—See "Railways."

B. C., Vancouver—See "Railways."

B. C., Vancouver—W. J. Lowe, 1320 20th Ave., E., receives bids in April building 4 story, 75 x 120 ft., rein.-con. and brick garage, concrete foundation, on Davie and Seymour Sts. About $70,000. F. L. Townley, 325 Homer St., archt.

BIDS DESIRED

N. Y., Albany—Until Mar. 10, by Lockwood, Green & Co., archts., 101 Park Ave., New York City, building 3 story, 80 x 90 ft., brick and mill construction factory, brick foundation, for Van Slyke & Horton, 471 B'way. About $75,000.

N. Y., New York—Until Mar. 14, by L. A. Sheinart, archt., 192 Bowery, building 2 story, 98 x 117 ft., brick and steel garage, rein.-con. flooring and concrete foundation, at 536-546 West 42nd St., for S. K. W. Shellat, Newport, R. I., Marcus & Goldstein, 141 B'way., lessee.

S. C., Charleston—Until Mar. 25, by J. D. Newcomber, archt., Broad St., building 2 story 100 x 120 ft., rein.-con. garage on Meeting St., for Sottile Cadillac Co., 261 Meeting St. About $50,000.

Industrial **Works (Continued)**

Mo., Macon—Until Mar. 20, by W. H. Martin, city clk., improving power plant. About $15,000. F. L. Wilcox, Syndicate Trust Bldg., St. Louis, engr.; advertised in this issue.

N. B., Lake Edward—Until Mar. 10, by Dept. Pub. Wks., Ottawa, Ont., for building power house here. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

Ont., Orillia—Until Mar. 31, by Dept. Pub. Wks., Toronto, building 5 story power house and hospital on Main St., rein.-con. and steel, rein.-con. flooring and concrete foundation. About $40,000 and $25,000 respectively.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—G. J. Wilson let contract building 1 story, 80 x 110 ft. rein.-con. and steel factory and sales building, rein.-con. flooring and concrete foundation, on Brookline Ave., to E. S. Butterfield Co., 88 Broad St. About $75,000.

★Mass., Worcester—Simplex Player Co., Boylston St., Boston, let contract building 4 story 50 x 55 ft. and 35 x 115 ft. brick and rein.-con. factory and storehouse on Blackstone St. here, to E. D. Ward Co., 82 Foster Park. About $80,000.

★Conn., Derby—General Ordnance Co., Housatonic Ave., let contract building 1 story, 30 x 250 ft. steel machine shop, rein.-con. flooring, concrete foundation, to Truss-Con-Steel Co., 207 Orange St., New Haven. About $25,000. Noted Dec. 19.

★Conn., Waterbury—Scovill Mfg. Co., 99 Mill St., will build 1 story, 124 x 197 ft. brick addition to factory, rein.-con. flooring and concrete foundation, on Hamilton Ave. About $50,000. Work will be done by day labor.

★N. Y., Brooklyn—Interborough Iron & Steel Co., c/o M. A. Cantor, archt., 373 Fulton St., will build 1 story, 100 x 100 ft., steel and brick garage, rein.-con. flooring and concrete foundation, on 6th Ave. and 62nd St. About $30,000. Work will be done by day labor.

★N. Y., Holcomb—W. N. Clark Co., 333 Hollenbeck St., Rochester, let contract building concrete factory consisting of one 2 story, 50 x 130 ft., one 1 story, 50 x 150 ft. and one 1 story, 70 x 80 ft. buildings, wooden flooring, to L. J. Held, 153 Plymouth Ave., Rochester. About $60,000.

★N. Y., New York—F. A. Munsey, 280 Bway., will build addition and alter existing printing plant. About $50,000. Work will be done by day labor. Noted Feb. 27.

★N. Y., Utica—L. F. Pilcher, state archt., Capitol, Albany, let contract building addition to central heating plant here, to R. G. Lloyd, 113 South St., $29,832.

★Pa., Phila.—Pennsylvania R. R., Broad St. Sta., let contract building 1 story, 24 x 468 ft. concrete, steel and brick roundhouse, rein.-con. flooring, concrete foundation, on 48th St. and Parkside Ave., to W. Steele & Sons Co., 16th St. and Parkway. About $85,000.

★Pa., Phila.—Powers, Weighton & Rosengarten, 916 Parrish St., let contract building 4 story, 28 x 40 ft. brick and timber factory, rein.-con. flooring, concrete foundation, on 9th and Parrish Sts., to R. C. Ballinger & Co., 218 North 13th St. About $30,000.

★Pa., Temple—Temple Malleable Iron & Steel Co. let contract building 1 story, 340 x 380 ft. steel and brick plant, concrete foundation, near Pennsylvania R. R., (Schuylkill Div.), here, to F. D. Chase, Peoples Gas Bldg., Chicago, Ill., percentage basis. Noted Feb. 27.

★Md., Baltimore—Crown Cork & Seal Co., 1511 Guilford Ave., let contract building two 1 story, 75 x 240 ft., concrete and steel warehouses, rein.-con. flooring, concrete and stone foundation, on Eastern Ave., as follows: grading and concrete work, to West Constr. Co., 907 Amer. Bldg., structural steel, to Patapsco Iron Wks., Inc., Ostend and Wicomico Sts.; galvanized iron work, to Phillipp-Kell Co., Inc., Holliday and Centre Sts. Total cost, $60,000.

★Mich., Detroit—Detroit Edison Co., David Whitney Bldg., let contract building 70 x 110 ft., brick and steel addition to central heating plant, concrete foundation, to A. A. Albrecht & Co., 1130 Penobscot Bldg.

★Ill., East St. Louis—Obear Nestor Glass Co., Bway. and Terminal R. R., let contract building 2 story, 82 x 190 ft. brick, steel and rein.-con. addition to plant, rein.-con. flooring and concrete foundation, to F. Ganschinietz, 501 North 18th St. About $65,000.

★Ia., Cherokee—Sache-Bunn Co., 322 3rd St., Sioux City, let contract building rein.-con. and brick implement building, rein.-con. flooring, concrete foundation, to Brown Bros., Hospers, $28,300. Noted Jan. 30.

★Kan., Wichita—Campbell Baking Co., 601-3 North Emporia St., let contract building 2 story, 60 x 140 ft. brick and rein.-con. addition to bakery, to N. T. Vorse, 911 S. and L. Bldg., Des Moines, Ia. About $100,000.

★Ont., London—Societe L' Air Liquide, 1 Ernest Maisonneuve, Montreal, let contract building plant here, to R. H. Harman & Co., 248 Dupont, Toronto. About $60,000.

Buildings

PROPOSED WORK

Mass., Brockton—Church and Parish—Unity congregation, c/o C. C. King, 106 Main St., plans to build brick on Warren Ave.

Mass., Lynn—Hotel—D. Grossman, Roxbury, receives bids about Apr. 1, building 7 story brick and concrete, concrete foundation on Lynn Shore Drive here. About $250,000. D. Sanborn, Lynn, archt.

Conn., Ansonia—Armory—Appropriation Com., Capitol, Hartford, petitioned to appropriate $100,000 to build state armory here.

Conn., Bridgeport—Store and Office—Zimmer Bros., 179 Golden Hill St., plans to build 4 story on Main St. About $50,000.

Conn., Hartford—Hotel—Berenson & Moses, archts., 26 State St., receive bids about Mar. 22, building 3 story brick apartment hotel, concrete foundation on Buckingham St. for D. Kaplan. About $60,000.

Conn., Meriden—Store and Office—E. Derecktor, 39 Crown St., had plans prepared by W. A. Donovan, archt., 3 Colony St., for 3 story, 40 x 75 ft. brick and timber, rein.-con. flooring and concrete foundation on West Main St. About $50,000.

Conn., New Haven—Business—Beecher & Bennett, Inc., 280 Elm St., having plans prepared by C. S. Palmer, archt., 191 Church St., for 2 story, 70 x 100 ft. brick, on Bway. and Howe St. About $60,000.

Conn., New London—Church—Federal St. Methodist Episcopal congregation plans to build brick and steel, rein.-con. flooring and concrete foundation on Broad St. About $100,000. Address M. R. Geuter, 193 Hempstead St., pastor.

Conn., Norwalk—Home—Comrs. Fairfield Co. (Bridgeport), having plans prepared by Davis & Dane, archts., 1024 Main St., Bridgeport, for 2 story brick addition on Westport Ave. here. About $50,000. Noted Feb. 6.

Conn., Stamford—Theater—S. Weiss and A. Geronimo purchased site on Park Pl. and plan to build. About $100,000.

Conn., Waterbury—Church—Immaculate Conception congregation, 97 East Main St., having plans prepared by J. A. Jackson, archt., 1133 Bway., New York City, rebuilding church on East Main St. About $100,000. L. Fitzsimmons, pastor.

N. Y., East Syracuse—Bank—East Syracuse Bank recently incorporated plans to build bank. About $50,000. Address Town Clerk.

N. Y., Greece—Memorial Hall—Town plans to vote on project to build 2 story, 45 x 90 ft., brick and concrete auditorium, town office and library. Cost between $40,000 and $50,000.

N. Y., New York—Office—Atlantic & Pacific Steamship Co., 7 Hanover Sq., soon receives bids for 5 story, 70 x 80 ft., brick and steel, concrete foundation, on Water St. and Old Slip. J. W. O'Connor, 3 West 29th St., archt.

N. Y., New York—Office—C. B. H. Gilbert, archt., 1123 Bway, soon receives bids building 12 story, 50 x 100 ft., brick and limestone, concrete foundation, at 6-8 East 44th St. Owner's name withheld.

N. Y., New York—Office and Loft—Baker, Carver & Morrell, 39 Water St., having plans prepared by Severence & Van Allen, archts., 4 West 37th St., for 9 story, 28 x 83 ft., steel and brick, concrete foundation, at 37 Water St. Noted Jan. 30.

N. Y., Norfolk—Library—A. B. Hepburn, Ogdensburg, will build 2 story, ornamental brick library here as gift to town. About $50,000; town will provide maintenance.

N. Y., Ogdensburg—Hotel—A. Irving, pres., chamber of commerce, and associates, plan to build. About $200,000.

N. Y., Potsdam—Memorial Community Center—Town considering holding election to vote on $150,000 bonds to build memorial building and community center. S. Watson, village pres.

N. Y., Rome—School—Bd. Educ. plans to build 2 story, 100 x 125 ft., on Linden St. About $120,000. W. T. Towner, 366 5th Ave., New York City, archt.

N. Y., Syracuse—Schools, etc.—Bd. Estimate & Apportionment request Council for authorization of $500,000 bond issue. About $200,000 will be used to build Prescott and Lincoln Schools; remainder will be used to extend park system, purchase and develop playgrounds, build addition to city hospital and new firehouse, etc. H. A. Allen, city engr.

N. J., Newark—Theater—F. W. Wentworth, archt., 140 Market St., Paterson, receives bids about April, building 2 story, 83 x 147 ft. steel motion picture theater, rein.-con. flooring, concrete foundation, on Branford Pl. near Broad St. here, for J. Fabian, 12 Union St., Paterson. About $500,000.

N. J., Orange—Memorial Hall—War Memorial Advisory Com. had plans prepared for civic center building. About $100,000.

N. J., Trenton—Mercantile—A. C. Nevius, 601 Rutherford Ave., plans to alter 5 story Y. M. C. A. on State St., into mercantile building. About $100,000.

Pa., Chester—Hotel—Foster Hotel Corp. having plans prepared by E. A. Wilson, archt., 1208 Chestnut St., Phila., for 4 story, 118 x 228 ft. brick and steel, on 9th and Welch Sts. About $250,000.

Pa., Pottstown—Memorial—Hill School Alumni Association plans to build memorial hall. About $100,000.

Md., Towson—Orphan Asylum—St. Vincents Male Orphan Asylum, York Rd., near here, plans to rebuild building recently destroyed by fire. Loss about $75,000. A. Deupert, 815 North Arlington Ave., Baltimore, pres. bd. mgrs.

Va., Charlottesville—Bank—Nat'l. Bank of Charlottesville having plans prepared by Marsh & Peter, archts., 522 13th St., Wash., D. C., for 8 story, steel and brick, concrete flooring. About $200,000.

Va., Norfolk—Schools—City appropriated $300,000 for new schools as follows: 1 in Colonial Pl., addition to Lott Cary School, 1 at Lamberts Point and completing addition to Walter Herron Taylor School.

W. Va., Morgantown—Law—State Bd. Control, Charleston, plans to build steel and cement law building at West Virginia University. About $125,000 appropriated for project. H. C. Jones, dean.

N. C., Charlotte—High School—Bd. Educ. plans to build 3 story, rein.-con., brick and tile. About $135,000. Edwards, Sayward and Leitner, Chamber Commerce Bldg., Atlanta, Ga., archts.

N. C., Sedalia—School—Bd. Educ. plans to build. About $70,000. H. Barton, Greenboro, archt.

Fla., Gainesville—Schools—Bd. Educ. Alachua Co. plans to build one 3 story high school and one 2 story industrial school, brick or tile. Total cost, $150,000. Edwards, Sayward and Leither, Chamber Commerce Bldg., Atlanta, Ga., archts.

Ala., Birmingham—School—Bd. Educ. had preliminary plans prepared by D. O. Whilldin, archt., Title Guarantee Bldg., for 1 and 2 story on Montevallo Rd. and Montgomery Highway, Shades-Canaba School Dist. 1-A. About $50,000. Noted Feb. 27.

La., Shreveport—Church—Highland Ave. Baptist congregation receives bids in June or July building steel and rein.-con., brick facing, on Olive and Stephens St. About $75,000. C. P. Roney, 1333 Jennings St., pastor. Noted Feb. 6.

Buildings (Continued)

La., Thibodaux—Church—St. Joseph's congregation plans to rebuild church. About $125,000.

O., Cleveland—Commercial—Cowell & Hubbard, East 6th St. and Euclid Ave., having plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., building 2 story, (ultimately 8 stories) 80 x 200 ft. brick, on Euclid Ave. and East 13th St. About $300,000.

O., Cleveland—University—Industrial Assn. of Cleveland, 607 Arcade Bldg., plans to build 6 or 10 story, 100 x 200 ft. industrial university, brick, steel and concrete. Plans include 4 large class rooms, auditorium, gymnasium ,swimming pool, billiard rooms, etc. About $1,000,000.

O., Columbus—Bank and Office—Franklin Loan and Savings Co., 347 South High St., receives bids about Mar. 15, building 6 story, 25 x 90 ft. brick and rein.-con., concrete foundation on High and Main Sts. About $163,000. F. L. Packard, Hayden Bldg., archt.

O., Dayton—Office, etc.—Buick Automobile Co., 130 North Main St., plans to build 2 story, 78 x 100 ft. brick and rein-con. office and garage, rein.-con. flooring and concrete foundation, at 413 South Main St.

O., Franklin—School—Bd. Educ. having plans prepared by E. J. Mounstephen, archt., 802 Union Bank Bldg., Dayton, for 2 story, brick and rein.-con., rein-con. flooring and concrete foundation. About $150,000. J. C. Null, clk.

O., Pittsburgh—School—Bd. Educ. having plans prepared by E. J. Mounstephen, archt., 802 Union Bank Bldg., Dayton, for 2 story, brick and rein.-con., rein.-con. flooring and concrete foundation, in Monroe Twp. About $100,000.

O., Yellow Springs—School—Bd. Educ. plans to build 1 story, brick and rein.-con., brick foundation. About $50,000. E. J. Mounstephen, 802 Union Bank Bldg., Dayton, archt.

Mich., Calumet—Hospital—Calumet Hospital Bd. plans to build 2 story brick hospital, rein.-con. flooring, concrete and rock foundation. About $50,000. M. S. Carlton, chn.

Mich., Grand Rapids—School—Bd. Educ. soon receives bids building two 3 story, 67 x 167 ft. brick, concrete and steel schools on Congress and Henry Aves. About $150,-000 each. H. Turner, care Bd. Educ., archt.

Ill., Chicago—Administration—Bd. Educ. 7 South Dearborn St., plans to build administration building in downtown district. About $250,000.

Ill., Good Hope—High School—City voted $60,000 bonds to purchase site and build high school.

Ill., Griggsville—High School—Bd. Educ. plans to rebuild high school recently destroyed by fire. About $75,000.

Ill., Quincy—School—Bd. Educ. plans to build new Irving School. About $115,000.

Ill., Villa Grove—High School—Village voted $75,000 bonds to build high school.

Wis., Janesville—See "Industrial Works."

Wis., La Crosse—See "Miscellaneous."

Wis., Madison—City Hall—City plans to build. About $300,000. O. S. Norsman, city clk.

Wis., Milwaukee—Hotel—O. Webb, archt., 544 49th St., preparing plans for 12 story, 75 x 120 ft., brick and steel, rein.-con. flooring, concrete foundation. Owner's name withheld.

Wis., Milwaukee—Market—A. Kuenselmann, 450 Mitchell Ave., having plans prepared by W. G. Herbst, archt., 114 Grand Ave., building 1 story, 140 x 160 ft., rein.-con., concrete foundation, on Mitchell and 8th Aves. About $175,000. Noted May 9.

Wis., Milwaukee—Schools—Bd. Educ. plans to expend $800,000 to build here.

Wis., Superior—School—City plans to expend $250,000 to build ward school. E. McKeagul, city clk.

Wis., Watertown—Home—Lutheran congregation plans to build addition to home for feeble-minded. About $75,000.

Ia., Ft. Dodge—Fair—Hawkeye, Fair & Exposition, Inc., plans to build 72 x 150 ft. administration and woman's building, 72 x 150 exposition building, automobile show building, sales show pavilion and grand stand. About $75,000. E. C. Cameron, Alta, pres.

Ia., Ft. Dodge—High School—City voted $650,000 bonds to build high school. C. H. Reynolds, city engr. Noted Feb. 6.

Ia., Iowa City—Dormitory, etc.—State petitioned to appropriate $150,000 for girls' dormitory, $225,000 for botany and geology building, $70,000 for laboratory and $150,-000 on nurses' building.

Ia., Shenandoah—Club—K. of C. Home Assn., c/o C. R. Jarvis, secy., plans to build here. About $50,000.

Minn., Round Lake—School—Bd. Educ. having plans prepared by G. Pass & Son, archts., Mankato, for consolidated school. About $50,000. B. C. Denkman, clk.

Neb., Lincoln—Capitol—State Legislature appropriated $5,000,000 to build here.

S. D., Hurley—School—Hurley Consolidated School having plans prepared by Perkins & McWayne, archts., 322-324 Paulton Bldg., Sioux Falls, for 2 story, 60 x 134 ft. brick, steel and concrete, concrete foundation. About $85,000.

S. D., Madison—Hospital—Madison Hospital Assn., having plans prepared by Perkins & McWayne, archts., 322-324 Paulton Bldg., Sioux Falls, building 3 story, 38 x 92 ft. brick and terra cotta, concrete foundation. About $75,000.

N. D., Dickinson—Dormitory—State Budget Com., Capitol, Bismarck, plans to build dormitory at State Normal School here. About $55,000 appropriated for project.

Mo., Jefferson City—Theater—F. B. Miller, archt., receives bids about May building 57 x 198 ft. brick and rein.-con., rein.-con. flooring and concrete foundation, on High St., for W. H. Mueller. About $60,-000. Noted Jan. 23.

Mo., St. James—Home—Missouri State Soldiers Home plans to build addition to existing hospital, cost $20,000; miscellaneous additions, $20,000; elevators, $3500; new powerhouse equipment, $7600; septic tank, etc., $8000. W. V. Farris, pres. bd. mgrs.

Mo., St. Louis—Bank—L. Haeger, archt., 3844 Utah St., receives bids about Mar. 15, building 2 story, 60 x 100 ft. brick and concrete, on Grand and Hartford Aves., for Tower Grove Bank, Grand and Juaniata Aves. About $60,000. Noted Feb. 13.

Mo., St. Louis—Hotel—Hotel Realty Co., Mercantile Trust Bldg., purchased site on 13th St. from Locust to St. Charles Sts., and plans to build 12 story, 204 x 225 ft. hotel. About $2,000,000. F. J. Wade, pres.

Mo., University City (St. Louis P. O.)—Schools—City plans election to vote on $250,000 bonds to build schools. J. M. Atkinson, 10 Radcliffe Pl., chn. school bd. com.

Tex., Vernon—Hospital—Comrs. Wilbarger Co. plan election Mar. 22 to vote on $50,000 bonds to build memorial hospital.

Okla., Okmulgee—School—City voted $215,000 bonds to build 3 story high school and 4 room addition to grade school.

Okla., Pawhuska—High School—Bd. Educ. having plans prepared by Hawk & Parr, archts., 501 Security Bldg., Oklahoma, building 2 story, 150 x 150 ft. brick and rein.-con. About $95,000. A. C. Seely, clk.

Colo., Alamosa—Home—Odd Fellows plan to build. About $65,000. W. E. Simmons, chn.

Colo., Las Animas—Store—Thomas Mercantile Co. plans to build 50 x 150 ft. on Carson and Powers Sts.

Colo., Longmont—City Hall—City election in spring to vote on $55,000 bond issue to build City Hall.

Ore., Freewater—Bank—Milton 1st Natl. Bank plans to build on Evans and Depot Sts., here.

Ore., Marshfield—Home—Elks' Club plans to build home. About $60,000. G. Dix, chn.

Ore., Pendleton—Hospital—Sisters of St. Francis, Catholic Indian Mission, plan to build. About $100,000.

Ore., Pendleton—Store—Gritman Bros. purchased site on Webb and Willow Sts., and plan to build 1 story, 50 x 100 ft., brick.

Ore., Portland—Hospital—Senate petitioned to appropriate between $400,000 and $500,000 to build state hospital here.

Ore., Portland—Schools—Bd. Educ. considering $3,000,000 bond issue to build high and grade schools.

Cal., Sacramento—Store—Weinstock, Lubin & Co., Balboa Bldg., San Francisco, plans to build 8 story, 160 x 120 ft., department store on L St. here. About $1,000,-000. S. W. McKim, pres.

Cal., Tulare—Schools and Auditorium—City Trustees and School Dirs. plan election Apr. 14, to vote on $90,000 bonds for 2 brick schools and $60,000 bonds for auditorium.

Que., Shawinigan Falls—Community—Shawinigan Water & Power Co., Station Ave., having plans prepared by D. J. Spence, archt., 246 Beaver Hall, for 3 story, 50 x 100 ft., on Transmission Ave. About $150,-000.

Ont., Arnprior—Hospital—Hospital Bd. plans to build 4 story, rein.-con. and brick. About $100,000. J. S. Church, Arnprior, engr.

Ont., Bayswater—Club House—Knights of Columbus, c/o Bayswater Council, 1010 Wellington St., plans to build 3 story, 50 x 95 ft., brick and timber, concrete foundation, on Spadina Ave. About $60,000. Millson & Burgess, 309 Sparks St., Ottawa, archts.

Ont., London—Mausoleum—London Mausoleum Co. having plans prepared by A. H. McPhail, archt., Bd. Trade Bldg., Windsor, for mausoleum. About $100,000.

Ont., Ottawa—Hospital—City will petition Legislature for authority to raise $1,500,000 bonds to establish civic hospital. A. F. McCallum, City Hall, engr.

Ont., Ottawa—Townsite—City plans to form Civil Serv. Housing Assn. to build townsite in connection with Provincial Housing Act. About $800,000. G. N. Bowen, secy.

Ont., Owen Sound—School—Bd. Educ. having plans prepared building technical school. About $125,000.

Ont., Renfrew—Collegiate School—Bd. Educ. having plans prepared building here. About $142,000. S. T. Chown, engr.

Ont., Toronto—Federal—Dept. Pub. Wks., Ottawa, receives bids about Mar. 15 constructing combined custom house and Federal building here. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

BIDS DESIRED

N. Y., Albany—Laboratory, etc.—Until Mar. 15, by H. M. Biggs, comr. of health, State Health Dept., building sterile rooms, laboratory, media hood, refrigerator, cupboards and shelvings, etc.; advertised in this issue.

N. Y., Brooklyn—School—Until Mar. 17, by Bd. Educ., 500 Park Ave., New York City, building P. S. 20, 5 story, 92 x 193 ft., brick and limestone, concrete foundation on Roebling St., North 4th and North 5th Sts. About $600,000. C. B. J. Snyder, Municipal Bldg., New York City, archt. Noted Nov. 28.

N. Y., Brooklyn—School—Until Mar. 17, by Bd. Educ., 500 Park Ave., New York City, building P. S. 182, 5 story, 118 x 192 ft., brick and concrete, concrete foundation, Dumont Ave. and Wyona St., $543,474. C. B. Snyder, Municipal Bldg., New York City, archt. Noted Feb. 6.

Pa., Palmerton—School—Until Mar. 14, by Bd. of Educ. building grade school. About $100,000. C. H. Lloyd, Telegraph Bldg., Harrisburg, archt. Noted Feb. 6.

Pa., Phila.—Drill—Until Mar. 21, by Armory Bd., Capitol Bldg., Harrisburg, building 1 story, 154 x 282 ft. rein.-con., steel and brick drill shed, rein.-con. flooring, concrete foundation, on Cuthbert St., 32nd to 33rd St., here.

Pa., Phila.—Hospital—A. A. Ziegler, archt., Bailey Bldg., receiving bids for 7 story, 41 x 91 ft. brick, on 7th and Delancy Sts., for Babies' Hospital of Philadelphia, 1126 Walnut St. About $80,000.

Pa., Pittsburgh—School—Until Mar. 14, by Bd. Educ., building 3 story, 30 x 80 ft. brick, steel and stone, brick foundation on 24th and Birch Sts. and building 3 story, 30 x 80 ft. addition to school on 18th and Ferry Sts. About $50,000.

O., Kenmore—School—Until Mar. 10, by Bd. Educ., building 2 story, 69 x 127 ft. brick, rein.-con. flooring, concrete and brick foundation, on North 9th St. Cost between $90,000 and $95,000. A. R. Ritman, clk. M. P. Lauer, 707 People's Saving & Trust Bldg., archt.

Buildings (Continued)

Mich., Lansing—Office—Until Apr. 2, by Bd. State Aud., building 6 story brick and rein.-con library and office. E. A. Bowd, 129 West Allegan St., archt. Noted Feb. 27.

Tex., Dallas—Until Mar. 15 by Y. M. C. A., c/o B. B. Taylor, pres., Baton Rouge, La., constructing 4 story, 75 x 112 ft. building to include social and class rooms, gymnasiums, swimming pool, bathrooms and dormitories. Shattuck & Hussey, 19 South La Salle St., Chicago, archts.

Okla., Blackwell—Church—Until Feb. 18, by 1st Baptist congregation, building 3 story, 85 x 100 ft., brick. About $50,000. J. E. Greene, 1204 13th Ave., Birmingham, Ala., archt.

Que., Levis—Station—Until Mar. 15, by Dept. Rys., Ottawa, Ont., building on side track here. About $50,000. L. Brousseau, Levis, engr.

Que., Ste. Agathe — Sanitorium — Until Mar. 14, by A. Gagnon, secy. dept. pub. wks. & labor, Quebec, constructing seven rein.-con. and steel buildings at Laurentian Sanitorium. About $300,000. G. St. Michel, Parliament Bldg., Quebec, engr.

★Ont., Hamilton—Federal—Until Mar. 15, by Dept. Pub. Wks., Ottawa, constructing combined Federal building and custom house here. R. C. Wright, Dept. Pub. Wks., Ottawa, archt.

Ont., Kingston—Educational Block—Until Mar. 19, by Dept. Pub. Wks., Ottawa, building one 4 story, 106 x 168 ft., and one 3 story, 67 x 83 ft. rock face and cut stone buildings, rein.-con. flooring, rock foundation at Royal Military College here. About $400,000. R. C. Wright, Dept. Pub. Wks., Ottawa, archt.

Ont., Orillia—Hospital—See "Industrial Works."

Ont., Ottawa—Hospital—Until Mar. 20, by Salvation Army, 20 Albert St., Toronto, building 4 story, concrete, brick and steel, on Wellington St., here. About $150,000. Noted Feb. 6.

Ont., Ottawa—School—Until Mar. 31, by Dept., Pub. Wks., Toronto, building 3 story, 59 x 180 ft., normal school on Driveway, rein.-con., brick and steel, rein.-con. flooring. About $50,000.

Ont., Sydenham—Hospital—Until Mar. 13, by Dept. Pub. Wks., Ottawa, for altering and building additions to Military Hospital here. About $125,000. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

Alta., Calgary—Federal—Until Mar. 15, by Dept. Pub. Wks., Ottawa, Ont., constructing combined Federal building and custom house here. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, Ont., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., New Haven—Hotel—J. P. Kaufman, 42 Church St., will build 5 story, 84 x 114 ft. brick, steel and concrete, rein.-con. flooring and concrete foundation, corner Orange and Bishop Sts. About $200,000. Work will be done by day labor.

★Conn., New Haven—Hotel—Puglisti & Milici, 20 Wight St., will build 4 story, 100 x 101 ft. brick, concrete and steel, rein.-con. flooring and concrete foundation, Boulevard and Chapel St. About $165,000. Work will be done by day labor.

★Conn., Waterbury—Theater—M. G. Witort, 789 Bank St., let contract building 1 and 2 story brick, rein.-con. flooring and concrete foundation, on Washington Ave., to M. P. Laukaitis, 25 Congress St. About $50,000.

★N. Y., Brooklyn—Theater—Kings Highway Corp., 1817 Kings Highway, let contract building 2 story, 104 x 120 ft., brick and steel moving picture theater, concrete flooring, on Kings Highway and East 12th St., to L. Gold, 44 Court St. About $175,000.

★N. Y., New York—Hotel—H. Claman, 241 West 43rd St., will build 10 story, 100 x 100 ft., steel and brick, concrete foundation, on 43rd St. near 8th Ave. Work will be done by day labor. Noted Jan. 23.

★N. Y., New York—Office—H. Jaeckel & Sons, 16 West 32nd St., let contract building 6 story, 25 x 155 ft., steel and brick addition, at 546 5th Ave., to Wharton Green & Co., 37 West 39th St. About $75,000. Noted Feb. 27.

★N. Y., New York—Schools—Bd. Educ. 500 Park Ave., let contract building P. S. 6, 5 story, 60 x 142 ft., brick, concrete foundation, on Tremont and Bryant Aves., Bronx, to T. A. Clark Co., 122 Livingston St., Brooklyn, $206,000; P. S. 57, 5 story, 118 x 192 ft., brick and steel, on Crotona Ave. and 181st St., Bronx, to Nugent Constr. Co., Park Ave., $456,282. Noted Feb. 20.

★Md., Aberdeen—House and Dormitory—Natl. Catholic War Council, 122 East 28th St., New York City, let contract building 2 story, 96 x 136 ft., frame, visitors' house and dormitory, wooden flooring, at Proving Grounds here, to Northeastern Constr. Co., 225 5th Ave., New York City. About $65,000.

★Ind., Shelbyville — Infirmary — Comrs. Shelby Co. let contract rebuilding 2 story, to R. Bryant, Franklin, $55,897. Noted Aug. 15.

Ill., Chicago—School—Bd. Educ. received following bids Feb. 19, building two 3 story, 39 x 62 ft. and 47 x 90 ft. brick and steel additions to Davis School on West 39th St. and South Sacramento Blvd., masonry, F. A. Siebold & Son, 133 West Washington St., $59,980; J. L. Connelly, 133 West Washington St., $62,400; H. Schrik & Co., 3722 West Chicago Ave., $63,293; terra cotta, Northwestern Terra Cotta Co., 175 West Jackson Blvd., $30,590; Midland Terra Cotta Co., 11 South La Salle St., $32,000; structural steel (250 tons), W. Horn Structural Iron Wks., 336 North Leavitt St., $25,870; Holmes Pyott & Co., 159 North Jefferson St., $26,557; Hansell Elcock Co., Archer and Normal Aves., $26,594; carpentry, F. Voss, $20,985; E. E. Young, $23,538; H. Reininga, $23,560. Noted Dec. 12.

★Ia., Waterloo—School—Bd. Educ. let contract building 3 story, 55 x 125 ft., rein.-con. and brick, to Lauritzen Constr. Co., 3319 East 4th St. About $75,000. Noted Feb. 13.

★Neb., Barneston—School—Bd. Educ. let contract building 2 story, 75 x 124 ft., brick and stone, to G. R. Unthank, Lincoln. About $51,961. Noted Feb. 6.

★Okla., Hooker—School—Bd. Educ. let contract building 3 story, 54 x 74 ft. brick and rein.-con. school in Dist. 23, to E. Slaedelin & Son, Medford. About $50,000.

Federal Government Work

PROPOSED WORK

Mass., Boston—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install electric traveling cranes in storage shed; Spec. 3822. About $15,000.

Mass., Quincy—School—U. S. Housing Bd., Dept. Labor, Wash., D. C., plans to build 2 story, brick, between 5th and German Aves. About $150,000.

N. Y., Charlotte—Custom House, etc.—City petitioned Treas. Dept., Wash., D. C., for new custom house and federal building.

D. C., Wash.—Radio Operators Room—Bureau Yards & Docks, Navy Dept., plans to build on roof of Navy Bldg.; Spec. 3821. About $3000.

Va., Hampton Roads—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Air Sta.; Spec. 3823, to take place of Spec. No. 3818 which was cancelled. About $560,000.

Va., Yorktown—Extension to Naval Mine Depot—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Jan. 6. Noted Jan. 9.

Va., Yorktown—Tanks and Towers—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids received Dec. 2, installing a Naval Mine Depot. Noted Dec. 5.

Fla., Ft. Myers—Federal—Treas. Dept. plans to purchase site and construct federal building here.

La., Alexandria—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 7, extending and remodeling post office and court house. Noted Jan. 16.

Mo., Charleston—Federal Office—Treas. Dept., Wash., D. C., appropriated about $60,000 for federal building here. J. A. Wetmore, Wash., D. C., superv. archt.

BIDS DESIRED

N. Y., West Point—Barracks, etc.—Until Mar. 27, by Quartermaster, building south wing of south cadet barracks and guard house; advertised in this issue.

Pa., Phila.—Cranes—Until Mar. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing two 150 ton electric traveling cranes here; Spec. 3777. About $70,000; $10 deposit required for plans and spec.

Del., Wilmington—Dredging—Until Mar. 31, by U. S. Eng. Office, Old Federal Bldg., dredging Tuckerton Creek, N. J.

Md., Indianhead—Incinerator—Until Mar. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Proving ground; Spec. 3790. About $7000; $10 deposit required for plans and spec. Noted Feb. 6.

D. C., Bellevue—Fuse and Primer House—Until Mar. 17, by Bureau Yards & Docks, Navy Dept., Wash., building fuse, primer storehouse and loading shop; Spec. 3737. About $25,000; $10 deposit required for plans and spec. Noted Jan. 2.

W. Va., Wheeling—Valve Operating Machinery—Until Mar. 24, by U. S. Eng. Office, Old Federal Bldg., furnishing and delivering valve operating machinery for Dams 23, 25 and 27, Ohio River; advertised in this issue.

Fla., Pensacola—Boatshed—Until Mar. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building wet basin boat shed; Spec. 3472. About $60,000.

Ky., Greenup — Lack and Abutment — Until Mar. 29, by U. S. Eng. Office, 1st. Dist., Cincinnati, O., building lock and abutment for Dam No. 30, Ohio River, near here; advertised in this issue.

O., Akron—Post Office—Until Mar. 21, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., altering post office.

O., Cincinnati — Bear Trap Leaves — Until Apr. 4, by U. S. Eng. Office, 1st Dist., delivering and erecting bear trap leaves for Dam No. 30, Ohio River; advertised in this issue.

Kan., Eldorado—Post Office—Until Apr. 4, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office. Noted Feb. 27.

Neb., Omaha—Pumps, etc.—Until Apr. 15, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing 3 electric triplex elevator pumps, in courthouse, etc., here; advertised in this issue.

Mo., St. Louis—Drainage—Until Mar. 26, by Mississippi River Comn., 1311 International Bldg., constructing 47,000 cu.yd. earthwork in East Cape Girardeau and Clear Creek D. D., Ill.; advertised in this issue.

Tex., Honey Grove—Post Office—Until Apr. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Chelsea—Kitchen Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Naval Hospital Reservation here, to Morandi-Proctor Co., 86 Washington St., Boston, $5270 (50 days). Noted Feb. 6.

★Tiverton, R. I.—Dry Dock—U. S. Shipping Bd., Emergency Fleet Corp., Phila., Pa., let contract building 20,000 ton floating dry dock, to Naragansett Shipbuilding Corp., Tiverton. About $1,000,000. Work involves 3000 tons steel and 4,000,000 ft. timber.

★N. Y., Jamaica—Pontoons—U. S. Shipping Bd., Emergency Fleet Corp., Phila., Pa., let contract building 33 timber pontoons at Jamaica Bay, Mill Basin, to Atlantic Gulf & Pacific Co., Mill Island. About $1,000,000.

★N. Y., Kingston—Dry Dock—U. S. Shipping Bd., Emergency Fleet Corp., Phila., Pa., let contract building 20,000 ton floating dry dock, to Kingston Shipbuilding Co., Island Dock. About $1,000,000. Work involves 3000 tons steel and 4,000,000 ft. timber.

★N. Y., Rockaway—Addition to Dispensary—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Rangeley Constr. Co., 405 Lexington Ave., New York City, $22,444 (120 days). Noted Feb. 27.

★N. Y., Rockaway—Seaplane Hangar—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Post & McCord, 101 Park Ave., New York City, $40,190. Noted Feb. 27.

N. Y., Walden—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Mar. 3, (1) limestone; (2) sandstone, from J. Miles & Sons Co., 393 Main Grove, Worcester, Mass., (1)

Federal Government Work (Continued)

$67,449; (2) $68,049; Wills Egelhof Co., 101 Park Ave., New York City, (1) $67,674; J. L. Robinson Constr. Co., 66 Knickerbocker Bldg., Baltimore, Md., (1) $68,000. Noted Feb. 6.

★**N. Y., Wards Island**—Refrigerating Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Naval Hospital Reservation here, to Frick Co., Inc., West Main St., Waynesboro, Pa., $21,074 (93 days). Noted Feb. 20.

★**Pa., Ft. Mifflin**—Tank and Tower—U. S. Eng. Office, Phila., let contract building steel water tank and tower here, to Pittsburgh-Des Moines Steel Co., 50 Church St., New York City, $6755. Noted Jan. 30.

★**Pa., Ft. Mifflin**—Water Pipe Line—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to M. J. B. McHugh, 892 North Markoe St., Phila., $30,877 (94 days). Noted Jan. 16.

★**Pa., Phila.**—Substation for Foundry, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building substation for foundry and piers at Navy Yard, here to Wark Co., 1737 Filbert St., $7695 (45 days).

Md., Baltimore—Hospital—J. A. Wetmore, superv. archt., treas. dept., Wash., D C., received bids Mar. 3, (1) building hospital unit A, (2) special hospital unit; (3) extensions and alterations to kitchen and mess hall; (4) attendants' quarters, etc., at U. S. Hospital here, from Newport Contg. & Eng. Co., Silsby Bldg., Newport News, Va., total $49,533; D. M. Andrew Co., Mt. Vernon Ave., total $61,000; H. S. Roberts & Co., 1123 Bway., New York City, total $63,900; Price Constr. Co., 210 Maryland Trust Bldg., (1) $24,900; (2) $37,300; (3) $9200; (4) $18,500; L. J. Eichner, Fayette and Liberty St., (1) $18,448; (2) $19,973; (3) $8929; (4) $10,788. Noted Feb. 13.

★**D. C., Wash.**—Barges—Inland Waterways Comn., Wash., let contract building 4 steel barges, to Star & Bennett, Newburn, N. C., $330,000.

★**D. C., Wash.**—Bridge—Dist. Comrs., Dist. Bldg., let contract building concrete encased steel plate girder bridge on South Dakota Ave. over tracks of Baltimore & Ohio R.R. (work complete) to C. Thompkins, 1883 3rd St., N. W., $32,406. Noted Feb. 20.

★**D. C., Wash.**—Hygienic Laboratory—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building with materials furnished by Government, to Boyle-Robertson Constr. Co., Inc., 601 Evans Bldg., $87,821 (6 months). Noted Jan. 23.

D. C., Wash.—Sidewalks—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 3, laying cement sidewalks, here, (1) and (2) price per sq.yd., from A F. Brenizer, 101 New York Ave., N. E., (1) $199; (2) $219; M. Bonomo & Co., 1605 Lexington Ave., New York City, (1) $295; (2) $312; A. C. Moses Constr. Co., 916 New York Ave., N. W., (1) $408; (2) $470. Noted Feb. 20.

★**Va., Arlington**—Roadway and Walks—C. S. Ridley, U. S. Engr., Wash., D. C., let contract building macadam roadway and gravel walks, to L. M. Johnston, Arlington. About $15,000.

Va., Norfolk—Dredging—U. S. Eng. Office, Norfolk, received lowest bid dredging Norfolk channel from Hampton Roads to Norfolk & Western Ry. bridge, from F. E. Jones, Norfolk, $1,026,500. Plans include dredging 64 acres anchorage in Norfolk Harbor between Craney Island lighthouse and railways coal piers to minimum depth at mean low water of 35 ft., widening 12 mi. channel from Hampton Roads to Norfolk & Western Ry. bridge, 300 yd. wide with minimum depth at mean low water of 40 ft., building bulkhead of brush and stone around Craney Island flats over distance of 6000 ft.

Va., Norfolk—Grandstand and Bleachers—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 3, building at Naval Operating Base:

(1) net price and time for grandstand complete with grading immediately around building in accordance with drawings and specifications.

(2) net price and time for bleachers marked "B" complete with grading immediately around same in accordance with drawings and specifications. In connection with proposals on (2) bidder shall state net amount to be deducted for each 12 ft. bay omitted from bleachers "B" as in making award it may be desired to reduce length of bleachers by omitting one or more bays, from

Harwood & Moss, 307 Law Bldg., Newport News, Va., (1) $47,630 (110 days), (2) $16,800.

H. S. Roberts Co., 1123 Bway., New York City, (1) $51,151, (120 days); (2) $17,035.

Oscawana Bldg. Co., 101 Park Ave., New York City, (1) $56,700 (120 days); (2) $17,000 (120 days). Noted Feb. 27.

★**La., New Orleans**—Paint Shop and Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Sta., to J. A. Petty, 608 Godchaux Bldg., $22,000 (100 days.) Noted Feb. 6.

Mo., St. Louis—Surgical Dressing Room—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids building in U. S. Marine Hospital here, from P. H. Wall, St. Louis, $4980; W. MacDonald Constr. Co., St. Louis, $5166; W. Boencke, Maplewood, $5562. Noted Jan. 30.

★**Tex., Ft. Worth**—Cooling Pond—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at argon production plant, to Cooling Tower Co., 15 John St., New York City, $18,000 (145 days). Noted Feb. 27.

Cal., San Diego—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 3, building 7 rein.-con. hollow tile barracks at Marine Corps Base, concrete flooring and foundation, consisting of barracks A, 2 story, 42 x 182 ft., with 1 story, 41 x 66 ft. dormitory wings, 1 story, 29 x 43 ft. kitchen wing, barrack C, 154 x 182 ft. ell shaped, with 41 x 92 ft. and 41 x 73 ft. dormitory wings, 14 ft. connecting arcade, etc.

(1) net price and time for work complete in accordance with drawings and specifications.

(2) amount to be deducted from net price under (1) if toilet and wash rooms are finished as specified under alternative No. 1, paragraph No. 286, of specifications.

(3) net price and time for buildings A-2 to A-6 inclusive, and C-1 in accordance with drawings and specification.

(4) amount deducted from net price under (2) if toilet and wash rooms are finished as specified under alternative No. 1, paragraph No. 286, of specification.

(5) net price and time for buildings A-3 to A-6 inclusive and C-1 in accordance with drawings and specifications.

(6) amount deducted from net price under (5) if toilet and wash rooms are finished as specified under alternative 1, paragraph No. 286, of the specifications.

(7) price per lin.ft. for concrete piles in place to be used as specified in paragraph No. 36.

(8) price per cubic yard for preliminary excav. and disposal of excavated material in accordance with provisions of paragraph No. 28.

(9) amounts, (a) (b) and (c) to be deducted from or added to prices stated under (1), (3) and (5) respectively, for arranging and equipping all casement windows to swing inward in accordance with requirements of "Alternative Construction No. 2" as specified in Addendum No. 1, including all costs in connection with use of outside fixed screens instead of inside swinging screens and any other costs incident to such alternative construction, from

H. F. Friestedt Co., 327 South La Salle St., Chicago, Ill., (1) $1,191,835 (12 months); (2) $36,757; (3) $1,021,872; (4) $31,626; (5) $852,146; (7) add $1.75, deduct $0.55; (8) add $1.25; (9) (a) $14,700, (b) $12,677, (c) $10,642.

Paschen Bros., 111 West Washington St., Chicago, Ill., (1) $1,390,000 (time as specified); (2) $30,000; (3) $1,197,000; (4) $26,000; (5) $998,000; (6) $22,000; (7) $1.76; (8) $1.50.

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., submitted bid to San Diego. Amount of bid not known in Wash., D. C. Noted Feb. 13.

BARGE CANAL WORK—NEW YORK

Contract No. 69

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, for p ecting shore of Erie Basin between Lake St. and Slip No. 1, Buffalo, from (A) R. Bush, Tonawanda, (awarded contract); (B) Mohawk Dock & Dredge Co., Manion Blk Herkimer; (C) G. Park Sons Co., 217 15th St., Buffalo. The unit bids were as follow

	A	B	C
150 cu.yd. excavation	$3 00	$3 00	$3 60
300 cu.yd. cinder backfill	1 50	1 50	1 75
19 M.ft.b.m. sawed lumber	105 00	130 00	140 00
100 cu.yd. stone filling in cribs	104 80	4.50	4 75
110 cu.yd. second-class concrete	18.00	22.00	25 00
900 lb. structural steel	18 11	.10	10 10
60 cu.yd. first-class riprap	7.26	6.00	6 00
Total	$5,886.00	$6,690.00	$7,400 00

Contract No. 57

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, constructing certain parts of an approach from Court St. and South Ave. to Barge Canal Terminal at Rochester, from (A) C. Kiehn, Gardner Bldg., Utica, (awarded contract); (B) Lupfer & Remick, Ellicott Sq., Buffalo; (C) M. Ludington Sons, Inc. 124 Powers Bldg., Rochester. The unit bids were as follows:

	A	B	C
13,900 cu.yd. excavation	$1.24	$0 75	$1 25
12,650 cu.yd. forming embankment	.25	.15	25
42 cu.yd. 1: 1½: 3 reinforced concrete	24.00	28 00	28 00
1,340 cu.yd. first-class reinforced concrete	22.50	28 00	26 00
180 cu.yd. second-class concrete in column bases	16.73	24 00	25 00
2,285 cu.yd. second-class concrete, except as provided for by Item No. 5	13.42	15 00	12 00
1,490 lin.ft. concrete balustrade	4 00	4 00	4 00
143 cu.yd. stone filling for cribs	3 00	3 00	3 00
23 M.ft.b.m. timber in temporary cribs and fender	77 00	90 00	80 00
Wooden stairway (lump sum)	100.00	75 00	100 00
294,000 lb. metal reinforcement	.06	.057	07
935 lin.ft. metal curb bar	.42	.25	50
7,000 lb. cast-iron drains and outlet pipes	.07	.08	07
126 lin.ft. pipe railing	2.30	1 50	2 50
11 lamp poles	50.00	45.00	50 00
1,525 lb. metal duct	.25	.20	25
796 lin.ft. 3-in. fibre duct	.20	.15	20
120 lin.ft. 10-in. vitrified pipe and specials	.65	.70	70
163 lin.ft. 12-in. vitrified pipe and specials	.95	.70	1 00
168 lin.ft. 15-in. vitrified pipe and specials	1.22	1 00	1 30
1,675 sq.yd. brick pavement	2.87	3.00	2 25
2 manholes	110.00	100.00	110 00
6 gutter basins	65.00	60.00	70 00
24,200 sq.ft. waterproofing concrete	.0325	.02	035
167 lin.ft. drilling holes in existing masonry	1.50	1.00	1 50
10 cu.yd. relaying masonry	5.00	5 00	5 00
500 lin.ft. pointing masonry	.30	30	30
Removing superstructure of change bridge (lump sum)	10.00	10.00	50 00
Maintaining traffic for pedestrians (lump sum)	100.00	100 00	100 00
Extended totals	$120,598	$123,962	$126,067

Miscellaneous

PROPOSED WORK

Coaling Station—Cape Vincent, N. Y.—G. Pyke of Pyke Towing & Salvage Co., 506 Princess St. Kingston, Ont., arranged with New York Central R. R. for large part of dock and wharfage facilities, and plans to build lake steamer coaling station with 200 ton per hour capacity.

Dock and Pavilion—Chaumont, N. Y.—Jefferson Co. Sportsmen's Assn. informed by New York State Conservation Comn. that state aid will be forthcoming for erection of concrete dock and pavilion; also necessary dredging, on Long Point, Chaumont Bay. About $20,000. B. C. Dennison, secy.

Playground, etc.—Syracuse, N. Y.—See "Buildings."

Dam, etc. — Watertown — Northern New York Utilities, Inc., Light & Power Bldg., plans to develop power at Brown's Falls. Plans include building dam, power house, flume and tailrace, on Oswegatchie River. J. B. Taylor, Watertown, pres.

Park and Golf Links—Maplewood, N. J.—South Orange Twp. plans to acquire 8½ acre site for park and public golf links.

Meadow Development—Newark, N. J.—Dept. Sts. and Pub. Impvts. petitioned legislature to issue $500,000 additional bonds for meadow development. Plans include filling, grading and paving Haynes Ave. from Weston Ave. to Port St. A. Raymond, dir.

Hydraulic Riveter and Flanging Machine—Baltimore, Md.—Bartlett, Hayward Co., Scott and McHenry St., plans to install hydraulic riveter with 12 in. gap to drive 1 in. rivets, 1000 lb. W. P. and 14 in. hydraulic flanging machine, 100 tons, in proposed ship repair plant. Project is temporarily in abeyance, due to holding up of appropriations by Congress and failure of U. S. Shipping Bd. to co-operate.

Pier and Bulkhead—Baltimore, Md.—Bd. Awards soon lets contract building creosote treated wood pier on creosoted wood piles, and creosote treated timber bulkhead, both 300 ft. long, pier 37 ft. wide, at Bodkin Creek opposite Ft. Howard. About $25,000. B. P. Harrison, Recreation Pier, foot of Bway, city harbor engr.

Bulkhead—Curtis Bay (Baltimore P. O., Md.)—See "Industrial Works."

Jetties—Ft. Pierce, Fla.—City plans to issue $80,000 bonds; $65,000 to be used to construct protective jetties to extend into ocean, 300 ft. on south side and 600 ft. on north side of inlet; $13,000 to dredge waterway deeper from ocean to Indian River, involving 80,000 yds. excav. Cunningham & Hollowes, Ft. Pierce, engrs., Isham Randolph & Co., Barnett Bldg., Jacksonville, consultg. engrs.

Harbor Improvements—Safety Harbor, Fla.—Town plans to improve harbor. Work includes shelled driveway and filling to end of present seawall from which dock will be built 150 ft. out. Channel will be dredged at end of dock to be 80 ft. wide and 6½ ft. deep at low tide; also small pier on palmetto piling will be built to extend from dock and turning basin dredged around short dock. About $11,000. C. R. Knight, 710 Southern Blvd., Tampa, engr.

Transmission Line — Farmington, Ill. — Central Illinois Light Co., 316 South Jefferson Ave., Peoria, filed application with Utilities Comn. to install 13,000 volt transmission line from here to Gilchrist, 9 mi. long.

Memorial Center—La Crosse, Wis.—City plans to establish soldiers' and sailors' memorial and civic center. Work involves relocation of streets and railroad, development of several new buildings as social centers and adoption of zone system for building regulations. About $300,000. J. Nolen, Cambridge, engr.

Monument—Long Prairie, Minn.—Comrs. Tood Co. soon receive bids building soldiers' and sailors' monument. About $15,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Miscellaneous — St. James, Mo. — See "Buildings."

Extending Cemetery—Pendleton, Ore.—City plans to extend Olney cemetery 1730 sq. rods northward to paved road.

Pier—Seaside, Ore.—City having plans prepared for 2000 ft. pier, creosoted pitch. G. Boschke, engr.

Crushed Rock—Visalia, Cal.—Bd. Supervs. Tulare Co. received no bids Feb. 21, furnishing crushed rock for Springerville-Worth Rd. F. M. Pfrimmer, superv., authorized to purchase rock. Noted Feb. 6.

BARGE CANAL WORK—NEW YORK

Contract No. 107

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, for installing electric wiring, lighting, power and battery charging equipment for canal terminal at Erie Basin, Brooklyn, from (A) J. Livingston Co., 70 East 45th St., New York City; (awarded contract); (B) G. E. Eng. Co., Inc., 417 Canal St., New York City; (C) Lupfer & Remick, Ellicott Sq., Buffalo. The unit bids were as follows:

	A	B	C
14,000 lb. metal duct and fastenings	$0.15	$0.2375	$0.20
400 lin.ft. No. 12 single rubber-insulated braided conductors	.04	.055	.06
1,030 lin.ft. No. 6 single rubber-insulated braided conductors	.08	.125	.11
1,800 lin.ft. No. 2 single rubber-insulated braided conductors	.18	.17	.20
780 lin.ft. No. 1 single rubber-insulated braided conductors	.23	.245	.25
2,900 lin.ft. No. 000 single rubber-insulated braided conductors	.37	.36	.40
160 lin.ft. No. 0000 single rubber-insulated braided conductors	.47	.60	.35
8,500 lin.ft. No. 12 duplex rubber-insulated braided conductors	.07	.075	.09
960 lin.ft. No. 12 single lead-covered rubber-insulated braided conductors	.14	.08	.10
950 lin.ft. No. 6 single lead-covered rubber-insulated braided conductors	.17	.19	.15
440 lin.ft. No. 4 single lead-covered rubber-insulated braided conductors	.29	.205	.27
800 lin.ft. No. 2 single lead-covered rubber-insulated braided conductors	.31	.275	.25
1,850 lin.ft. No. 1 single lead-covered rubber-insulated braided conductors	.35	.30	.30
200 lin.ft. No. 000 single lead-covered rubber-insulated braided conductors	.60	.56	.56
600 lin.ft. No. 0000 single lead-covered rubber-insulated braided conductors	.68	.56	.50
100 lin.ft. 250,000 c.m. single lead-covered rubber-insulated braided conductors	.85	.97	.77
600 lin.ft. 500,000 c.m. single lead-covered rubber-insulated braided conductors	1.05	1.125	1.00
320 lin.ft. No. 6 Triplex lead-covered rubber-insulated braided conductors	.46	.60	.60
100 lin.ft. No. 2 Duplex rubber-insulated braided flexible cable	.46	.53	.50
50 lin.ft. No. 0000 Duplex rubber-insulated braided flexible cable	1.64	1.80	1.50
1,900 lin.ft. No. 00 bare trolley wire	.13	.14	.16
58 lighting fixtures "a"	14.50	14.05	14.00
22 lighting fixtures "b"	7.50	11.10	10.00
2 lighting fixtures "c"	140.00	49.00	51.50
8 lighting fixtures "d"	4.12	5.50	5.00
5 lighting fixtures "e"	3.60	4.40	4.60
9 lighting fixtures "f"	3.67	5.90	5.00
5 lighting fixtures "g"	6.20	9.40	6.60
88 lighting fixtures "h"	7.90	8.90	7.00
46 lighting fixtures "i"	9.80	10.70	8.50
1 lighting panel board "i" with doors and trim (lump sum)	58.00	54.00	33.00
2 lighting panel boards "II" and "III" with doors and trim	45.00	44.00	55.00
8 lighting panel boards "IV" to "XI" with cabinets	103.75	89.00	66.00
2 lighting panel boards "XII" and "XIII" with cabinets	77.50	65.00	51.00
36 push-button switches	1.30	1.33	1.50
32 receptacle outlets	1.55	1.70	1.50
4 safety-first enclosed fused lever switches "q"	47.50	20.00	15.00
23 power outlet receptacles "p"	25.00	32.20	15.00
46 trolley brackets	8.00	9.50	5.00
8 strain insulators and supporters	5.25	5.00	3.00
1 main switchboard (lump sum)	2,700.00	2,786.00	3,250.50
1 substation switchboard (lump sum)	2,320.00	2,079.00	1,850.00
1 25-k.w. motor-generator set (lump sum)	2,600.00	2,531.00	2,400.00
2 50-k.w. motor-generator sets	3,100.00	3,308.65	4,000.00
3 10-k.v.-ampere transformers	266.00	279.00	350.00
1 .v.-ampere transformer (lump sum)	85.00	84.00	100.00
Installing capstans (4) (each)	132.50	44.00	50.00
Trolley hoist bracket (lump sum)	200.00	237.00	400.00
Installing electric trolley hoist (lump sum)	35.00	112.00	25.00
Battery bench (lump sum)	140.00	112.00	110.00
4 battery-charging connector panels "X"	37.50	29.00	25.00
Extended totals	$28,239	$29,263	$29,592

Contract No. 223

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, constructing Barge Canal Terminal freight shed at Greenpoint, Brooklyn, from (A) Post & McCord, 101 Park Ave., (awarded contract); (B) Harris Structural Steel Co., 1480 B'way.; (C) Carleton Co., Inc., all contractors of New York City. The unit bids were as follows:

	A	B	C
54 M.ft.b.m. sawed lumber	$92.00	$120.00	$120.96
34 cu.yd. first-class concrete	19.00	20.00	28.80
18 cu.yd. cinder concrete	6.00	10.00	9.52
594,500 lb. structural steel	.062	.0562	.06423
450 sq.ft. 8-in. terra cotta tile	.50	.40	.474
300 sq.ft. 6-in. terra cotta tile	.45	.35	.384
2,100 sq.ft. 4-in. terra cotta tile	.37	.26	.312
610 sq.ft. wood flooring	.16	.35	.224
2,500 sq.ft. solid metal windows	.85	.90	.8428
12 windows and sash	54.00	60.00	40.32
2 plain metal covered doors, 3 ft. 0 in. by 7 ft. 6 in	58.00	60.00	46.48
6 glazed metal covered doors, 3 ft. 0 in. by 7 ft. 6 in	58.00	68.00	46.48
6,048 sq.ft. warehouse doors	3.18	3.45	3.232
9,800 sq.ft. corrugated metal siding	.29	.38	.347
4,900 sq.ft. flashing	.37	.42	.42
21,900 sq.ft. roof covering	.12	.13	.1277
810 lin.ft. gutters	1.50	1.50	1.657
240 lin.ft. corrugated conductors	.68	.60	.474
250 lin.ft. 4-in. pipe conductors	2.05	1.60	1.61
4 flag poles	25.00	30.00	36.00
4 24-in. ventilators	35.00	34.00	36.96
1 8-in. ventilator	20.00	17.00	18.00
Extended totals	$75,719	$76,998	$79,920

BARGE CANAL WORK—NEW YORK, N. Y.

Contract No. 200

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, for driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport, from (A) Lupfer & Remick, Ellicott Sq., Buffalo; (B) Walsh Constr. Co., 114½ West 3rd St., Davenport, Ia.; (C) Lathrop, Shea & Henwood Co., Ellicott Sq., Buffalo; (D) Empire Eng. Co., Inc., 6 Church St., New York City, $192,215; (E) W. F. Martens, Cutler Bldg., Rochester, $192,767; (F) Troy Public Wks., Inc., Utica, $193,960; (G) J. W. Dawson & R. Provo, Syracuse, $195,888; (H) Mohawk Dredge & Dock Co., Manion Blk., Herkimer, $202,515; (I) The Foundation Co., 233 Bway., New York City, $205,976; (J) J. W. Holler, Ft. Edward $219,450; (K) Sperry Eng. Co., New Haven, Conn., $225,891; (L) P. H. Murray, Cutler Bldg., Rochester, $229,110; (M) Scott Bros., Rome, $235,437. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
5,300 cu. yd. excavation	$1.68	$1.68	$1.68
22 M. b.m. sheeting and bracing	95.00	85.00	114.00
770 cu.yd. forming embankment	.20	.20	.24
2,300 sq.ft. ¼-in. steel sheet piling	.80	.75	1.68
77,000 sq.ft. ⅜-in. steel sheet piling	1.18	1.20	1.28
79,300 sq.ft. steel sheet piling (driving)	.31	.35	.32
2,900 cu.yd. 2nd-class concrete	15.00	15.00	15.00
500 cu.yd. wash wall	3.30	3.50	3.60
460 lb. structural steel	.10	.10	.12
1,040 lb. metal reinforcement	.10	.10	.12
730 cu.ft. removing concrete	.75	.90	.90
Sawing off existing wooden sheet piling (lump sum)	30.00	25.00	30.00
22,700 sq.ft. tar felt waterproofing	.20	.15	.216
Cofferdams, pumping, bailing and draining (lump sum)	1,400.00	1,440.00	1,440.00
Extended totals	$180,249	$183,735	$191,907

Contract 201

Bids were received by Lewis Nixon, supt. pub. wks., Capitol, Albany, for completing concrete prism lining at Cartersville and constructing stream entrance near Knapp's Bridge, from (A) I. M. Ludington Sons, Inc., 124 Powers Bldg., Rochester; (B) Michael H. Ripton, Rochester; (C) Amer. Pipe & Constr. Co., 112 North Broad St., Phila.; (D) E. W. Foley Contg. Corp., New York City, $49,786; (E) Cleveland & Sons Co., Brockport, $53,255; (F) Rosoff Eng. Co., 15 Park Row, New York City. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
8,870 cu.yd. excavation	$1.20	$1.25	$1.60
3,930 cu.yd. forming embankment	.15	.15	.15
2,400 cu.yd. 2nd-class concrete	10.00	11.25	11.50
3,220 sq.yd. excavating concrete slab	.75	.65	.75
160 cu.yd. 3rd-class rip-rap	4.50	4.50	4.50
360 cu.yd. wash wall	3.50	3.50	3.30
2,250 sq.ft. wire mesh reinforcement	.055	.055	.055
50 lin.ft. cutting steel sheet piling	1.25	1.25	1.25
10 lin.ft. 2-in. iron pipe	1.00	1.00	1.00
Cofferdams, pumping, bailing and draining (lump sum)	3,000.00	2,500.00	2,600.00
Extended totals	$42,825	$45,446	$49,501

PIER—PHILADELPHIA, PA.

Bids were received by Department of Wharves, Docks & Ferries, Feb. 14, for constructing Kenilworth St. Pier No. 30, South Wharves, from (A) F. W. Mark Constr. Co., Inc., Finance Bldg., (awarded contract); (B) Post & McCord, 101 Park Ave., New York City; (C) Hughes-Foulkrod Co., Commonwealth Bldg.; (D) Empire Eng. Co., Inc., 1206 South 31st St., $973,600; (E) William Steele & Sons Co., 16th and Arch St., $987,210; (F) McArthur Bros. Co., 120 B'way. New York City, $988,332; (G) Snare & Triest Co., Penn Bldg., $990,990; (H) Raymond Concrete Pile Co., Finance Bldg., $1,000,560; (I) Warren Moore & Co., 13th and Market Sts., $1,161,100; (J) Brown & Simpson, $1,505,727; (K) Arthur McMullen & Co., 149 B'way. New York City, $1,524,205. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
Entire work (lump sum)	$763,800.00	$780,000.00	$853,000.00
100,000 cu.yd. dredging	.41	.40	.36
800 tons rip-rap	5.00	7.00	3.60
30,000 tons gravel or cobble fill	2.00	1.50	1.32
5,000 sq.yd. sheet asphalt paving	2.40	3.00	2.09
5,000 sq.yd. asphalt block paving	3.60	3.25	3.30
1,200 sq.yd. repaving granite block	1.10	1.10	.92
1,000 hrs. mechanics with tools	1.00	1.50	1.10
1,000 hrs. laborers with tools	.70	1.00	.55
10 days dredging plant, 10-hr. day	260.00	300.00	255.00
10 days dredging plant, 20-hr. day	400.00	600.00	500.00
Extended totals	$908,420	$914,670	$968,734
Unit prices for additional work:			
Bearing piles (per pile)	$45.00	$35.00	$37.00
Spur piles (per pile)	50.00	36.00	40.00
Pile shoes (per shoe)	5.00	3.00	3.00
Sheet piling (per hor.ft.)	50.00	28.00	37.00
New sawed yellow pine (per M.ft.b.m.)	190.00	128.00	120.00
Bolts, nuts, washers, nails, etc. (per lb.)	.15	.11	.11
No. 1 concrete (per cu.yd.)	24.00	17.60	37.00
No. 2 concrete (per cu.yd.)	12.50	16.50	18.00
Reinforcing steel (per lb.)	.05½	.08½	.07
Bollards (each)	150.00	172.00	85.00
Mooring posts (each)	260.00	450.00	150.00
Corner protection shapes (per lb.)	.10	.20	.10

Miscellaneous (Continued)

Drydock—Three Rivers, Que.—Tidewater Shipbuilding Co. having plans prepared for drydock to cost $100,000; pile work, $40,000.

BIDS DESIRED

Miscellaneous Supplies — Albany, N. Y.—Until Mar. 18, by State Highway Comn., Capitol, Albany, furnishing Contr. 1, bituminous material, cold patch asphaltic emulsion in Div. 1. 2, 3, 4 and 5; Contr. 2, bituminous material cold patch asphaltic emulsion in Div. 6, 7, 8 and 9; Contr. 3, bituminous material asphaltic cut back; Contr. 4, bituminous material A, binder; Contr. 5, bituminous material A, light cold oil and light hot oil; Contr. 6, bituminous material T, cold patch, Contr 7, bituminous material T, binder and cold application; advertised in this issue.

Break in Levee—El Centro, Cal.—Until Mar. 18, by Imperial Irrigation Dist., closing break 5600 ft. wide in levee in Mexico involving 92,000 cu.yd. earthwork, 8 mi. leverment on Volcano Lake levee in Mexico and 120,000 yd. rock from district quarries.

Subway, Foundation, etc.—St. Boniface, Man.—Until Mar. 20, by E. Gagnon, secy. provencher bridge com., for excavating and building foundation and superstructure for Water St. subway.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Castings — New York, N. Y. — N. J. Hayes, comr. water supply, gas and electricity, let contract furnishing, delivering, unloading, stacking and storing c.i. valve box castings, to J. Fox & Co., 253 Bway., $6152. Noted Feb. 27 under "Waterworks."

Rebuilding Ferry Racks — New York, N. Y.—J. A. Delaney, comr. plant and structures, received bids Feb. 26, rebuilding ferry racks at Manhattan Terminal of Staten Island ferry; lowest 3 were A. M. Hazell, Inc., 26 Cortland St., $78,758; A. N. Spooner & Son, Pier 11, North River, $80,441; P. T. Cox Contg. Co., 154 Nassau St., $89,600. Noted Feb. 20.

Tractors—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., received bids Feb. 28, furnishing and delivering 7 tractors, from Yorkville Motor Co., 1324 Lexington Ave., Ford, $8750, Dodge, $11,970; W. J. B. Motor Truck Co., $11,410; Kaufman-Stowers Co., $12,521. Noted Feb. 27.

★Boilers—Piping, etc.—Utica, N. Y.—L. F. Pilcher, state archt., Capitol, Albany, let contract installing boilers in central heating plant here, to McNaul Boilers Co., 983 Front St., Toledo, O., $58,130; heating and piping, to W. B. Armstrong Co., Fulton St., Albany, $39,640. Noted Feb. 20.

★Lighting System—Jersey City, N. J.—Nagle Packing Co., 683 Henderson St., let contract installing electric lighting system in plant, to W. Coleman, Willow Court. About $19,000.

Repairing Fenders—Newark, N. J.—Bd. Freeholders Essex Co., received bids Feb. 26, repairing fenders on (1) Lincoln Highway bridge over Hackensack River, (2) Lincoln Highway bridge over Passaic River, (a) price per pile (b) price per M for 30,000 ft. sheathing pine (c) price per M for 20,000 ft. sheathing pine, from Linde & Griffiths, foot of 4th Ave. (1a) $87.50, (1c) $337; Stillman-Delehanty-Ferris & Co., 26 Exch. Pl., Jersey City, (2a) $85, (2b) $325. Noted Feb. 20.

★Relining Culvert—Petersburg, Va.—City let contract relining brick house run culvert with rein.-con., to W. P. Thurston Co., Merchants Bank Bldg., Richmond. About $18,000. Work involves 50 cu.yd. earth and 200 cu.yd. rock excav., 75 cu.yd. rein.-con. and 400 cu.yd. mass concrete.

EXPORT OPPORTUNITIES

A. & T. Burt, Ltd., Dunedin, N. Z., general importers and exporters, would like to establish connections with American manufacturers of machinery and fittings, engineering requisites, lighting fixtures and similar lines with view to handling their goods.

Briscoe & Co., Ltd., Crawford and Bond Sts., Dunedin, N. Z., importers of steel bars and plates, wire rope, etc., would like to establish connections with American manufacturers.

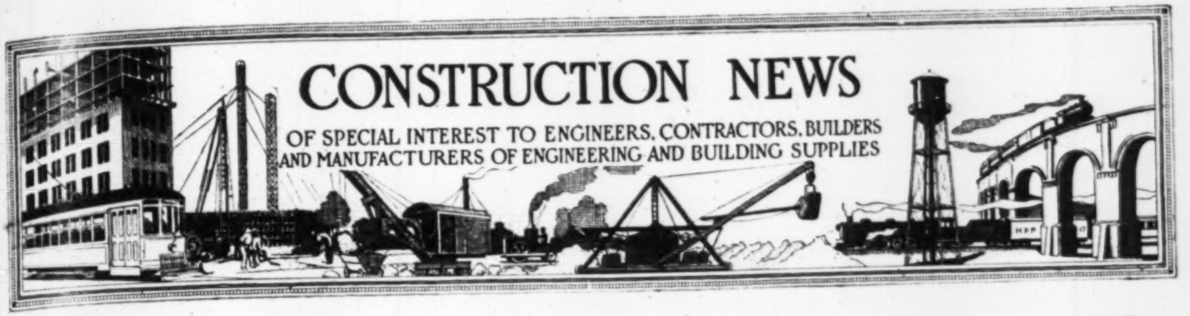
Mohamedally Abdoolally & Co., Iron Jathe, Carnac Bridge, Bombay, India, are desirous of establishing connections with American manufacturers of galvanized, corrugated and plain sheets, steel angles, fees and plates, hoops, pipes and pipe fittings.

W. Rakers, 21 Chineesche Voorstraat, Sourabaya, Java, would like to establish connections with American exporters of tools, hardware and machinery.

Osaka Boeki Kaisha, Ltd., Osaka, Japan, would like to establish connections with American dealers in chemicals and metals with view to securing Japanese and Korean representation.

Juan Ortoll Delmotte, Santa Cruz, Teneriffe (Canary Islands), would like to secure exclusive representation of American lines of motor cars and accessories, hardware, wire and nails.

Joseph Boubee & Cie., Alexandria, Egypt, general importers of chemicals, iron and steel, cement and building lines would like to establish connections with American manufacturers.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

For Proposals Advertised See Pages 88-93 inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Mar. 18	Wyandotte, Mich.	Feb. 20
Mar. 19	Hartford, Conn. Adv. Feb. 27 and Mar. 6.	Mar. 6
Mar. 20	Milwaukee, Wis. Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 21	Spencer, Ia.	Mar. 13
Mar. 24	Minot, N. D.	Mar. 6
Mar. 25	Jersey City, N. J. Adv. Feb. 27 and Mar. 13.	Feb. 20
Apr. 15	Duluth, Minn.	Mar. 13

SEWERS

Mar. 14	Trenton, N. J.	Feb. 27
Mar. 17	Harbor Beach, Mich.	Mar. 13
Mar. 18	New York, N. Y.	Mar. 13
Mar. 19	Greenfield, Ind.	Mar. 6
Mar. 19	New York, N. Y.	Mar. 13
Mar. 21	Granite City, Ill. Adv. Mar. 6.	Mar. 6
Mar. 24	Detroit, Mich.	Mar. 13
Apr. 1	Harrison, N. J.	Mar. 6
Apr. 1	Newark, N. J	Mar. 6
Apr. 2	Hamilton, Ont.	Mar. 13

BRIDGES

Mar. 17	Stuart, Va.	Mar. 6
Mar. 17	Minot, N. D.	Mar. 6
Mar. 18	Knoxville, Tenn. Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 19	Visalia, Cal.	Mar. 6
Mar '19	Denver, Colo.	Mar. 13
Mar. 20	Springfield, Mass. Adv. Feb. 27.	Feb. 27
Mar. 20	Chicago, Ill.	Mar. 13
Mar. 21	Chicago, Ill.	Mar. 13
Mar. 23	**Buckhannon, W. Va.**	**Feb. 13**
Mar. 24	Middlebourne, W. Va.	Mar. 6
Mar. 25	Jersey City, N. J.	Mar. 13
Mar. 27	Janeville, Wis. Adv. Mar. 6 and Mar. 13.	Mar. 6
Apr. 1	Peterborough, Ont.	Mar. 13
Apr. 11	Holyoke, Mass. Adv. Mar. 13.	Mar. 13
Apr. 16	**Ottawa, Ont.**	**Feb. 20**

STREETS AND ROADS

Bids Close		See Eng. News-Record
Mar. 14	Phila., Pa.	Mar. 13
Mar. 15	Atlanta, Ga.	Feb. 27
Mar. 15	Yazoo, Miss.	Mar. 6
Mar. 17	Washington	Mar. 6
Mar. 17	Riverside, Cal.	Feb. 27
Mar. 17	Tuscumbia, Ala.	Mar. 6
Mar. 17	Tunica, Miss.	Mar. 6
Mar. 17	Steubenville, O.	Mar. 6
Mar. 17	Kenilworth, Ill.	Mar. 13
Mar. 18	Ripley, W. Va.	Mar. 13
Mar. 18	Rutherford, N. J.	Mar. 13
Mar. 18	Dravosburg, Pa.	Mar. 6
Mar. 18	Kansas City, Mo. Adv. Feb. 27 and Mar. 6.	Feb. 27
Mar. 18	Santa Ana, Cal.	Feb. 27
Mar. 18	St. Louis, Mo.	Feb. 27
Mar. 18	St. Louis, Mo.	Feb. 20
Mar. 18	St. Cloud, Minn.	Mar. 6
Mar. 18	Manon, S. C.	Mar. 13
Mar. 18	St. Cloud, Minn.	Mar. 13
Mar. 18	New York, N. Y.	Mar. 13
Mar. 18	Newark, N. J.	Mar. 18
Mar. 19	Brooklyn, N. Y.	Mar. 13
Mar. 19	Baltimore, Md.	Mar. 13
Mar. 19	Oklahoma, Okla.	Mar. 13
Mar. 19	Newman, Ga.	Mar. 13
Mar. 19	Denver, Colo.	Mar. 13
Mar. 20	Logan, Ia. Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 20	Philippi, W. Va. Adv. Feb. 27 to Mar. 13.	Mar. 6
Mar. 20	Edgerton, Wis.	Mar. 6
Mar. 20	Rockford, Ill.	Mar. 13
Mar. 20	Williston, N. D.	Mar. 6
Mar. 20	Pennsylvania Adv. Feb. 27 to Mar. 13.	Mar. 6
Mar. 21	Seattle, Wash.	Mar. 13
Mar. 21	Rhode Island Adv. Mar. 13.	Mar. 13
Mar. 21	Washington	Mar. 13
Mar. 22	Oregon	Feb. 27
Mar. 22	Orillia, Ont.	Mar. 13
Mar. 24	Rugby, N. D.	Mar. 6
Mar. 24	Beaumont, Tex.	Mar. 6
Mar. 25	Bottineau, N. D.	Mar. 6
Mar. 25	Mt. Olive, N. C. Adv. Mar. 6 and 13.	Mar. 13
Mar. 25	Pillsburg, Pa.	Mar. 13
Mar. 26	Fairmont, W. Va. Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 26	Delaware, N. J.	Mar. 6
Mar. 27	Michigan	Mar. 13
Mar. 27	Devils Lake, N. D.	Mar. 6
Mar. 27	Center City, Minn.	Mar. 6
Mar. 27	New York, N. Y.	Mar. 13
Mar. 28	Anoka, Minn.	Mar. 13
Mar. 28	Dayton, O.	Mar. 6
Mar. 28	Pennsylvania Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 31	Lockport, N. Y.	Feb. 6
Mar. 31	Ottawa, Ont.	Feb. 27
Apr. 2	Gold Beach, Ore.	Mar. 13
Apr. 2	Michigan	Mar. 13
Apr. 2	Santa Ana, Cal.	Mar. 13
Apr. 3	Flemington, N. J. Adv. Mar. 13.	Mar. 13
Apr. 7	Moulton, Ala.	Feb. 20
Apr. 7	Salem, N. J. Adv. Mar. 13.	Mar. 13
Apr. 9	Hackensack, N. J. Adv. Mar. 13.	Mar. 13
Apr. 15	Greenville, Miss. Adv. Mar. 13.	Mar. 13
Apr. 22	Spencer, W. Va.	Mar. 13

EXCAVATION AND DREDGING

Mar. 17	Mason City, Ia.	Mar. 13
Mar. 18	El Centro, Cal.	Mar. 6
Mar. 19	Carthage, Ill. Adv. Mar. 6 and Mar. 13.	Feb. 20
Mar. 19	Quincy, Ill. Adv. Mar. 6 and Mar. 13.	Feb. 20
Mar. 20	Osceola, Ark.	Feb. 27
Apr. 4	Whiteside, Ill. Adv. Mar. 6 and Mar. 13.	Mar. 6
Apr. 8	Hollandale, Miss.	Feb. 13
Apr. 10	Newport, Ark.	Mar. 13

INDUSTRIAL WORKS

Mar. 14	Brooklyn, N. Y.	Mar. 13
Mar. 14	New York, N. Y.	Mar. 6
Mar. 19	Brooklyn, N. Y.	Feb. 20
Mar. 20	La Crosse, Wis.	Feb. 20
Mar. 20	Macon, Mo. Adv. Mar. 6.	Mar. 6
Mar. 20	Brooklyn, N. Y.	Mar. 13
Mar. 20	Watertown, N. Y.	Mar. 13
Mar. 21	Philadelphia, Pa.	Mar. 6
Mar. 21	Sydenham, Ont.	Mar. 13
Mar. 24	Newark, N. J.	Mar. 13
Mar. 25	Charleston, S. C.	Mar. 6
Mar. 28	New York, N. Y.	Mar. 13
Mar. 31	Orillia, Ont.	Mar. 6
Apr. 1	Quebec, Que.	Mar. 13
Apr. 1	**Sioux City, Ia.**	**Jan. 16**

BUILDINGS

Bids Close		See Eng. News-Record
Mar. 14	New York, N. Y.	Mar. 13
Mar. 15	Albany, N. Y. Adv. Mar. 6.	Mar. 6
Mar. 15	Detroit, Mich.	Mar. 13
Mar. 17	Brooklyn, N. Y.	Mar. 13
Mar. 17	Johnstown, Pa.	Feb. 20
Mar. 17	Brooklyn, N. Y.	Mar. 6
Mar. 18	Esquimalt, B. C.	Feb. 20
Mar. 18	New York, N. Y.	Mar. 13
Mar. 18	Huntington Park (Huntington P. O.) N. Y.	Mar. 13
Mar. 19	Chicago, Ill.	Mar. 13
Mar. 19	New York, N. Y.	Mar. 13
Mar. 19	Kingston, Ont.	Mar. 6
Mar. 20	Ottawa, Ont.	Mar. 6
Mar. 23	Dayton, O.	Mar. 13
Mar. 25	Bath, N. Y.	Feb. 27
Mar. 28	West Unity, O.	Feb. 27
Mar. 31	Ottawa, Ont.	Mar. 6
Mar. 31	Edgard, La.	Mar. 13
Apr. 2	Lansing, Mich.	Mar. 6
Apr. 2	New York, N. Y.	Jan. 23
Apr. 4	Seattle, Wash.	Mar. 13
Apr. 10	Newaygo, Mich.	Feb. 6
Apr. 15	Newark, N. J.	Feb. 6

FEDERAL GOVERNMENT WORK

Mar. 14	Hoistway, etc. — Easton, Pa. Adv. Feb. 27.	Feb. 27
Mar. 17	Wooden Pier and Approach — Spec. 3820 — Yorktown, Va.	Feb. 27
Mar. 17	Building—Spec. 3760—Annapolis, Md.	Feb. 27
Mar. 17	Fuse and Primer House—Spec. 3737—Bellevue, D. C.	Mar. 6
Mar. 17	Cranes—Spec. 3770—Philadelphia, Pa.	Mar. 6
Mar. 17	Incinerator—Spec. 3790—Indianhead, Md.	Mar. 6
Mar. 17	Argon Production Plant—Spec. 3800—North Fort Worth, Tex.	Mar. 13
Mar. 19	Post Office, etc., Woodward, Okla.	Feb. 20
Mar. 21	Post Office, Akron, O.	Mar. 6
Mar. 22	Roads—Great Falls, Mont.	Mar. 13
Mar. 24	Dredging — Wilmington, Del. Adv. Feb. 27 to Mar. 13.	Feb. 27
Mar. 24	Valve Operating Machinery —Wheeling, W. Va. Adv. Feb. 27 to Mar. 13.	Mar. 6
Mar. 24	Boatshead—Spec. 3472—Pensacola, Fla.	Mar. 6
Mar. 24	Fuel Oil Storage Plant—Spec. 3631—Mare Island (Valleyjo P. O.), Cal	Mar. 13
Mar. 24	Cranes—Spec. 3822—Boston, Mass.	Mar. 13
Mar. 24	Forced and Induced Draft Fans—Spec. 3793—Norfolk, Va.	Mar. 13
Mar. 24	Incinerator—Spec. 3790—Indian Head, Md.	Mar. 13
Mar. 24	Extension to Fresh Water System—Spec. 3805—Pensacola, Fla.	Mar. 13
Mar. 24	Forced and Induced Draft Fans—Spec. 3793—Philadelphia, Pa.	Mar. 13
Mar. 25	Remodeling Post Office, etc. —Providence, R. I.	Feb. 27
Mar. 26	Drainage—St. Louis, Mo. Adv. Feb. 27 to Mar. 13.	Mar. 6
Mar. 26	Post Office — Youngstown, O.	Mar. 13
Mar. 26	Grading—Wash., D. C. Adv. Mar. 13.	Mar. 13
Mar. 27	**West Point, N. Y.** Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 27	Post Office and Custom House, Albany, N. Y.	Mar. 13

Bids Close		See Eng. News-Record
Mar. 29	Lock and Abutment-Greenup, Ky. Adv. Feb. 27 to Mar. 13.	Mar. 6
Mar. 31	Coal—Memphis, Tenn. Adv. Mar. 6 and Mar. 13.	Feb. 27
Mar. 31	Dredging—Wilmington, Del. Adv. Mar. 6 and Mar. 13.	Mar. 6
Mar. 31	Power Plant Improvements—Spec. 3389—Pensacola, Fla. Adv. Mar. 13.	Mar. 13
Apr. 1	Cement—Conneaut Harbor, O.	Mar. 13
Apr. 2	Post Office—Honey Grove, Tex.	Mar. 6
Apr. 2	Sewer and Water Supply—Stapleton, N. Y.	Mar. 13
Apr. 4	Post Office—Eldorado, Kan.	Mar. 6
Apr. 4	**Bear Trap Leaves—Cincinnati, O.** **Adv. Mar. 6 and Mar. 13.**	Mar. 6
Apr. 15	Pumps, etc.—Omaha, Neb. Adv. Feb. 27 and Mar. 6	Mar. 6
Apr. 18	Post Office—Mt. Pleasant, Mich.	Mar. 13
Apr. 21	Post Office—Rinelander, Wis.	Mar. 13
Apr. 23	Post Office—Glimer, Tex.	Mar. 13

MISCELLANEOUS

Mar. 14	Electric Fixtures—Hudson, N. Y.	Feb. 27
Mar. 18	Miscellaneous Supplies—Albany, N. Y.	Mar. 6
Mar. 18	Miscellaneous Supplies—New Haven, Conn.	Mar. 13
Mar. 18	Miscellaneous Supplies—New York, N. Y.	Mar. 13
Mar. 19	Paving Blocks—New York, N. Y.	Mar. 13
Mar. 19	Trailers, etc.—New York, N. Y.	Mar. 13
Mar. 19	Miscellaneous Supplies—New York, N. Y.	Mar. 13
Mar. 19	Pipe—Ottawa, Ont.	Mar. 13
Mar. 20	Plant Operation—Springfield, Mass. Adv. Mar. 6 and 13.	Mar. 13
Mar. 20	Subway, Foundation, etc.—St. Boniface, Man.	Mar. 6
Mar. 25	Foundation—Philadelphia, Pa.	Mar. 13
Mar. 25	Air Compressor—Marion, Ind.	Mar. 13
Mar. 27	Pier—Philadelphia, Pa.	Mar. 13
Mar. 31	Boardwalk—Seaside, N. J.	Mar. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Gilboa—New York City having plans prepared by Bd. Water Supply, Municipal Bldg., New York City, for dam here to form Schoharie Reservoir of Catskill Water Supply. Plans include cyclopean masonry overfall structure with earth wing, spillway channel, etc., across Schoharie Creek.

Fla., Miami Beach—City voted $40,000 bonds to establish water-supply system.

Mich., Flint—City voted $78,400 bonds to extend water mains in various streets. E. C. Shoecraft, city engr.

Mich., Ypsilanti—City Council recommended that city sink new well, rebuild wheel pit, install 12 hydrants and new pumping machinery with electric auxiliary. About $32,000. W. R. Caldwell, city engr.

Nebraska—See "Railways."

Wyo., Casper—City election Mar. 29 to vote on $260,000 bonds to extend and build water mains to new portions of city and suburbs. A. W. Wheeler, city engr.

Mont., Harlowton—City plans to extend water mains in various streets. About $30,000.

Mo., Carrollton—City having plans prepared by E. E. Harper, engr., Kansas City, for gravity type filtration plant, 750,000 gal. capacity.

Ark., Prescott—City plans to improve waterworks system, to include storage and distributing reservoir, canal, headgate and supply pipe line. About $300,000. H. Phillips, International Life Bldg., St. Louis, Mo., consult. engr.

Tex., Henderson—City plans election to vote on $12,500 bonds to extend and improve waterworks system.

Tex., Mineral Wells—City plans to build 4½ mi. with vitr. or concrete gravity pipe line from reservoir to city. About $150,000. J. R. McLendon, city engr.

Tex., San Angelo—See "Industrial Works."

Okla., Cardin—City election Mar. 17, to vote on $50,000 bonds for waterworks system.

Okla., Marietta—City sold $15,000 bonds to improve waterworks and light plant. Noted Feb. 6.

Colo., Sedgwick—City plans election to vote on $30,000 bonds for waterworks and electric light systems. Henningson Eng. Co., 1122 Farnam St., Omaha, Neb., engrs.

Ont., Kingston—City plans to extend waterworks system. About $500,000. W. W. Sands, clk.

Ont., Ottawa—Bd. Control instructed A. F. McCallum, comr. works, to report on cost of furnishing 2,000,000 gal. of water daily to Eastview. About $50,000.

Ont., Ottawa—Bd. Control receives bids in spring extending waterworks system. About $40,000. A. F. McCallum, City Hall, engr. Noted Feb. 20.

D. C., Squamish—See "Miscellaneous."

BIDS DESIRED

Mich., Harbor Beach—Until Mar. 17, by city, trenching, laying pipe and installing pump in Water St. as far as Court St. with branch sewers on Trescott and Court Sts. B. W. Jenks, mayor.

Ia., Spencer—Until Mar. 21, by R. M. Cornwall, city clk., furnishing and laying 6400 ft. 4 in. class D c.i. water pipe, necessary valves, hydrants and other specials. W. L. Fahey, city engr.; advertised in this issue.

Minn., Duluth—Until Apr. 15, by P. G. Phillips, comr. pub. utilities, building extension to water and gas mains from here to Smithville and Morgan Park. About $28,000. L. Ayres, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Cleveland—city let contract laying water and steam pipes, to Baker-Dunbar-Allen Co., 1900 Euclid Bldg., $6448.

Sewers

PROPOSED WORK

Mass., Natick—See "Buildings."

W. Va., Martinsburg—City plans to build sewerage system and sewage disposal plant. E. D. Bromley, city engr.

W. Va., Parkersburg—See "Streets and Roads."

Ind., Terre Haute—City soon lets contract laying sewer pipe in Poplar St., involving 1600 ft. 20-24 in. vitr. pipe and 1000 ft. 30 in. segmental block pipe. About $12,000.

Mich., Flint—City voted $199,100 bonds to build sanitary, storm water and intercepting sewers in various streets. E. S. Shoecraft, city engr.

Nebraska—See "Railways."

Wyo., Casper—City election Mar. 29, to vote on $60,000 bonds to extend and lay main trunk sewers to suburbs. A. W. Wheeler, city engr.

Tex., Dallas—City having plans prepared for storm sewer in Jefferson Ave., concrete and vitr. pipe, cost, $13,000; storm sewer 15 ft. diameter, from Mill Creek, Haskell Ave. to Exall Park, $128,000. G. D. Fairtrace, city engr.

Tex., Eastland—City having plans prepared by P. Oneal, engr., 610 Praetorian Bldg., Dallas, building sanitary sewerage system. Noted Aug. 22.

Okla., Oklahoma—City plans to issue $100,000 bonds to make surveys and tests for extensive sewerage improvements now under consideration. B. M. Hart, city engr.

BIDS DESIRED

N. Y., New York—Until Mar. [illegible] by H. Bruckner, pres. Bronx Boro., building sewers in Birchall Ave. between [illegible] St. and White Plains Rd., Van Cortlandt Park S., between Exterior Pl. and Orloff Ave., Bailey Ave. between Van Cortlandt Park, S., and Sedgwick Ave., East 180th St. from 3rd to Monterey Aves.

N. Y., New York—Until Mar. [illegible] by F. L. Dowling, pres. Manhattan Boro., completion of sewer in 42nd St. from [illegible] to 3rd Ave.

Mich., Detroit—Until Mar. 24, by Comn. Pub. Wks., building and finishing following vitro. crock lateral sewers: No. 3049, bounded by Lonyo, Central, [illegible] and Radcliffe Sts.; No. 3099, bounded by Senect, Fisher, Harper and Peter Hunt Aves.; No. 3100, bounded by Inverness, Log Cabin, Pilgrim and Putnam Aves.; No. 3103, bounded by Robert, Gratiot, Harper and Peter Hunt Aves.; No. 3105, bounded by Genessee, Linwood, Longfellow Aves. and Chicago Blvd.; No. 3106, bounded by La Salle Blvd., Wawash, Elmhurst and Richton Aves.; No. 3110, bounded by Broad and Dumont Sts., Martindale Ave. and Joy Rd.; No. 3111, bounded by Centerline, Van Dyke and Kern Aves. and alley south of Kern Ave.; No. 3112, bounded by Conant, Salem Sts. and south line of village of Hamatramck. H. H. Esselstyn, comr. Noted Jan. 2.

Ont., Hamilton—Until Apr. 2, by C. G. Booker, mayor, chn. bd. control, building 1750 ft. brick or concrete sewer on King, Macklin and Dundas Sts. S. H. Kent, city clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Creedmore—State Hospital Comn., Capitol, Albany, let contract building sewage disposal plant at Brooklyn State Hospital here, to Murphy Bros., 262 Bay 43rd St., Brooklyn, $22,483. Plans include installation of Imhoff tanks, six 10 in. syphons, dosing chambers, 6 beds, diverting manhole, 1000 ft. 12 in. vitr. pipe, etc. Noted Feb. 27.

O., Cleveland—City received bids laying sewers in following streets:

(a) Parkgrove Ave. from East 156th to 161st Sts., involving 990 ft. 24 in. rein.-con. and 30 ft. 12 in. vitr. pipe, etc.;

(b) East 160th St. from Holmes Ave. to Saranac Rd., 290 ft 20 in. rein.-con., 290 ft 18 in. vitr., 290 ft. 15 in. segmental block and 350 ft. 12 in. tile block pipe, etc.;

(c) East 158th St. from Waterloo Rd. to Calcutta Ave., 230 ft. 15 in. rein.-con. and 270 ft. 12 in. vitr. pipe, etc.;

(d) East 157th St. from Waterloo Rd. to Calcutta Ave., 240 ft. 15 in. rein.-con. and 270 ft. 12 in. vitr. pipe, etc.;

(e) Huntmere Ave. from East 156th to 161st Sts., 960 ft. 24 in. rein.-con. and 30 ft. 12 in. vitr. pipe, etc.;

(f) Grovewood Ave. from East 156th to 161st Sts., 990 ft. 24 in. rein.-con. and 30 ft. 12 in. vitr. pipe, etc.;

(g) Sylvia Ave. from East 140th to 152nd Sts., 140 ft. No. 2 C. brick, 350 ft. 20 in. rein.-con., 300 ft. 18 in. vitr., 350 ft. 15 in. segmental block and 810 ft. 12 in. tile block pipe, etc.;

(h) Damon Ave. from East 150th to 161st Sts., 320 ft. 18 in. rein.-con. 320 ft. 15 in. vitr. and 340 ft. 12 in. segmental block pipe, etc.;

(i) Corsica Ave. from East 156th to 161st Sts., 300 ft. 18 in. rein.-con., 610 ft. 15 in. vitr. and 340 ft. 12 in. segmental block pipe, etc.;

(j) East 156th St. from Holmes to St. Clair Aves., 300 ft. 18 in. rein.-con., 540 ft. 15 in. vitr. and 330 ft. 12 in. segmental block pipe, etc.;

(k) Hale Ave. and East 147th St. from Sylvia Ave. to East 152nd St., 550 ft. 18 in. rein.-con., 270 ft. 15 in. vitr. and 330 ft. 12 in. segmental block pipe, etc.;

(l) East 140th St. from St. Clair to Castelia Aves., 650 ft. 24 in. rein.-con., 210 ft. 20 in. vitr., 50 ft. 15 in. segmental block and 60 ft. 12 in. tile block pipe, etc.;

(m) East 39th St. from Scovill to Cedar Aves., 760 ft. 5 ft. 9 in. rein.-con., 960 ft. 4 ft. 3 in. vitr., 10 ft. 4 ft. segmental block, circular brick pipe, 100 cu. yd. Class B. concrete; etc.; from [illegible]

D. Pfahl, 723 Guardian Bldg. (a) $4861; (c) $1540; (d) $1560; (e) $4720; (f) $4889; (g) $11,932; (h) $2936; (i) $2770; (k) $3657.

A. Marra, 409 Park Bldg., (a) $5056; (e) $4956; (f) $5053; (l) $4603.

Sewers (Continued)

Water & Sewer Impvt. Co., (a) $5194; (b) $3872; (c) $4945; (h) $2945; (i) $2775; (k) $3784.

A. C. Hattendorf & Co., (b) $3697; (j) $3377.

Altoora & Joseph Co., (b) $3942; (d) $1484.

Fredericks & Hosaine, (c) $1606; (j) $3579.

N. Salom, (c) $1631.

N. Yahya, (d) $1613; (j) $3540.

Iannetta Bros., (f) $5042; (h) $3178; (l) $4726.

P. Ciraci, (g) $13,421.

George Bros. Co., (g) $14,668.

Brookside Constr. Co., (i) $3208.

A. Gandio, (k) $3720.

G. Sam, (l) $4739.

W. McDowell & Son, (m) $58,947.

J. Duff Co., 603 Marshall Bldg., (m) $61,871.

W. F Gibbons Co., (m) $62,472.

All contractors of Cleveland.

★Pa., Pittsburgh—City let contract laying sewers in McCandless Ave. from east line of 53rd St. to existing sewer on McCandless St. at Celadine St., involving 628 ft. 15 in. terra cotta pipe, 3 manholes and 5 catch basins, to Manella Constr. Co., 1507 North Lang Ave.; cost, $2617; in Reiter St., from Larimer Ave. to existing sewer on Hamilton Ave., 392 ft. 12 in. terra cotta pipe, to Pittsburgh Paving Co., Bakewell Bldg., $1294; Pear Way and private properties to Saw Mill Run, 4962 ft. 8-15 in. terra cotta pipe, 17 manholes, to M. Ott & Co., 414 Warrington Ave., $14,433. Noted Mar. 6.

★Mich., Ford (Wyandotte P. O.)—Village let contract extending present sewerage system and replacing present outlet, to G. R. Cooke, Penobscot Bldg., Detroit, $101,877. Work involves trenching, laying pipe and backfilling complete sewerage system, involving 2022 ft. 24-33 in. concrete pipe, 49,663 ft. 8-22 in. vitr. pipe and 400 ft. 12 in. concrete outlet pipe to replace present outlet, 154 manholes, 212 catchbasins, 7 lampholes and 290 ft. c.i. pipe. Noted Feb. 20.

★Mich., Wyandotte—City let contract trenching, laying and backfilling for sewerage system in West Wyandotte, to G. R. Cooke, Penobscot Bldg., Detroit, $112,000. Noted Feb. 6.

Bridges

PROPOSED WORK

N. Y., Carthage—Ways and Means Com. petitioned L. Nixon, supt. pub. works., Capitol, Albany, to repair state bridge spanning Black River. Plans include entire new roadway 400 or 500 ft. long, 16 ft. wide, concrete blocks. About $12,000.

N. J., Newark—Essex Co., (Newark) and Hudson Co. (Jersey City) having surveys made by H. W. Hodge, consult. engr., 149 Bway., New York City, building new bridge over narrow part of Newark Bay to connect new highway between counties.

Ga., Canton—Comrs. Cherokee Co. soon receive bids building one 228 ft. and one 24 ft. concrete bridge, involving 600 cu.yd. concrete, 36½ tons steel, 740 lin.ft. concrete piling and 576 lin.ft. wooden piling. Johnson & Morgan, 500 Forsyth Bldg., Atlanta, engrs.

Ga., Thomasville—Comrs. Thomas Co. soon receive bids building rein.-con. bridge 4½ mi. from here; Federal Aid Project No. 12. Work involves 4.22 acres clearing and grubbing, 15 cu.yd. dry excav., 170 cu.yd. wet excav., 765 cu.yd. earth excav., 31,467 cu.yd. borrow for approach fill, 1160 cu.yd. Class A concrete, 525 cu.yd. Class B concrete, 61 tons reinforced steel placed, 1170 sq.ft. hog wire placed, 2240 lin.ft. wooden piling, 4128 lin. ft. 14 x 14 in. rein.-con. piling, 1825 cu.yd. sand clay surfacing on approach fills, 1593 sq.yd. asphaltic concrete surfacing on bridge, 2 c.i. rockers, 12 steel rocker plates, eighteen 3 x 3 in. metal drains and 172 2-in. tubes sheet metal. About $63,000. J. B. McCrary Co., 1408 3rd Natl. Bank. Bldg., Atlanta, engrs.

Nebraska—See "Railways."

Mont., Livingston—Park Co. will sell $50,000 bonds Apr. 9, to build bridges. Noted Oct. 31.

Wash., Seattle—City defeated election on $900,000 bonds to build bridge over West Waterway, West Spokane St. A. D. Butler, city engr. Noted Feb. 6.

Ore., Albany—City plans to build large steel or concrete bridge over Penniwinkle Creek.

Ore., The Dalles—State Highway Comn., Salem, plans to build bridge over Deschutes River. Cost between $80,000 and $100,000. M. Bennett, Pendleton, div. engr.

N. S., Halifax—City had plans prepared for steel bridge over Campbells Rd. About $48,000. H. A. McElhinnery, Truro, engr.

Que., Lotbiniere—Lotbiniere Co. had plans prepared for concrete and steel bridge, over Duchene River, 318 ft. long, 18 ft. wide. About $35,000. J. Bedard, seçy.

Ont., Comber—City soon lets contract building 2 steel beam bridges in Tilbury West Twp. About $30,000. T. T. Newman, Windsor, engr.

BIDS DESIRED

Mass., Holyoke—Until Apr. 11, by Bd. Pub. Wks., building deck steel girder bridge over 1st level canal on Appleton St.; steel work encased or covered with rein.-con. O. C. Ferry, asst. clk.; advertised in this issue.

N. J., Jersey City—Until Mar. 25, by Hudson Co. Blvd. Comn., building barricade, removing earth and floor system of Hudson Co. Blvd. bridge over Newark and New York branch of Central R. R. of New Jersey. About $10,000. Noted Mar. 6.

Ga., Mt. Vernon—Until May 6, by Comrs. Montgomery Co. (Mt. Vernon) and Wheeler Co. (Alamo) building rein.-con. bridge over Oconee River, 2 mi. from here. Contr. No. 1 involves 6 acres clearing and grubbing, 28,103 cu.yd. earth embankment; Contr. No. 2, three 100 ft. steel spans with concrete floors, one 80 ft. steel draw span complete, piers containing 560 cu.yd. wet excav., 900 lin.ft. wooden piling, 586 cu.yd. Class A concrete under water, 605 cu.yd. Class B concrete in piers, 10½ tons rein. steel, 29,000 ft. lumber in place; Contr. No. 3, 1125 cu.yd. dry excav., 48 cu.yd. wet excav., 946 cu.yd. Class B concrete, 2070 cu.yd. Class A concrete, 279 tons rein. steel, 3100 lin.ft. wooden piling, 4210 sq.yd. sand tar surface and 1 bronze name plate. About $156,840. Garrett & Slack, Bell Bldg., Montgomery, Ala., engrs.

Ill., Chicago—Until Mar. 21, by C. R. Francis, comr. pub. wks., building 3 span cantilever fixed bridge, center span 70 ft. long, concrete caisson foundations, 38 ft. wide over North River on Addison St., cost $165,000. Separate bids will be taken on substructure and superstructure. T. G. Pihlfeldt, 401 City Hall, engr.

Ill., Chicago—Until Mar. 20, by C. R. Francis, comr. pub. wks., building 70 ft. creosoted pile and timber trestle bridge on Lawndale Ave., 38 ft. wide, cost $50,000; 80 ft. fixed steel bridge on concrete abutments over north branch Chicago River on Kimball Ave., 38 ft. wide, $70,000. T. G. Pihlfeldt, 401 City Hall, engr.

Colo., Denver—Until Mar. 17, by city for taking down and removal of either, or both, steel highway bridges over Cherry Creek on Logan and West Colfax Sts. Removal of these bridges is preliminary to constructing 2 new bridges at above locations, cost $30,000 each. Noted Mar. 6.

Ont., Peterboro—Until Apr. 1, by city building 11-arch rein.-con. bridge over Otonabee River on Hunter St. R. H. Parsons, city engr. F. Barber, 40 Jarvis St., Toronto, consult. engr. Noted Mar. 6.

PRICES AND CONTRACTS AWARDED

(*Indicates award of contract)

Conn., North Canaan (Canaan P. O.)—C. J. Bennett, comr. state highway dept., Hartford, received bids Feb. 28, building 3 span rein.-con. "T" beam bridge over Blackberry River on Canaan Lakeville Rd., from Ossola & Besozzi Co., Torrington, $11,977; Osborn-Barnes Co., Odd Fellows Bldg., Danbury, $12,749; L. Longhi & Bro., Alhambra Bldg., Torrington, $13,153. Noted Feb. 20 under New Canaan.

★Kan., Topeka—City and Shawnee Co. let contract building 48 ft. rein.con. arch bridge over Butcher Creek on 21st St., to C. C. Clarke & Co., 202 Evelyn St., $10,636.

★N. D., Grand Forks—Comrs. Grand Forks Co. let contract building several bridges, wooden, steel, and concrete, to J. A. Jardine, 1325 Front St., Fargo. Noted Feb. 20.

★Okla., Guymon—Texas Co. let contract building one 240 ft. and one 120 ft. bridge also 1 small bridge, to Missouri Valley Bridge & Iron Works, 4th and Walnut Sts., Leavenworth, Kan., $13,349.

★Wash., Ceres—Lewis Co. let contract building 160 ft. combination Howe truss bridge, to N. C. Sears, Winlock. About $10,087.

★B. C., Fernie—Dept. Pub. Wks., Victoria, let contract building 250 ft. wooden highway bridge, 16 ft. wide, over Elk River to A. McLean, Fernie. About $13,000. Plans include 3 pile foundation, 3 timber piers and involves 2000 lin.ft. wooden piling, 83,000 ft. B. L. fir and 7 tons iron castings. Noted Feb. 20.

Reinforced Concrete

PROPOSED WORK

N. Y., Brooklyn—See "Industrial Works."

N. Y., Long Island City—See "Industrial Works."

Pa., Pittsburgh—See "Industrial Works."

Md., Crisfield—See "Industrial Works."

S. C., North Charleston—See "Industrial Works."

Mo., Kansas City—See "Buildings."

Que., Lotiniere—See "Bridges."

BIDS DESIRED

Pa., Phila.—See "Miscellaneous."

Ont., Peterborough—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Mich., Battle Creek—See "Industrial Works."

★Kan., Topeka—See "Bridges."

★Tex., Ballinger—See Streets and Roads."

★Wash., Seattle—See "Industrial Works."

Streets and Roads

PROPOSED WORK

Me., Auburn—City having plans prepared for improving various streets, bituminous macadam, granite block or brick. About $100,000. E. A. Beck, city mgr.

New Hampshire—State Highway Com., Concord, plans to grade and drain 6 mi. Greeley Rd., 21 ft. wide, Amherst and Bedford Twps., cost $44,000; 1.36 mi. Sunapee Lake Rd., gravel, 21 ft. wide, Alexandria and Hill Twps., involving 3600 cu. yd. earth excav. and 3400 sq.yd. gravel surfacing, $16,000; pave 8.1 mi. Lafayette Rd., 2 in. modified Topeka asphalt, 18 ft. wide, $112,000; 5090 ft. Merrimack Valley Rd., 2 in. modified Topeka asphalt on old macadam, 18 ft. wide, Bedford Twp., involving 10,190 sq. yd. bituminous concrete, $12,000; resurface 1½ mi. South Side Trunk Line, water bound macadam with bituminous penetration macadam (trap rock), 15 ft. wide, Milford Twp., $14,000; 1½ mi. Merrimack Valley Rd., water bound macadam with bituminous penetration macadam, (native stone), 15 ft. wide, Tilton Twp., $14,000; 3 mi. Merrimack Valley Rd., gravel with bituminous penetration macadam, 18 ft. wide, Laconia Twp., $30,000; resurface 3.75 mi. West Side Trunk Line, crushed gravel, tar surface treatment, 20 ft. wide, Littleton Twp., $14,000; improve 2 mi. South Side Trunk Line, 15 ft. surface, 3 ft. shoulders, with 4 in. crushed gravel, 0.6 gal. cold tar surface treatment, Candia Twp., $10,000; 0.6 mi. East Side Trunk Line, 21 ft., gravel foundation course and 17 ft. bituminous penetration macadam surface course, Colebrook Twp., $12,000; also building 1 mi. West Side Trunk Line, water bound macadam, 17 ft. wide, and 40 ft. concrete bridge in Lyme Twp., $15,000. C. P. Riford, div. engr.

Mass., Natick—See "Buildings."

N. Y., Baldwinsville—Town plans to improve ¾ mi. Main St. from end of present pavement to town line, brick pavement, concrete curbing and guttering, etc.; Empire State Rys. Co. plans to coöperate with town officials in paving Genessee St. from Canal bridge to Main St.

N. Y., New York—L. Nixon, supt. pub. wks., Capitol, Albany, soon receives bids paving portions of terminal sites at Mott Haven, Greenpoint and Gowanus Bay, $94,340.

N. Y., Norfolk—Town plans to build 9 mi. water-bound macadam roads, 10 ft. wide. Plans involve 200 yd. concrete in culverts. W. Ward, town comr.

N. Y., Watertown—Bd. Pub. Wks. plans to improve north approach to Van Duzee St. bridge. E. W. Sayles, city engr.

N. J., Jersey City—City plans to improve West Side and Pacific Aves., granite block. C. A. Van Keuren, city engr.

N. J., Newark—Bd. Comrs. soon receives bids repaving Clinton Ave. from West Newark branch of Pennsylvania R. R. to Chadwick Ave., napped reclipped granite block on 8 in. concrete foundation; also Sussex Ave. from High to Summit St., asphalt pavement, 2 in. top, 1½ in. binder on old macadam pavement properly scarified as base. M. R. Sherrard, city engr. Noted Feb. 20.

Streets and Roads (Continued)

N. J., Newark—City soon receives bids paving Foundry St. and Roanoke Ave., also Wilson Ave. from Ferry St. to Newark Bay, Doremus Ave. from Lincoln Highway to Port of Newark, and Delancey St. from Lehigh Valley tracks to Doremus Ave. M. R. Sherrard, city engr.

N. J., North Bergen—City plans to repair and pave South St. from Boulevard to Fairview Ave., grade Bway. from 28th St. to Park Ave., and 30th St. from Bergenline to Park Aves. About $25,000.

Pa., Ambridge—City plans to repave and repair various streets. About $50,000.

Pa., Erie—Comrs. Erie Co. plan to build 31 mi. roads as follows: 4 mi. Corry Hare Rd., 3 mi. Westlake Rd., 3 mi. Wattsburg Rd., 4 mi. road from Union City to Meadville; 6 mi. North-East Findley Lake Rd., 6 mi. North-East Station Rd., 4 mi. Route No. 295, Girard Twp., and 1 mi. road from Union City to cemetery.

W. Va., Martinsburg—City plans to pave various streets with brick. About $210,000 appropriated for project. E. D. Bromley, city engr.

W. Va., Parkersburg—City election April 8, to vote on $300,000 bonds to pave, build sidewalks, curbs and sewers in various streets.

Ga., Dalton—Comrs. Whitefield Co. plan to grade and top soil 11 mi. road, to include drainage structures and overhead crossings. About $70,000. Johnson & Morgan, 500 Forsyth Bldg., Atlanta, engrs.

Ga., Newnan—City having plans prepared by K. T. Thomas, engr., 502 Forsyth Bldg., Atlanta, paving 15,000 sq.yd. streets with brick, vibrolithic, asphalt, concrete and other high grade material.

Ga., Summerville—Comrs. Chattooga Co. plan to grade, chert and top soil 13 mi. road. Johnston & Morgan, 500 Forsyth Bldg., Atlanta, engrs.

Fla., Bartow—Comrs. Polk Co. plan to sell $300,000 bonds for building 34 mi. asphalt road, 15 ft. wide, also repaving 4 mi. roads in Lakeland.

Fla., Miami Beach—City soon receives bids paving beach roads with penetration system of asphaltic pavement. About $50,000. Noted Jan. 23.

Louisiana—State Highway Dept., New Orleans, having plans prepared building 50 mi. waterbound macadam and gravel roads 16 ft. wide, also bridges over swamp land. D. Buil, state highway engr.

O., Columbus—City plans to grade, drain, curb and pave with asphalt, Edward St. from Cleveland Ave. to 6th St. H. Maetzel city engr.

O., Lakewood—City plans to resurface Grace Ave. from Detroit to West Madison Aves., asphalt. E. A. Fisher, city engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract paving (a) Sheridan Ave. from Frederick to Harker Sts., 26 ft. wide, involving 6749 cu.yd. excav., 7680 lin.ft. Berea or Medina curbing, 11,651 sq.yd. asphaltic concrete on 6 in. concrete base, 216 cu.yd. concrete under and behind curb, 408 lin.ft. retaining stone;

(b) Crane Ave. from Forest Ave. to Moffat St., 26 ft. wide, 3410 cu.yd. excav., 3588 lin.ft. Berea or Medina curbing, 5370 sq.yd. asphaltic concrete on 6 in. concrete base, 99 cu.yd. concrete under and behind curb, 130 lin.ft. retaining stone;

(c) Charlevoix Ave. from Beniteau Ave. to Detroit Terminal R.R., 26 ft. wide, 3620 cu.yd. excav., 3773 lin.ft. Berea or Medina curbing, 5923 sq.yd. asphaltic concrete on 6 in. concrete base, 113 cu.yd. concrete under and behind curb, 495 lin.ft. retaining stone;

(d) Beals Ave. from Charlevoix to Mack Aves., 22 ft. wide, 2492 cu.yd. excav., 3323 lin.ft. Berea or Medina curbing, 4257 sq.yd. asphaltic concrete on 6 in. concrete base, 91 cu.yd. concrete under and behind curb, 119 lin.ft. retaining stone;

(e) Davison Ave. from Herman to 12th Sts., 24 ft. wide, 2018 cu.yd. excav., 2396 lin.ft. Berea or Medina curbing, 3414 sq.yd. asphaltic concrete on 6 in. concrete base, 70 cu.yd. concrete under and behind curb, 232 lin.ft. retaining stone;

(f) Newport Ave. from Waterloo to Charlevoix Aves., 26 ft. wide, 2018 cu.yd. excav., 1896 lin.ft. Berea or Medina curbing, 2814 sq.yd. asphaltic concrete on 6 in. concrete base, 53 cu.yd. concrete under and behind curb, 78 lin.ft. retaining stone;

(g) Canfield Ave. from Van Dyke to Maxwell Aves., 26 ft. wide, 1070 cu.yd. excav., 1090 lin.ft. Berea or Medina curbing, 1673 sq.yd. asphaltic concrete on 6 in. concrete base, 31 cu.yd. concrete under and behind curb, 88 lin.ft. retaining stone;

(h) Linden St. from alley first west of Harrison St. to Vermont Ave., 26 ft. wide, 777 cu.yd. excav., 976 lin.ft. Berea or Medina curbing, 1555 sq.yd. asphaltic concrete on 6 in. concrete base, 30 cu.yd. concrete under and behind curb, 180 lin.ft. retaining stone;

(i) Barker St. from McClellan to Cooper Sts., 26 ft. wide, 782 cu.yd. excav., 790 lin.ft. Berea or Medina curbing, 1284 sq.yd. asphaltic concrete on 6 in. concrete base, 25 cu.yd. concrete under and behind curb, 154 lin.ft. retaining stone;

(j) Roby St. from present pavement to Medbury Ave., 26 ft. wide, 539 cu.yd. excav., 504 lin.ft. Berea or Medina curbing, 765 sq.yd. asphaltic concrete on 6 in. concrete base, 14 cu.yd. concrete under and behind curb, 36 lin.ft. retaining stone. C. W. Hubbell, city engr. Noted Feb. 20.

Mich., Detroit—Dept. Pub. Wks. soon receives bids grading and curbing with Amherst or Medina and paving with sheet asphalt on 6 in. concrete base, 12th St. Sect. 1 from alley north of Virginia Park to Webb Ave., 42 ft. wide, less 18 ft. track space. About $110,920. C. W. Hubbell, city engr.

Mich., Flint—City voted $57,000 bonds to pave various streets. E. C. Shoecraft, city engr.

Mich., River Rouge—Village had estimates made by M. L. Brown & Son, engrs., 820 Chamber Commerce Bldg., Detroit, grading and paving Great Lakes Ave. from Jefferson Ave. to north limits, 1500 ft. long, 28 or 40 ft. wide; also South Dearborn Rd. from Michigan Central R.R. to north limits, 1500 ft. long, 40 ft. wide, brick or rein.-con. on concrete base. L. Laginess, village clk. Noted Feb. 27.

Ill., Belleville—Bd. Supervs. St. Clair Co. soon receives bids for earth grading and building culverts on Sect. N 15d, Bellville south to Hecker, 72,900 ft. long, 26 ft. wide, involving 61,041 cu.yd. grading, 498 cu.yd. concrete in culverts; Sect. M., Route 21, Belleville to Millstadt, 32,300 ft. long, 26 ft. wide, involving 26,312 cu.yd. grading and 314 cu.yd. concrete in culverts. Cost $37,000 and $18,000 respectively. D. O. Thomas, Belleville, co. engr.

Ill., Lincoln—City plans to pave various streets. About $30,000. W. C. Bates, city engr.

Ill., Rock Island—City plans to pave 20th Ave. from 25th to 27th Sts.; 19th Ave. from 25th to 27th Sts.; 25th St. from 18th to 20th Aves. and 32nd St. from 14th to 18th Aves., brick. W. Trichler, city engr.

Wis., Fond du Lac—Comrs. Fond du Lac Co. having plans prepared by Wisconsin Highway Comn., Madison, engrs., grading and surfacing with concrete 5½ mi. Fond du Lac Oshkosh Rd., 16 ft. wide.

Wis., Fond du Lac—Comrs. Fond du Lac Co. receive bids in April grading and surfacing with concrete 1½ mi. Fond du Lac Taycheedah Rd., 18 ft. wide. About $21,000. Wisconsin Highway Comn., Madison, engrs.

Wis., Hayward—Comrs. Sawyer Co. plan to expend $35,000 for building and repairing Federal and State Aid highways and $30,000 for county roads. J. S. McGeorge, chn. co. rd. and bridge comn.

Wis., Oshkosh—Comrs. Winnebago Co. plan election in April to vote on $2,000,000 bonds to build 100 mi. concrete road, 16 ft. wide.

Kan., Abilene—Dickinson Co. plans to pave 30 mi. Golden Belt Rd. through county, brick or concrete, 18 ft. wide; also receives bids about July 1 building 9 mi. Sante Trail and Bee Line Rd., brick or concrete, ½ mi. brick or bituminous macadam and 15½ mi. bituminous macadam, 18 ft. wide. K. Riddle, Abilene, engr.

Kan., Strong—City having plans prepared paving, grading, curbing and guttering 5280 ft. Cottonwood Ave. from south city limits to 6th St., 32 ft. wide, involving 30,000 sq.yd. bituminous macadam, 10,560 lin.ft. concrete curbing and 10,560 lin.ft. concrete guttering. E. J. Cook, Cottonwood Falls, engr.

South Dakota—State Highway Dept., Pierre, receives bids about Apr. 1, grading, graveling and draining 16.5 mi. Watertown-Redfield Rd., Clark Co., 18 ft. wide, involving 52,000 cu.yd. earth excav., 16,500 cu.yd. gravel, 2280 lin.ft. corrugated culverts, 450 cu.yd. concrete culverts, 22,774 lbs. steel reinforcement, 6415 lin.ft. wooden guard rail. About $60,500.

South Dakota—State Highway Dept., Pierre, receives bids about Apr. 20, grading, graveling and draining 10.5 mi. Mitchell-Plankington Rd., 18 ft. wide, Davison Co., $32,000.

South Dakota—State Highway Dept., Pierre, plans to grade, drain and gravel, 21.8 mi. Dell Rapids Rd., 18 ft. wide, Minnehaha Co., involving 80,000 cu.yd. earth excav., 26,000 cu.yd. gravel, 1500 lin.ft. corrugated iron culverts, 450 cu.yd. concrete culverts, 12,000 lb. steel reinforcement, 2200 lin.ft. wooden guard rail, cost $100,000; 9 mi. Sioux City-Elk Point Rd., 18 ft. wide, Union Co., involving 6000 cu.yd. earth excav., 15,000 cu.yd. gravel, 300 lin. ft. corrugated culverts, 60 cu.yd. concrete culverts, 2000 lb. steel reinforcement, $42,000.

N. D., Grand Forks—City plans to build cement or cement tile sidewalks and crossings. J. J. Smith, city engr.

Mont., White Sulphur Springs—Comrs. Meagher Co. plan to improve roads. About $35,000.

Ark., Harrisburg—Rd. Impvt. Dist. No 3, Poinsett Co., Marked Tree, rejected bids for grading, clearing, grubbing and draining 25 mi. road, 22 ft. wide, involving 185,000 cu.yd. grading, 25 acres clearing and grubbing, 20 acres grubbing, one 80 ft. bridge, two 60 ft. bridges, two 25 ft. bridges and 95 cu.yd. concrete culverts. Pride & Fairley, Osceola, engrs. Noted Feb. 20.

Tex., Cleburne—Johnson Co. plans to vote on $750,000 bonds to build concrete road from here to Grand View.

Tex., Dallas—City election Apr. 1, to vote on $1,000,000 bonds to improve various streets. G. D. Fairtrace, city engr.

Tex., Dallas—City having plans prepared paving Munger Ave. from Haskell to Carroll Aves., Grand Ave. from Holms to Wall Sts., Fletcher St. from Terry St. to Parry Ave., Cleveland St. from Grand to Forest Aves., Jefferson St. from Commerce to Wood Sts. and Colonial Ave. from Lenway St. to city limits. G. D. Fairtrace, city engr. Noted Feb. 27.

Tex., McKinney—Comrs. Collins Co. plan to vote on $1,570,000 bond issue, which together with $1,030,000 bonds voted on Feb. 22 and $119,000 voted last year will make a total of $2,719,000 available for road work during year. R. L. Moulden, co. judge.

Utah, Salt Lake—Salt Lake Co. plans to hard surface 5.5 mi. road from Taylorsville to Holliday Twp., 18 ft. wide, cost, $110,000; 3.5 mi. Hyland Dr. from 27th St. S., to Cottonwood Canyon, 18 ft. wide, $70,000; 2 mi. 21st St. S. from 11th St. E. to 27th St. E., 18 ft. wide, $40,000; 3 mi. road from Riverton to Draper, 16 ft. wide, $60,000; grade and hard surface 16 mi. Redwood Rd. from 21st St. S. to Bluffsdale, 16 ft. wide, $320,000; 3 mi. Vine St. from Murray to Hyland Dr., 16 ft. wide, $60,000; also macadamize 200 mi. of roads, including 8.5 mi. mountain roads, $500,000. G. G. Bywater, co. engr.

Wash., Seattle—King Co. authorized to improve 4 mi. Renton-Issaquah Rd., 2 mi. Redmond-Hollywood Rd., 2 mi. unpaved portion Auburn-Enumclaw Rd., 1.3 mi. Seattle-Renton Rd., paving ¾ mi. and grading and graveling ½ mi. Houghton-Medina-Bellebue Rd., 4.77 mi., Kent-Auburn Rd. S. Humes, co. engr., preparing plans.

Wash., Walla Walla—Comr. Walla Walla Co. plans to build 5 mi. concrete road. About $25,000 per mi.; Federal Government and county will each contribute $70,000.

Oregon—State has taken over post roads from Kingsley to Dufur and from Shaniko to Antelope, and plans to improve same.

Oregon—State Highway Dept., Salem, approved following projects and will receive Federal aid for road in Ochoco Canyon, cost, $52,500, cost to be borne by county, state and government; Coos-Curry project, $110,000, state and government to bear ½ of cost; Canyonville-Galesville project, county contributes $23,000, government and state $94,000 each; Tiller trail project, county contributes $26,725, state and government $48,439 each; Zigzag Sect. of Mt. Hood Rd., $48,000, state and government will bear cost; McKenzie Pass, county, $26,-

Streets and Roads (Continued)

299, state and government $92,078 each; Lapine-Lakeview project, $79,419, state and government will bear cost; Flora-Enterprise Rd., county, $5000, state and government $12,324 each; Three Rivers Rd., county, $21,500, state and government $50,250 each; Anna Creek section Crater Lake Rd., $6780, state and government will bear cost; Grants Pass-Crescent City project, $31,476, state and government will bear cost; Medford Crater Lake project, county, $3500, state and government, $34,436 each; Sarvice-Valades Ranch section of John Day Highway, Wheeler and Grant Counties, $86,000, state and government, $157,216 each.

Oregon—State Highway Comn., Salem, has $23,000,000 available for 1919, 1920 and 1921 road work. About $1,819,000 to be derived from Bean bill; $6,119,000 from Federal aid; $10,000,000 from 1919 bond bill; unexpended portion of $6,000,000 bond bill, gasoline and quantity mill tax.

Oregon—State Highway Comn., Salem, having plans prepared paving Columbia Highway from Seuferts to The Dalles. M. Bennett, Pendleton, div. engr.

Oregon—State Highway Comrs., Salem, plan to build 15 mi. pavement test road on Pacific highway, ⅓ concrete, ⅓ wood block and ⅓ bituminous.

Ore., Albany—City plans to pave Salem Rd. from Main St. to eastern limits of city.

Ore., Bend—City plans to improve 4 mi. streets. Work includes grading, volcanic cinder surfacing and cement sidewalks. Cost between $100,000 and $200,000.

Ore., Grants Pass—Josephine Co. will have $41,000 available annually for roads from general road funds.

Ore., Lebanon—Lebanon-Cascadia Good Rds. Assn. having tentative plans prepared for hard surfacing road from Albany to Cascadia through Lebanon. Mountain portion to be rock or gravel. G. W. Cruson, pres.

Ore., Pendleton—City considering paving Garfield St. from Jackson to Wilson Sts., and opening Mark St. from Matlock to Ark Sts.

Ore., Portland—City plans to improve Willamette Blvd. from bridge over Spokane, Portland & Seattle Ry. cut to Richmond St. About $23,108. O. Laurgaard, city engr.

Ore., Portland—Multnomah Co. plans to pave Canyon Rd. from pavement on Jefferson St. to Sylvan St., Thorburn Ave. from East Stark and 63rd Sts., around Mt. Tabor, through Montavilla, to 92nd St., Riverside Dr. from pavement on Macadam St., South Portland, to private pavement on drive, East 17th St., Sellwood Twp., to Clackmas Co. line, concrete or bitulithic.

Ore., St. Helens—Columbia Co. soon lets contract improving Rock Creek Rd. at Blakey's Hill and also at Kearns Pl., Rd. Dist. No. 9. J. W. Hunt, co. clk.

Cal., Los Angeles—Bd. Pub. Wks. receives bids in April, paving 4500 ft. Glassell Ave., 25 ft. wide, 5 in. concrete base, bituminous surface, also grading and oiling 5 ft. on either side of pavement and building monolithic concrete storm sewers, about 300 ft. long, etc. A. C. Hansen, city engr.

Cal., San Bernardino—State Highway Comn., Sacramento, will bear cost of grading 10 mi. cut off road from Deep Creek to Bear Valley. About $200,000.

Cal., Santa Barbara—S. D. Taggart, city clk., soon receives bids improving 4950 ft. East Montecito St. between State and Milpas Sts., including concrete paving, cement curbing, etc. About $45,000. A. B. Cook, city engr. Noted Mar. 6.

Cal., Santa Barbara—S. D. Taggart, city clk., soon receives bids improving 7560 ft. West Montecito St., including concrete paving, cement curbing, etc. About $85,000. A. B. Cook, city engr.

BIDS DESIRED

Rhode Island—Until Mar. 21, by State Bd. pub. Rds., State House, Providence, rebuilding 1.15 mi. Boston Neck Rd., 18 ft. wide, Narragansett Twp., involving 30,000 gal. asphalt, 3400 cu.yd. earth excav., 4000 ton crushed stone and 2800 cu.yd. gravel foundations. About $25,000. I. W. Patterson, State House, Providence, engr.; advertised in this issue.

N. Y., Brooklyn—Until Mar. 19, by E. Riegelmann, boro. pres., regulating and repaving roadway of Engert Ave. from Russell to North Henry Sts., Grove St., from Central to Wilson Ave., Knickerbocker Ave., from Myrtle Ave. to Bleecker St., Ridge Blvd., from point north of Wakeman Pl. to Bayridge Ave., Saratoga Ave., from Jefferson Ave. to Halsey St., St. Johns Pl., from 5th to 6th Aves., 23rd St., from 3rd to 4th Aves., 45th St., from Ft. Hamilton Pkway to New Utrecht Ave., 54th St., from 4th to 5th Aves., asphalt on 6 in. concrete base; also grading, curbing and laying sidewalks on Jerome Ave., from Liberty Ave. easterly to boro line.

N. Y., New York—Until Mar. 18, by H. Bruckner, pres. Bronx Boro., regulating, grading, curbing, building sidewalks, crosswalks, approaches, etc., on Adams St. from Morris Park Ave. to New York, New Haven & Hartford R. R., Benson St. from Frisby to Lane Aves., Tacoma St. from St. Lawrence to Beach Aves., repaving with granite blocks on concrete foundation, roadway of Park Ave. E., from Claremont Pkway to East Tremont Ave., paving with bituminous concrete on cement concrete foundation on roadway of East 203rd St., from Webster Ave. to New York and Harlem R. R., granite blocks on sand foundation roadway of Jackson Ave. from Southern Blvd. to East 138th St., etc.

N. Y., New York—Until Mar. 18, by H. Bruckner, pres. Bronx Boro., repairing asphalt block pavement and resetting curb where necessary, etc.

N. Y., New York—Until Mar. 27, by H. Bruckner, pres. Bronx Boro., building transverse road, regulating, grading, regrading, etc., paving and repaving, East 161st St. from Morris to Jerome Aves., Grant Ave. from East 161st St. to East 162nd St., Sherman Ave. from East 161st to East 162nd Sts., Walton Ave. from East 158th to 164th Sts., granite block and sheet asphalt on concrete foundation.

N. J., Flemington—Until Apr. 3, by Bd. Freeholders Hunterdon Co., resurfacing 2.457 mi. Ringoes-Woodsville Rd., involving 2250 tons broken stone, 700 tons filler, 400 tons dustless screenings, 15,135 gal. Tarvia B, etc. G. Davis, Whitehouse, co. engr.; advertised in this issue.

N. J., Hackensack—Until Apr. 9, by Bd. Freeholders Bergen Co., improving Williams Ave., Sect. 2, Hasbrouck Heights, Peterboro and Little Ferry boroughs, 7½-10½ in. Portland cement concrete surface on cinder foundation, involving 18,647 sq.yd. surface pavement, 10,640 cu.yd. foundation, etc. J. M. Harkness, co. clk.; advertised in this issue.

N. J., Newark—Until Mar. 18, by city, grading and laying plank roadway on Delancey St. from Ave. A to Ave. J. Work involves 83,000 ft. b. m. 3 x 12 in. plank, 11,300 ft. b. m. 4 x 6 in. stringers, 510 cu.yd. new clean coarse cinders and 500 cu.yd. excav. M. R. Sherrard, city engr.

N. J., Rutherford—Until Mar. 18, by city, paving Walnut St. between Morse and Erie Aves. and Erie Ave. between Walnut and Myrtle Sts., macadam asphalt.

N. J., Salem—Until Apr. 7, by Bd. Freeholders Salem Co., paving 3rd Sect. Malaga-Penn Grove Rd., Woodstown Boro., Pilesgrove Twp. Work involves 42,120 sq.yd. gravel surface pavement on earth foundation, etc. I. C. Smashey, clk.; advertised in this issue.

Pa., New Brighton—Until Mar. 20, by town paving 13th St., between 6th and Penn Aves., vitr. clay blocks, involving 3440 sq.yd. curb paving and 1700 cu.yd. grading, 350 lin.ft. new curb and 1050 lin.ft. old curb to be reset. H. T. Barker, city engr.

Pa., Phila.—Until Mar. 14, by G. E. Datesman, dir. dept. pub. wks., curbing, grading, paving and repaving with asphalt and vitr. block on various streets. About $137,898.

Pa., Pittsburgh—Until Mar. 25, by J. P. Moore, co. controller, Allegheny Co., filling, paving and curbing one side Breckenridge Rd., Harrison Twp., and Mile Lock Lane, in Breckenridge Boro. to Sycamore Ave. in Natrona Twp., 3400 ft. long, 20 ft. wide, involving 6800 yd. asphalt or concrete on 6 in. concrete base and 3400 lin.ft. 8 in. concrete curbing. R. V. Warren, co. engr.

Pa., Pittsburgh—Until Apr. 1, by J. P. Moore, co. controller, Allegheny Co., grading and paving 12,500 ft. Round Hill Rd., 20 ft. wide. R. V. Warren, co. engr. Noted Oct. 31.

Md., Baltimore—Until Mar. 19, by Bd. Awards, for Contr. 167, improving Boone St. from 20th to 22nd Sts., Homewood Ave. from 20th to 22nd Sts., 21st St. from Greenmount to Homewood Aves., 23rd St. from Greenmount Ave. to Star Lane, 20th St. from St. Paul St. to Greenmount Ave., 21st St. from Oak to Greenmount Aves., 23rd St. from St. Paul to Barclay Sts., Guilford Ave. from North Ave. to 23rd St., Barclay St. from North Ave. to 25th St., Oak St. from 21st to 24th Sts., including resurfacing over cobbles and curbing, involving 9000 sq.yd. sheet asphalt paving, 35,000 sq.yd. 1½ in. asphalt topping, 4000 lin.ft. armored concrete curbing, 17,000 lin.ft. old stone curbing reset and redressed, 500 lin.ft. old stone curbing reset, 500 lin.ft. old stone curbing redressed in place, 4000 sq.yd. brick gutters, 1300 cu.yd. grading and 3500 tons binder; Contr. 168, Atlantic Ave. from Harford Rd. to Lake Dr., Erdman Ave. from Harford Rd. to Lake Dr., Dobler Ave. from Harford Ave. to Lake Dr., Lake Ave. from Harford Ave. to Lake Dr. and Lake Dr. all around Lake Montebello, involving 10,500 sq.yd. concrete paving, 7500 lin.ft. concrete armored curbing and 3500 cu.yd. grading. J. M. McCummings, engr. for comrs. for opening streets.

Va., Accomac—Until Mar. 25, by J. B. Whealton, engr., 5507 Seminole Ave., Tampa, Fla., building 3½ mi. highway from Mainland to Chincoteague Island, 24 ft. wide on top; also building 1650 ft. trestle and draw bridge. About $100,000.

W. Va., Hamilin—Until Mar. 20, by Comrs. Lincoln Co. paving 11½ mi. road, concrete or asphalt, 16 ft. wide, 6 in. thick on sides and 8 in. thick in center. T. J. Bartrug, Hamilin, co. engr.

W. Va., Kingwood—Until Apr. 7, by Preston Co. grading and draining 4 mi. Kingwood-Terra Alta Pike, 20 ft. wide. About $16,000. H. E. Wilhelm, co. engr.

W. Va., Ripley—Until Mar. 18, by Jackson Co., grading and draining 1 mi. Ravenswood Rd. and 1 mi. Ripley Rd. J. S. Chase, co. rd. engr. Former bids rejected. Noted Jan. 23.

W. Va., Spencer—Until Apr. 22, by Comrs. Roane Co. building 9 mi. vitr. brick roads and bridges in Walton Dist. Woodyard & Alexander, Spencer, engrs.

N. C., Olive—Until Mar. 25, by Bd. Aldermen Town Council, improving various streets, involving 25,000 sq.yd. brick, asphalt, bitulithic or other pavement, 15,000 lin.ft. granite or concrete curb, 15,000 lin. ft. concrete gutter, 20,000 sq.yd. sidewalk and necessary drainage, etc. G. C. White, Durham, engr.; advertised in this issue.

S. C., Marion—Until Mar. 18, by Comrs. Marion Co., building 3½ mi. road at Gallivant's Ferry, including 12 pile timber bridges, aggregate length 2444 ft., requiring 354,000 ft. B. M. heart long-leaf pine, 26,000 lbs. hardware, 775 piles from 20 to 40 ft. long, 50,000 cu.yd. earth embankments and grading. Noted Dec. 5.

Ga., Newnan—Until Mar. 19, by Comrs. Coweta Co., building 4 mi. road. Federal Aid Project No. 15. About $20,200. Garrett & Slack, Bell Bldg., Montgomery, Ala., engrs.

Ga., Trenton—Until Apr. 1, by Comrs. Dade Co., building 10 mi. road. Work involves 12 acres clearing and grubbing 36,000 yd. excav., 4600 yd. rock excav., 950 yd. concrete, 17,000 lbs. reinforcing steel and 25,000 cu.yd. top soil. Johnson & Morgan, 500 Forsyth Bldg., Atlanta, engrs.

Fla., Miami—See "Miscellaneous."

Miss., Greenville—Until Apr. 15, by Highway Comn. Washington Co., resurfacing 49.5 mi. road with concrete, 9 ft. wide, or gravel, 12 ft. wide. Plans include 25.2 mi. road from Greenville to Lake Washington Rd., 4.4 mi. road from Greenville to Metcalf Rd., 10.2 mi. road from Leland to Sunflower Co. line, 5. mi. road from Hollandale to Murphy Bayou Rd., 4.7 mi. road from Arcola to Trail Lake Rd. E. W. Wood, chn.; advertised in this issue.

Michigan—Until Mar. 27, F. F. Rogers, comr. state highway, Lansing, shaping draining and surfacing 8 mi. Federal Aid Project No. 24, Berrien Co., waterbound macadam, concrete or bituminous concrete

Michigan—Until Apr. 2, by F. F. Rogers, comr. state highway, Lansing, shaping, surfacing and draining 2 mi. Federal Aid Project No. 36, Ingham Co., west of Lansing, bituminous or concrete.

Ill., Kenilworth—Until Mar. 17, by Bd. Local Impvts., paving Winnetka Ave. from Sheridan Rd., involving 2400 sq.yd. 1 course rein.-con., 1400 cu.yd. excav., 5 brick catch basins, 1500 ft. tile drain pipe. C. N. Roberts, Reaper Blk., Chicago, engr.

Streets and Roads (Continued)

Ill., Rockford—Until Mar. 20, by Winnebago Co., building 29,432 ft. Grant Highway, Sect. H., State Aid Route No. 4, 18 ft. wide, involving 12,000 cu.yd. grading, 147 cu.yd. concrete in culverts, 58,833 sq.yd. 7 in. concrete, cost $82,000 excluding cement; also 2369 ft. Sect. K., 18 ft. wide, involving 1470 cu.yd. grading, 4738 sq.yd. 7 in. concrete, $6800 excluding cement. A. R. Carter, co. supt. highways. Noted Dec. 26.

Minn., Anoka—Until Mar. 28, by comrs. Anoka Co., paving 6.6 mi. and surfacing with sand clay 13.8 mi. Federal Aid Project No. 16, State Rd. No. 1, involving 9 acres clearing and grubbing, 86,298 cu.yd. excav., 5635 lin. ft. guard rail, 684 lin. ft. 12-24 in. concrete culverts, loading and hauling 22,135 cu.yd. sand clay surfacing material. Noted Feb. 27.

Okla., Oklahoma—Until Mar. 19, by Bd. Comrs., paving 36th, 15th and 30th Sts., Ollie and Stiles Aves., north and south alley through blocks 3, 6 and 9, Dale Addition, alley in block 52, University Addition, 2 in. sheet asphalt; 42nd, 43rd, 41st, 28th and 29th Sts., Butler Pl., Kentucky and Stiles Aves., 2 in. asphaltic concrete; Lincoln Blvd., 1½ in. asphaltic concrete; Park Pl., 11th and 12th Sts. and Laird and Lindsay Aves., Capitol addition, 1 course concrete; East Ave., partly asphalt concrete and partly 1 course concrete. Work includes grading, filling, 4 in. concrete base on all surfaces, 18 in. concrete curbing, catch basins, inlets, manholes, and involves 18,850 sq.yd. sheet asphalt, 34,780 sq.yd. asphaltic concrete, 23,000 sq.yd. 1 course concrete. B. M. Hart, city engr.

Washington—Until Mar. 21, by State Highway Comn., Olympia, paving 4½ mi. Sunset Blvd. About $80,000.

Wash., Seattle—Until Mar. 21, by Bd. Pub. Wks., paving 1 mi. West Spokane St., brick, cost, $180,000, concrete, $152,000. Work involves 22,300 sq.yd. pavement. A. H. Dimock, city engr. Noted Feb. 20.

Wash., Seattle—Until Mar. 21, by Bd. Pub. Wks., paving ½ mi. concrete walk on 1st Ave., S., cost, $32,000; 2½ mi. concrete paving on Leary Ave., cost between $82,000 and $87,000. Work involves 22,000 sq.yd. pavement. Noted Jan. 2.

Ore., Gold Beach—Until Apr. 2, by Curry Co., building 3 mi. wagon road on south side of Chetco River, from Jacks Creek to Bravo Pl.

Ore., Marshfield—Until Apr. 1, by Coos Co., building 12½ mi. road between here and Coquille. A. B. Gidley, co. engr. Noted Dec. 26.

Cal., Santa Ana—Until Apr. 2, by Bd. Supervs. Orange Co., paving 6460 lin.ft. 17th St., 5th Rd. Dist. and 2520 ft. Magnolia Ave., 3rd Dist., concrete. E. L. McBridge, co. surv. Noted Jan. 23.

Ont., Orillia—Until Mar. 22, by James, Louden & Hertzberg, engrs., Excelsior Life Bldg., Toronto, paving with concrete, bitulithic on concrete, bituminous macadam on concrete, or asphalt on concrete about 40,000 sq.yd. streets for Town Council. Noted Dec. 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Comr. Pub. Wks. let contract paving 1171 ft. Dunbar Ave. and Walk Hill St., Dorchester Twp., 48-50 ft. wide, involving 6550 sq.yd. asphalt, to M. De Matteo, Dudley St., Roslindale, cost $20,842; 1383 ft. Baird, Irma and Middleton Sts., Dorchester Twp., 4[illegible] ft. wide, involving 6200 sq.yd. bituminous macadam, to Warren Bros., 142 Berkeley St., $18,489; alleys No. 818, 819, 820 and 821, Roxbury Twp., 1840 ft. total length and 16 ft. wide, involving 3700 sq.yd. granite block, on 6 in. concrete base, to J. McCourt Co., 46 Wait St., Roxbury, $11,023.

★Rhode Island—State Bd. Pub. Rds., State House, Providence, let contract building 2.04 mi. State Highway, Boston Neck Rd., from North Kingstown and Narragansett Twps., 18 ft. wide to J. Bristow, Narragansett Pier, $42,749. Work involves 7000 cu.yd. earth excav., 1450 cu.yd. stone fill foundation, 7875 cu.yd. gravel foundation, 7000 ton crushed stone and 60,000 gal. hauling, heating and applying bituminous binder. Noted Feb. 27.

★Connecticut—C. J. Bennett, comr. state highway dept., Hartford, let contract building 7300 ft. Barnum Ave., concrete Stratford Twp., to W. H. Arthur, Washington Bldg., Stamford, $47,879; 9938 ft. Farmington-Avon River Rd., native stone macadam, Farmington Twp., to J. Arborio, 36 Ward St., New Haven, $29,737; 7258 ft. Waterbury-Thomaston Highway, concrete, Waterbury, to Sperry Eng. Co., 82 Church St., New Haven, $39,622; 2930 ft. Clintonville-Northford Rd., native stone macadam, Clintonville Twp., to Immich Co., Meriden, $7636. Noted Feb. 20.

Connecticut—C. J. Bennett, comr. state highway dept., Hartford, received bids Feb. 28, building 13,933 ft. Shore Rd., concrete, Groton Twp., from F. D. Miller, Poquetanuck St., Norwich, $89,763; Sperry Eng. Co., 82 Church St., New Haven, $91,615; F. Arrigoni & Bro., 605 Main St., Middletown, $97,590. Noted Feb. 20.

N. Y., Brooklyn—E. Riegelmann, boro pres., received bids grading, curbing and laying sidewalks, asphalt, on (1) East 8th St., from Ave. K to M; (2) 36th St. from Church Ave. to 15th St.; (3) 86th St. from 21st to 22nd Sts.; (4) 4th Ave. from 60th St. to Bay Ridge Ave., from Castle Bros., Inc., Johnson Pl., (1) $6162; M. Sanzo, Brooklyn, (1) $7068; B. Turacamo, Brooklyn, (1) $7157; Cranford Co., 52-9th St., (2) $12,433; (3) $14,655; (4) $97,264; Uvalde Asphalt Paving Co., Metropolitan Ave., (2) $13,088; (3) $15,415; (4) $100,505; Sicillian Asphalt Paving Co., Paidge Ave., (2) $13,235; (3) $15,232; (4) $98,709. Noted Feb. 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., received bids Mar. 10, regulating, grading, curbing, paving, etc., bituminous macadam, 87th St. from 80th to 85th Sts., from Peace Bros., 20 Main St., Flushing, $6492; Skillman Ave. from 3rd to 5th Sts., from F. J. Clancy, $3595; Mount St. from Hunterspoint to Thompson Aves., from Welsh Bros., 39 Queens Blvd., $1388; Gamma Pl. from Suburban St. to Myrtle Ave., from C. A. Myers, foot of Stagg St., Brooklyn, $1905; 85th St. from 83rd to 91st Sts., from Savero & Britton, $8401; Sanford Ave., from T. F. Tuohy, 98 Main St., Flushing, $149; 87th St. from 78th to 80th Sts., from Peace Bros., $1615; Hillside Ave. from Morris to Metropolitan Aves., from T. Welsh, $1278. Noted Mar. 6.

N. J., Hoboken—City received bids Mar. 4, paving 4th St. from Hudson to Jackson St., 7th St. from Madison to Jackson St., 11th St. from Clinton to Madison St., 14th St. from Park to Willow Ave., granite block, from A. Lettiere & Sons Co., 261 Wayne St., Jersey City, cost $70,000; 7th St. from Park Ave. to Adams St., asphalt, from W. T. S. Crichfield Co., 54 5th St., $10,000. Noted Feb. 27.

★N. J., Rumson—Boro. Council let contract building Rumson Rd., 2 in. Warrenite top, 6 in. concrete base, to H. W. Scott, Cranbury, $128,262. Work involves 29,175 sq.yd. surface pavement and 5203 cu.yd. foundation. Noted Jan. 23.

★Pa., Pittsburgh—City let contract paving, grading and curbing, (a) Eggers St. from Lookout St. to Voegtly Cemetery line involving 1200 sq.yd. vitr. brick and 285 sq.yd. stone block on 6 in. concrete base, 1165 lin.ft. concrete curbing, 963 cu.yd. earth excav.;

(b) Holmes St. from 53rd to 54th Sts., 1300 sq.yd. vitr. brick and 100 sq.yd. stone block on 6 in. concrete base, 760 lin.ft. concrete curbing, 642 cu.yd. earth excav.;

(c) Maple Ave. from McIntyre to Burgess Sts., 1085 sq.yd. stone block, on 6 in. concrete base, 386 lin.ft. concrete curbing, 1157 cu.yd. earth excav., 230 yd. trench excav.;

(d) Fredonia St. from Lorenz Ave. to city line, 1735 sq.yd. vitr. brick, on 6 in. concrete base, 1300 lin.ft. concrete curbing, 450 cu.yd. earth excav.;

(e) Lakewood Ave. from Lorenz Ave. to city line, 36 ft. wide, 1281 sq.yd. vitr. brick, on 6 in. concrete base, 985 lin.ft. concrete curbing, 1107 cu.yd. earth excav.;

(f) Proxim Way from Montooth to Estella Sts.; 1960 sq.yd. vitr. brick on 6 in. concrete base, 990 ft. concrete curbing, 1168 cu.yd. earth excav.;

(g) Mellon St. from Bryant to Elgin Sts., 924 sq.yd. asphalt on 6 in. concrete base, 488 lin.ft. concrete curbing, 152 cu. yd. earth excav.;

(h) Rosina Way from Taylor to Ella Sts., 583 sq.yd. asphalt on 6 in. concrete base, 339 cu.yd. earth excav.;

(i) Boggs Ave. from Arion to Soffel Sts., 1089 sq.yd. vitr. brick on 6 in. concrete base, 491 lin.ft. concrete curbing;

(j) Carson St. from point 1332 ft. east from South Main St. to point 1221 ft. west from south approach to Point bridge, 3535 sq.yd. stone block, 1755 lin.ft. concrete curbing, 240 cu.yd. earth excav., 310 cu.yd. trench excav.;

(k) Moyer St. from Allendale to Francisco Sts., 552 sq.yd. vitr. brick on 6 in. concrete base, 378 lin.ft. concrete curbing, 214 cu.yd. earth excav.;

(l) Tweed St. from Allendorf to Francisco Sts., 3060 sq.yd. vitr. brick on 6 in. concrete base, 2120 lin.ft. concrete curbing, 1709 cu.yd. earth excav.;

(m) Francisco St. from Tweed to Moyer Sts., 2060 sq.yd. vitr. brick, [illegible] lin.ft. concrete curbing, 1282 cu.yd. earth excav., etc.; also building storm sewer.

Pittsburgh Paving Co., Bakewell Bldg., (a) $9403; (b) $7824; (i) $1927.

T. Cronin, 17th and Muriel Sts., (c) $13,694; (g) $4966; (h) $4085; (k) [illegible], (m) $14,135.

T. O'Toole, Sheridan, (d) $904[illegible]; (l) $17,519.

M. O'Herron, South 1st and [illegible] Sts., (e) $8169; (j) $53,427.

M. Ott & Co., 414 Warrington Ave., (f) $12,121. Noted Mar. 6.

★Maryland—State Highway Dept., 601 Garrett Bldg., Baltimore, let contract excavating and grading 1200 ft. Washington Blvd. near Elkridge, to H. Frior, 1507 West Pratt St., Baltimore, $0.50 per sq.yd.; resurfacing with concrete, to Thomas, Bennett & Hunter, Westminster, $1.55 per sq.yd.; state to furnish material and convict labor. Total cost between $18,500 and $19,000. Plans include straightening "Dead Man's Curve," 20 ft. wide, 3 ft. dirt shoulders, and involves 15,000 cu.yd. earth excav., building 20 ft. concrete culvert, etc.

★S. C., Spartanburg—Comrs. Spartanburg Co., let contract paving 2 mi. Appalachian Highway, and 1.9 mi. asphaltic concrete, to Southern Paving and Constr. Co., James Bldg., Chattanooga, Tenn., cost, $2.25 per sq.yd.; 9.5 mi. Blackstock Rd., to J. F. Blankenship & Son; 7 mi. Buncomb Rd. and 3 mi. Woodruff Rd., to Thompson & Chandler. Noted Feb. 20.

O., Cleveland—Comrs. Cuyahoga Co. received bids improving following streets: (a) Korman Ave. from West 74th to West 79th Sts., involving 1100 cu. yd. excav., 90 ft. 12 in. catch basin pipe, 1830 ft. 4 in. French drain, 20,220 sq.ft. 5 in. brick block paving and 1830 ft. 5 in. Berea stone curbing; (b) Flora Ave. from East 100th to East 103rd Sts., 380 cu.yd. excav., 1200 ft. 4 in. French drain, 15,600 sq.ft. 5 in. brick block paving and 1200 ft. 5 in. Berea stone curbing; (c) Altoona Rd. from Pearl Ave. to West 32nd St., 750 cu.yd. excav., 1150 ft. 4 in. French drain, 15,730 sq. ft. 4 in. brick block paving on 6 in. concrete base and 1150 ft. 5 in. Berea stone curbing; (d) Emily Ave. from West 82nd to West 88th Aves., 700 cu.yd. excav., 11,040 sq. ft. 5 in. brick block paving on 6 in. concrete base and 20 ft. stone curbing; (e) Lakeside Ave. from West 6th to West 9th Sts., 940 cu.yd. excav., 960 ft. French drain, 21,600 sq.ft. Medina stone paving on 6 in. concrete base and 960 ft. Medina stone curbing; (f) Aetna Rd. from East 93rd St. to Erie Ry., 300 cu.-yd. excav., 110 ft. 12 in. catch basin pipe, 2311 ft. 4 in. French drain, 30,415 sq.ft. 5 in. brick block paving on 6 in. concrete base and 2310 ft. 5 in. Berea stone curbing; (g) Broadway from East 34th St. to 1145 ft. westerly, 2400 cu.yd. excav., 2250 ft. 4 in. French drain, 48,340 sq.ft. Medina stone paving on 6 in. concrete base and 2250 ft. Berea stone curbing; (h) Alverno Court from West 41st to West 39th Sts., 220 cu.yd. excav., 7050 sq. ft. 5 in. brick block paving; (i) East 128th St. from Penobscot to St. Clair Aves., 880 cu.yd. excav., 1370 ft. 4 in. French drain, 16,400 sq.ft. 4 in. brick block paving on 6 in. concrete base and 1370 ft. Berea stone curbing, from Baldwin Bros., 506 Rose Bldg., (a) $11,841, (b) $7013, (c) $10,186, (d) $7942, (e) $17,880, (f) $23,552, (g) $39,531, (h) $30,733, (i) $11,074; Enterprise Paving Co., 8436 Bway. Ave., (a) $12,162, (e) $18,007, (f) $23,260, (g) $39,686; Gould & Maybach, 823 East 150th St., (a) $12,233, (b) $10,843; Reiley Bros., 348 Arcade Bldg., (b) $7069, (d) $8021, (f) $23,585, (h) $3064, (i) $10,983.

★Ind., Greenfield—Hancock Co. let contract building Porter Bolander et al Rd., in Vernon Twp. to C. Sachs, $11,609

Mich., Detroit—Dept. Pub. Wks. received bids paving and curbing

(a) St. Aubin Ave. from end of paving north of Newton to Euclid Aves., 28 ft. wide, involving 3320 cu.yd. excav., 2509 lin.ft. curbstone, 3975 sq.yd. sheet asphalt on 6 in. concrete base, 68 cu.yd. concrete under and behind curb, 143 lin.ft. retaining stone;

(b) Blaine Ave. from west line Dexter Blvd. to east line Radford Ave., 26 ft. wide, 2023 cu.yd. excav., 2436 lin.ft. curbstone, 3789 sq.yd. asphaltic concrete on 6 in. concrete base, 70 cu.yd. concrete under and behind curb, 194 lin.ft. retaining stone.

(c) "T" alley between 2nd, Woodward, Bethune and Pallister Aves., 20 ft. wide, 596 cu.yd. excav., 1978 sq.yd. 1 course concrete, 797 lin.ft. retaining plank 2 x 6 ft.;

(d) "T" alley between Wilson, Byron, Hazelwood and Taylor Aves., 18 ft. wide

Streets and Roads (Continued)

677 cu.yd. excav., 1656 sq.yd. 1 course concrete, [illegible] lin.ft., retaining plank 2 x 6 ft. 34 lin.ft. retaining stone;

(e) "East and West" alley between 12th St. Holden Ave., Ferry Park and West Grand Blvd., 18 ft. wide, 346 cu.yd. excav., 1073 sq.yd. 1 course concrete, 1055 lin.ft. retaining plank 2 x 6 ft., 18 lin.ft. retaining stone;

(f) "North and South" alley between 1st St. west of Woodward Ave. from Forest to Hancock Aves., 15 ft. wide, 191 cu.yd. excav., 590 sq.yd. 1 course concrete, 583 lin.ft. retaining plank 2 x 6 ft., 20 lin.ft. retaining stone;

(g) Alley between Hamilton Blvd., 3rd St. Seward Ave. and Virginia Park, 20 ft. wide, 535 cu.yd. excav., 1766 sq.yd. 1 course concrete, 1333 lin.ft. retaining plank 2 x 6 ft.;

(h) Alley between 3rd and 2nd Sts., Glynn Court and Calvert Aves., 19 ft. wide, 507 cu.yd. excav., 1731 sq.yd. 1 course concrete, 1617 lin.ft. retaining plank 2 x 6 ft.;

(i) Alley between Brush, Oakland, Josephine and Owen Aves., 17 ft. wide, 528 cu.yd. excav., 1607 sq.yd. 1 course concrete, 1612 lin.ft. retaining plank 2 x 6 ft.;

(j) Alley between Byron, Hamilton, Taylor and Clairmont Aves., 18 ft. wide, 347 cu.yd. excav., 1151 sq.yd. 1 course concrete, 1087 lin.ft. retaining plank 2 x 6 ft.;

(k) "East and West" alley between 3rd, 2nd, Colburn and Antoinette Sts., 20 ft. wide, 310 cu.yd. excav., 915 sq.yd. 1 course concrete, 796 lin.ft. retaining plank 2 x 6 ft.;

(l) Alley between Orleans and Dequindre Sts. and Lafayette and Monroe Aves., 15 ft. wide, 216 cu.yd. excav., 574 sq.yd. 1 course concrete, 418 lin.ft. retaining plank 2 x 6 ft.;

(m) Alley between Beechwood, Firwood, Seebaldt and Allendale Aves., 20 ft. wide;

(n) "T" alley between Vinewood, Taft, Scoval and Grand River Aves., 18 and 20 ft. wide;

(o) Alley between Sheridan, Townsend, Kercheval and Waterloo Aves., 15 and 20 ft. wide;

(p) Alley between 14th, Wabash, Magnolia and Linden Sts., 20 ft. wide;

(q) Alley between Ironwood, Beechwood, Oregon and Vancouver Aves., 18 ft. wide;

(r) Alley between Calumet, Commonwealth, Canfield and Trumbull Aves., 20 ft. wide;

(s) Linwood Ave. from Joy Rd. to Calvert Aves., 30 and 35 ft. wide less single track space;

(t) Delmar Ave. from Lynn to Caniff Sts., 26 ft. wide;

(u) Laura St. from McClellan to Pennsylvania Aves., 26 ft. wide;

(v) Elsa Ave. from McClellan to Pennsylvania Aves., 26 ft. wide;

(w) Burnett Ave. from Van Dyke to Maxwell Aves., 26 ft. wide;

(x) David Ave. from Crane to Rhons Aves., 26 ft. wide, from

Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $21,279; (b) $16,418; (s) $49,023; (t) $9650; (u) $9543; (v) $8990; (w) $7723; (x) $5804.

W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $21,308; (b) $16,345; (s) $49,169; (t) $10,022; (u) $10,187; (v) $9518; (w) $8088; (x) $6208.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $21,507; (b) $16,458; (s) $48,545; (t) $9816; (u) $9644; (v) $9024; (w) $7794; (x) $5858.

Talbot Co., Penobscot Bldg., (c) $5193; (d) $4745; (g) $4569; (h) $4665; (j) $3277; (k) $2817; (l) $2028; (m) $5723; (o) $1853; (p) $3495; (q) $2902.

R. J. Powelson Co., 1577 Iroquois Ave., (c) $5325; (d) $4613; (e) $3107; (f) $1953; (g) $4823; (h) $4496; (i) $4512; (j) $3076; (k) $2731; (l) $1979; (m) $5185; (p) $3351; (r) $1611.

Oakwood Constr. Co., Ford St. and Wabash R. R., (c) $5231; (d) $4601; (e) $2905.

Otis Cement Constr. Co., 806 Hammond Bldg., (e) $2988; (f) $1890; (h) $4709; (i) $4329; (j) $3047; (k) $2622; (l) $1899; (m) $5343; (n) $4879; (p) $3442; (q) $2732; (r) $1682;

Lennane Bros., Union Trust Bldg., (f) $1884.

E. Meredith & Co., 145 Harper Ave., (g) $4887; (i) $4438; (m) $5343; (n) $5050; (o) $5070; (q) $2732.

W. E. Currie, 20 McGraw Bldg., (o) $4980.

Lennane & McIlvenna, Union Trust Bldg., (r) $1676.

Noted Feb. 20.

Wis., Kenosha—City received bids Mar. 6 for 79,234 sq.yd. pavement, either brick, sheet asphalt, rein.-con. or vertical fiber brick and 23,342 lin.ft. curbing and guttering (a) excavation, (b) brick with asphalt filler, (c) brick with cement filler, (d) vertical fiber brick with asphalt filler, (e) sheet asphalt, type A, (f) rein.-con., (g) curb and gutter, (h) sheet asphalt, type B, from C. Peterson Co., Kenosha, (a) $0.75 per cu.yd., (b) $2.89 per sq.yd., (c) $2.79 per sq.yd., (d) $2.62 per sq.yd., (e) $2.69 per sq.yd., (f) $2.41 per sq.yd., (g) $0.68 per lin.ft., J. Cape & Co., 468 Water St., Racine, (a) $0.70 per cu.yd., (b) $2.96 per sq.yd., (c) $2.68 per sq.yd., (d) $2.80 per sq.yd., (f) $2.50 per sq.yd., (g) $0.75 per lin.ft., Western Impvt. Co., 840 9th St., Racine, (a) $0.65 per cu.yd., (b) $2.99 per sq.yd., (e) $2.38 per sq.yd., (g) $0.73 per lin.ft., (h) $2.28 per sq.yd. Noted Feb. 27.

★Minn., St. Paul—Comrs. Ramsay Co. let contract to Garrick Bros., Scandinavian Bank Bldg., graveling and improving ½ mi. Frost Ave., cost, $2449; ¾ mi. Oakdale Rd. in West St. Paul from south end of 1917 improvement to Mendota Rd., $4249; grading, claying and graveling 1 mi. Fairchild Ave. between Dale and Rice Sts., $2449; D. W. Moore, 894 Edmund St., graveling and improving Dale St. from Crosby Rd. north 1 mi. from Crosby Rd., $3160; claying and graveling 1 mi. Highwood Rd., $2398; A. H. Skiba, New Brighton, grading, claying and graveling Hamline Rd. between Valentine Lake and Manimin Rd., $5480. Noted Feb. 6.

★Neb., Lincoln—City let contract paving Worthington Ave., sheet asphalt, and Starr St., asphaltic concrete, to Abel Constr. Co., 318 Terminal Bldg., $2750 and $10,030 respectively; resurfacing 27th St., asphaltic concrete, 2 in. thick, and paving 33rd St., asphaltic concrete, to Burke-Cochrane Constr. Co., 522-1st National Bank Bldg., $8855 and $11,959 respectively. Noted Feb. 27.

★Tex., Ballinger—Comrs. Runnels Co. let contract grading, draining and gravel surfacing 8½ mi. Central Texas Highway, to Kuykendall & Thompson, Temple.

★Colo., Denver—City let contract building cement sidewalks, crosswalks, culverts, etc., in South Denver Surfacing Dist. No. 15, to J. F. Roberts, Tramway Bldg., $21,515; surfacing various streets in North Denver Surfacing Dist. No. 4, to E. G. Gibbons, 1355 Milwaukee St. $17,590. Noted Feb. 6.

★Oregon—State Highway Comn., Salem, let contract grading and graveling 7.2 mi. John Day Highway, from John Day to Fisk Creek Sect., Grant Co., involving 42,000 cu.yd. excav. and 20,000 cu.yd. gravel; grading and paving 6.9 mi. Pacific Highway from Jefferson to Albany, Linn Co., involving 31,000 cu.yd. excav., 65,000 sq.yd. surfacing, etc., to A. D. Kern, $111,264 and $168,827 respectively.

Ore., Portland—City received bids improving Bidwell Ave. from East 7th St. to Milwaukee Ave.; concrete roadway, from Cochran Bros., $2 per sq.yd., total, $24,301; Warren Constr. Co., Journal Bldg., $2.10 per sq.yd., total, $25,263. Noted Feb. 27.

Railways

PROPOSED WORK

Florida—See "Industrial Works," Tampa.

Nebraska—Chicago, Burlington & Quincy R.R. (lines west of Missouri River), plans following improvements during year: replacement of several miles of 90-lb. steel rails with lighter steel; application of additional ballast in main tracks; equipment of several miles of main track with automatic block signals; new modern power plants to replace old ones; new concrete and steel bridges to replace lighter structures and extension or enlargement of several depots, roundhouses, fuel stations and water stations. Exact location of improvements not determined. F. T. Darrow, Lincoln, engr., maintenance of way.

California—City of Pasadena election Apr. 3 to vote on $2,000,000 to $3,000,000 bonds to build municipal railway from Pasadena to Los Angeles. Pasadena holds option to purchase at $680,000 the Pasadena Rapid Transit Co.'s right of way from south limits of Pasadena to within short distance of Los Angeles business center. About $300,000 will be required to purchase right of way for 4 track line in Pasadena. Cost of terminal at Pasadena, $115,676; Los Angeles, $49,500. R. B. Orbison, city engr., Pasadena, preparing plans for electric railway which will be included in bond issue.

Excavation and Dredging

PROPOSED WORK

N. J., Jersey City—Ditches—Mosquito Extermination Comn. of Hudson Co., 665 Newark Ave., soon lets contract for 100,000 ft. of drainage ditches on salt marsh meadows beginning at Bergen Co. line and extending along either side of Hackensack River to Kill von Kull. Plans include filling in all post holes and other depressions with material or sod removed from ditches. L. E. Jackson, secy.

N. C., New Holland—Canal—Mattamuskeet D. D. soon lets contract for cleaning 20-70 ft. canal, suction dredge work. About $125,000. K. L. Ponzer, ch. engr.

Ga., Dalton—Drainage—See "Streets and Roads."

La., Crowley—Ditches—Iota—Longpoint D. D., Acadia Parish, had plans prepared by M. Bernard, engr., Crowley, for 25 mi. ditch, involving 500,000 cu.yd. floating dredgework.

Minn., Ada—Ditch—Comrs. Norman Co. plan to expend $15,000 for county and judicial ditches involving about 50 mi. open ditch. J. A. Erickson, highway engr.

Minn., Breckenridge—Ditch—Comrs. Wilkin Co. plan to expend $203,129 to build 2 judicial ditches. P. E. Traux, co. aud.

Minn., Montevideo — Ditches — Comrs. Chippewa Co. plan to expend $270,000 to build county and judicial ditches.

Minn., Pipestone—Ditch—Comrs. Pipestone Co. plan to expend $90,000 to build county and judicial ditches involving 50 mi. tile and 20 mi. open ditch work. T. A. Bailey, co. aud.

Minn., Willmar—Ditch—Comrs. Kandiyohi Co. plan to expend $300,000 to build county and judicial ditches, tile and open work. S. Nelson, co. aud.

Minn., Windom—Ditch—Comrs. Cottonwood Co. plan to expend $100,000 to build county and judicial ditches, involving 40 mi. tile. S. A. Brown, co. aud.

Mont., Townsend—Irrigation—Blaine Co. Irrigation Dist. plans to build diversion dam and 50 mi. of canals to irrigate 81,000 acres. G. E. Stratton, Malta, engr.

Wash., Spokane—Irrigation—Hazelwood Irrigated Farms Dist. voted $100,000 bonds to develop irrigation in district. Plans include boring about 12 wells, etc.

Ore., Madras—Irrigation—Secy. of Interior authorized Recl. Bureau to make surveys and examinations of watersheds and storage reservoir sites for Deschutes Irrigation project. Noted Feb. 27.

Ore., Portland—Dredging—Port of Portland plans to dredge in front of all harbor docks to provide 30 ft. of water for larger vessels. Dipper dredges will be used in removing rock from Abina dock.

Ore., Salem—Irrigation—Twenty-four irrigation districts throughout state plan to issue $20,000,000 bonds for irrigation system to cover 7,000,000 acres desert land.

Cal., Newport Beach—Dredging—City voted $65,000 bonds to dredge 200 x 1000 ft. turning basin. P. Kressly, city engr.

Cal., Riverside—Drainage—Bd. Superv. Riverside Co. receives bids in May or June, building drainage systems in Drainage Impvt. Dist. No. 3, northeast of here, along Mission Rd. About $30,000. Work involves 17,505 ft. 8-24 in. tile, 18 concrete manholes, 9 sewer pipe inlets, 1 concrete outlet, etc. A. C. Fulmor, co. surv.

BIDS DESIRED

Ia., Mason City—Drainage—Until Mar. 17, by Cerro Gordo Co., building D. D. No. 67 involving 7800 ft. 12-24 in. tile and 3 laterals involving 1800 ft. 6-10 in. tile. P. Weigand, aud.

Kan., Marion—Drainage—Until Mar. 26, by Cottonwood Valley D. D., for improving Cottonwood River, involving 968,000 cu.yd. new channel excav., 160,000 cu.yd. excav. from present channels, 130,000 cu.yd. levee embankment and 56,000 lin.ft. removal of obstructions other than earth from present channels. Tuttle-Ayers-Woodward Eng. Co., 305-7 Reliance Bldg., Kansas City, Mo., engrs.; advertised in this issue. Noted Oct. 17.

Excavation and Dredging (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

N. Y., Rochester—Barge Canal Works—B. L. Nixon, supt. pub. wks., received bids Mar. 11, completing canal from Kings Bend to Lehigh Valley R.R. crossing here. Contr. No. 190, from Empire Eng. Co., Inc., 60 Church St., New York City, $245,191; J. W. Holler, Ft. Edward, $246,550; Amer. Pipe & Constr. Co., 112 North Broad St., Phila., Pa., $250,154. Work involves 61,000 cu.yd. excav., 20,000 cu.yd. forming embankment, 640 lin.ft. foundation piles, 875 cu.yd. 2nd class concrete, 420 lin.ft. 12 in. vitr. pipe, removing timber approaches to Clinton Ave. bridge, building 1 storehouse, etc. Noted Feb. 20.

★Ia., Logan—Drainage—Comrs. Harrison Co. (Logan) and Monona Co. (Onawa) let contract building Upper Willow D. D. No. 2, Sect. 1 to 9, main ditch involving 504,680 cu.yd. excav. and 8 lateral ditches involving 16,106 cu.yd. excav., to Colahan Walker Co., Omaha, Neb., entire job $0.1132 per cu.yd. Noted Feb. 27.

★Cal., Los Angeles—Irrigation—Bd. Pub. Serv. let contract furnishing 10,000 ft. 6 in. sheet steel riveted pipe for extending pipe lines from city aqueduct to irrigate lands at Raymar and Van Nuys in San Fernando Valley, to Baker Iron Wks., North Bway. and Ord Sts., $0.65½ per ft. Noted Feb. 27.

Industrial Works

PROPOSED WORK

Mass., New Bedford—W. A. Robinson & Co., 144 South Water St., plans to rebuild plant recently destroyed by fire. Loss $75,000.

R. I., Providence—City receives bids about May building 2 story central heating plant. About $50,000. J. H. Gainer, mayor.

Conn., New Haven—T. R. Blakeslee, 84 Norton St., plans to build 6 story, 88 x 108 ft., brick, steel and concrete factory, rein.-con. flooring, concrete foundation, on Hill and Congress Aves., to be occupied by Bradley-Smith Co. About $65,000. Dwight Bldg. Co., 24 Center St., engrs.

Conn., South Willington—W. H. Hall receives bids in April building 3 story, 60 x 100 ft. mill construction dye house, concrete foundation. About $40,000. A. R. Sharpe, Willimantic, archt.

Conn., Waterbury—C. H. Preston, Jr., archt., 136 Grand St., receives bids about Mar. 21, building 1 story, 70 x 104 ft. brick and concrete public garage, rein.-con. flooring, concrete foundation, on Hill St., for W. Roberts. About $30,000.

N. Y., Brooklyn—Cushman Baking Co., 44 Manhattan Ave., having plans prepared by Slee & Bryson, archts., 154 Montague St., for 3 story, 60 x 100 ft., brick and steel bakery, concrete foundation, on Nostrand Ave. and Malbone St. About $125,000.

N. Y., Brooklyn—Lehn & Fink, 120 William St., New York City, plans to build 8 story, 40 x 100 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, on Irving and Columbia Sts. Buchman & Kahn, 56 West 45th St., New York City, archts.

N. Y., Brooklyn—Shampan & Shampan, archts., 772 Bway, soon let contract building 1 story, 50 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Coney Island Ave. and Prospect Park W., for Circle Garage Co., 250 Coney Island Ave. Abopt $45,000. Noted Dec. 26.

N. Y., Flushing—L. Nixon, supt. pub. wks., Capitol, Albany, soon receives bids building barge canal terminal and frame freight shed here. About $162,590.

N. Y., Geneva—Geneva Cutlery Co., Torrey Pk., plans to build large addition on Gates Ave. Cost between $75,000 and $100,000. Plans include construction of 24 ft. bridgeway to connect proposed addition to existing plant.

N. Y., Long Island City—S. Kappen & Bros., 68 West 34th St., New York City, had plans prepared by Ballinger & Perrot, archts., 1328 Bway., New York City, for 6 story, 135 x 489 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, on Jackson Ave. between Hulst and Harold Aves., here. About $750,000.

N. Y., Rochester—Dairyman's League plans to build milk handling plant here. About $150,000. Address G. M. Tyler, pres.

N. Y., Tuckahoe—Hodgeman Rubber Co., having plans prepared by W. L. Stoddard, archt., 9 East 40th St., New York City, for 1 story, 50 x 150 ft., brick and steel factory, rein.-con. flooring, concrete foundation, here.

N. J., Newark—Federal Adding Machine Co., York and Grove Sts., New Haven, Conn., plans to build experimental plant near here. About $250,000.

Pa., New Kensington—Dispatch Printing Co., 324 9th St., had plans prepared for printing plant. About $35,000.

Pa., Phila.—J. J. Felin Co., Inc., 4148 Germantown Ave., plans to build 3 story, 40 x 89 ft., steel, concrete and brick paving plant, rein.-con. flooring, concrete foundation, at 4142 Germantown Ave. About $50,000. C. B. Comstock, 110 West 40th St., New York City, archt.

Pa., Pittsburgh—K. Solomon, Frick Annex, plans to build 3 story, 82 x 154 ft., rein.-con., concrete and brick garage, rein.-con. flooring, concrete foundation, at 513-523 Water St. About $125,000.

Del., Wilmington—Electric Hose & Rubber Co., 12th and Dure Sts., soon lets contract building 2-story, 63 x 210 ft. brick and rein.-con. factory, pipe and cement flooring, concrete foundation. About $60,000. Brown & Whiteside, Dupont Bldg., archts.

Md., Crisfield—C. D. Briddell having plans prepared by W. C. Carter, archt., Crisfield, for 1 story, 50 x 100 ft., brick or rein.-con. factory, rein.-con. flooring.

S. C., North Charleston—General Asbestos & Rubber Co. having plans prepared by Lockwood, Greene & Co., archts., Healey Bldg., Atlanta, Ga., building 600 k.w., rein.-con. and steel power plant, rein.-con. flooring, concrete foundation. About $75,000.

Ga., Buford—Bona Allen, Inc., plans to build 4 story, 45 x 200 ft. shoe factory. Lockwood, Greene & Co., Healey Bldg., Atlanta, engrs.

Ga., Savannah—Reliance Fertilizer Co., 106 Bay St., having plans prepared by Lockwood, Greene & Co., engrs., Healey Bldg., Atlanta, building rein.-con. fertilizer factory. About $100,000.

Fla., Tampa—McElroy Eng. Co., engrs., Giddens Bldg., soon receives bids building sugar mill, including 20 mi. tramway. About $800,000. Owners' name withheld.

Ky., Henderson—Henderson Cotton Mills having plans prepared by Lockwood, Greene & Co., engrs., Healey Bldg., Atlanta, Ga., building 2500-kw. steam plant, brick and concrete, rein.-con. flooring and concrete foundation. About $300,000.

O., Cleveland—L. C. Banderlean, Arlington Ave., having plans prepared by W. R. Powell, archt., 705 Rose Bldg., for 1 story, 60 x 93 ft., brick, steel and concrete garage on Arlington Ave. About $75,000.

O., Cleveland—M. Bealls, 2711 Scoville Ave., had plans prepared by A. Sogg, archt., 10106 Pierpoint Ave., building, 1 story, 36 x 90 ft., brick and timber addition to factory. About $25,000.

O., Cleveland.—Beckman Co., Fulton Rd., having preliminary sketches prepared by Lockwood, Greene & Co., engrs., 38 South Dearborn St., Chicago, Ill., building 2 story, brick and rein.-con. weaving factory on Fulton Rd. About $175,000.

O., Cleveland—Forbes Chocolate Co., 5100 Superior Ave., plans to build brick, steel and rein.-con. candy factory, rein.-con. flooring and concrete foundation, on Ridge Rd. and Dennison Ave. About $250,000.

O., Cleveland—Ohio Blower Co., West 93rd St. and Detroit Ave., plans to build 2 story brick, steel and concrete addition to factory. About $25,000.

O., Dayton—Dayton Fan & Motor Co., South Ludlow and Bayard St., having preliminary plans prepared building factory, with 100,000 ft. floor space. About $175,000.

Mich., Detroit—Amer. Blower Co., 1400 Russell St., purchased 20-acre site along Detroit Terminal R.R. tracks near Gratiot and Grinnell Aves., and plans to build plant. About $750,000.

Mich, Detroit—J. G. Kastler & Co., archts., 523 Chamber of Commerce Bldg., soon let contract for 2 story, 120 x 150 ft., brick and steel foundry, concrete flooring and concrete foundation, for Lokomsky Bros., Dubois St. and East Grand Blvd.

Mich., Detroit—C. R. Wilson Body Co., Clay Ave., having plans prepared by Esselstyn, Murphy & Hanford, archts., New Telegraph Bldg., for rein.-con. factory, rein.-con. flooring; also 2 story rein.con. addition to present factory. About $450,000. Noted Mar. 6.

Mich., Dowagiac—Ruddy Furnace Co plans to build 50 x 200 ft. addition to foundry. A. E. Rudolph, pres.

Mich., Highland Park (Detroit P. O.)—See "Buildings."

Mich., Jackson—Frost Gear & Forge Co, Horton and Tyson Sts., plans to build 75 x 150 ft. steel and concrete addition to factory.

Mich., Marquette—City plans to enlarge electric light plant. About $100,000.

Mich., Three Rivers—Eddy Paper Co White Pigeon, plans to build plant here. About $1,750,000.

Ill., Alhambra—Alhambra Grain & Feed Co. plans to build grain elevator. About $25,000. A. Gerbig, pres.

Ill., Chicago—Morris & Co., Union Stock Yards, having plans prepared by D. D. Meredith, archt., c/o company, for 7 story rein.-con. building to replace one recently destroyed by fire.

Ill., East St. Louis—Durbin Automatic Train Pipe Connector Co., Terminal Belt R.R. and Bond Ave., plans to build 100 x 300 ft. addition to iron foundry. V. S. Durbin, pres. and engr.

Minn., Mankato—Eckman Bros. soon lets contract building 2 story, 30 x 50 ft. garage, 17 x 40 ft. office, 10 x 15 ft. stockroom and 50 x 88 ft. workshop, rein. con. and brick. About $30,000. H. C. Gerlach, Mankato, archt. Noted Feb. 27.

Kan., Hutchinson—Merchants Transfer Co., having plans prepared by Mann & Gerow, archts., building 3 story, 108 x 152 ft. warehouse. About $75,000.

Kan., Moundridge—Unruh & Schlender having plans prepared by C. W. Shaver, archt., Saline, for 1 story, 50 x 100 ft brick garage.

Neb., Omaha—Higgins Packing Co., 1315 Woodmen of World Bldg., soon lets contract building 3 story, 50 x 100 ft., rein.-con. and brick, at 4701 South 37th St. J. H. Craddock, 504 Farnum Bldg., archt.

N. D., Fargo—City election Apr. 1, to vote on $150,000 bonds to build light plant. F. L. Anders, city engr.

N. D., Jamestown—City election Apr. 7, to vote on bonds to build light and power plant.

N. D., Williston—Williston Farmers' Creamery & Produce Co. plans to build creamery. About $30,000.

Mo., St. Louis—McQuay Norris Mfg. Co., 2808 Locust St., having plans prepared building two or three 1 story brick factories and power plant near Oak Hill R.R. tracks and Cooper St. A. J. Mummert, 2808 Locust St., engr. Noted Feb. 20.

Tex., San Angelo—City election Mar. 29 to vote on $500,000 bonds to purchase or build electric-light and water plant.

Idaho, Caldwell—J. L. Bardsley Implement Co., Railroad St., plans to build warehouse. About $75,00.

Idaho, Caldwell—B. M. Holt Seed & Feed Co., 307 Main St., plans to build grain elevator. About $100,000.

Ore., Molalla—Molalla Fire Clay Co. plans to build 1 kiln pottery factory on 32 acre site northwest of here. B. S. Sinoheimer, secy.

Cal., Los Angeles—See "Buildings."

N. S., Springhill—Dominion Coal Co., Glace Bay, having plans prepared for turbo compressor plant here. About $200,000. R. Gordon, secy.

Que., East Angus—Brompton Paper & Pulp Co., having plans prepared by D. J. Spence, archt., 246 Beaver Hall, Montreal, for extension to plant. About $60,000.

Que., Montreal—Belgo Canadian Co., 243 Bleury St., had plans prepared by D. J. Spence, archt., 246 Beaver Hall, for 2 story, 50 x 100 ft., rein.-con. garage, rein.-con. flooring. About $80,000.

Industrial Works (Continued)

Que., Montreal—Dominion Glass Co., 285 Beaver Hall, having plans prepared building 80 x 200 ft. factory, 40 ft. high, on Wellington St. to replace one recently destroyed by fire. About $100,000.

Que., Three Rivers—Wabasso Cotton Co., St. Maurice St., having plans prepared by D. J. Spence, archt., 246 Beaver Hall, Montreal, for addition to cotton mill. About $100,000. Noted Dec. 19.

Ont., Cobourgh—Hydro Electric Comn., 226 Yonge St., Toronto, had plans prepared building planing mill. About $30,000.

Ont., Cornwall—A. C. Robertson, Pitt St., had plans prepared for building garage. About $30,000.

Ont., Guelph—Premier Rubber Co. having plans prepared building 4 story shoe factory. About $150,000.

Ont., Kitchener—Kaufman Rubber Co., 419 King St. W., plans to build addition to plant. About $40,000. A. R. Kaufman, mgr.

Ont., London—Holeproof Hosiery Co., 186 King St., receives bids about Apr. 1, building 4 story, 150 x 200 ft. rein.-con. and steel factory, concrete foundation, on Bathurst St. About $250,000. Noted Sept. 19.

BIDS DESIRED

N. Y., Brooklyn—Until Mar. 14, by D. C. Cooley & Co., archts., 41 Park Ave., New York City, building 3 story, 45 x 60 ft., brick and steel addition to bakery, concrete foundation, for B. A. Cushman, Inc., 772 Nostrand Ave. About $50,000.

N. Y., Brooklyn—Until Mar. 20, by Shampan & Shampan, archts., 772 Bway., building 1 story, 90 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on North 1st St. near Bedford Ave., for Lurwall Realty Co., 49 Graham Ave. About $55,000. Noted Jan. 30.

N. Y., New York—Until Mar. 28, by N. W. Levitan, archt., 7 West 45th St., for 2 story, 100 x 171 ft., brick garage, rein.-con. flooring, concrete foundation, on Lenox Ave. between 110th and 111th Sts., for Stalwart Realty Co., c/o Ames & Co., 26 West 31st St. New West Side Garage Corp., lessee. Noted Feb. 27.

N. Y., Watertown—Until Mar. 20, by Northern New York Utilities Inc., Light and Power Bldg., for 1-story rein.-con. addition to existing generating plant at Effley Falls, consisting of 30 x 38 ft. rein.-con. power house, 120 ft. of 7½ ft. steel penstock, revamping present dam, etc. J. B. Taylor, pres. Noted Mar. 6.

N. J., Newark—Until Mar. 24, by P. B. Taylor, archt., Essex Bldg., building 1 and 2 story, 140 x 168 ft., rein.-con. and brick factory, rein.-con. flooring, concrete foundation, at 238 Wilson Ave., for Amer. Oil & Supply Co., 52 Lafayette St. About $100,000. W. F. Hofman, treas. Noted Feb. 20.

Que., Quebec—Until Apr. 1, by I. De Vorennes, 279 St. Joseph St., building garage. About $35,000. I. A. Burgeson, 1031 St. John St., archt.

Ont., Sydenham—Until Mar. 21 (change of date) by Dept. Pub. Wks., Ottawa, for altering and building additions to military hospital here, same to be converted into power house, etc. About $75,000. R. C. Wright, Dept. Pub. Wks., archt. Noted Mar. 6 under "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Adams—R. Graves, 132 Commercial St., let contract building 3 story, 50 x 150 ft. brick garage, rein.-con. flooring, concrete foundation, on Columbia St., to D. S. McGrath, Summer St. About $50,000.

★R. I., Providence—Marine Eng. & Drydock Co., 170 Westminster St., let contract building 1 story, 60 x 303 ft. brick and timber machine shop and office, rein.-con. flooring and concrete foundation on Allens Ave., to Interstate Constr. Co., 29 Weybosset St. About $85,000. Owners originally planned to build by day labor, but later gave contract to above mentioned firm. Noted Jan. 16.

★Conn., Bristol—New Departure Mfg. Co., 269 North Main St., let contract building 1 story, 90 x 302 ft. brick hardening shop, rein.-con. flooring and concrete foundation, on North Main St., to Torrington Bldg. Co., 197 Water St., Torrington. About $60,000. Noted Jan. 30.

★Conn., Hartford—J. J. Roche Co., Maple Ave. and White St., let contract building two 3 story, 50 x 125 ft. brick factories, rein.-con. flooring and concrete foundation, on Maple Ave., to Ellison Constr. Co., 60 Prospect St. About $50,000.

★N. Y., Brooklyn—Belgian Fur Dyeing Co., 321 Manhattan Ave., will build 3 story, 68 x 98 ft. brick and steel factory, rein.-con. flooring and concrete foundation, at 566 Johnson Ave. Work will be done by day labor. About $35,000. Noted Feb. 27.

★N. Y., Long Island City—Englander Spring Bed Co., 88-35th St., let contract building 2 story, 200 x 200 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Johnson, Stewart and Varick Sts., to Rosenthal Eng. Contg. Co., 228 Jackson Ave., Brooklyn. Noted Feb. 6.

N. Y., Thiells—F. A. Vanderlip, pres. bd. mgrs. Letchworth Village, 7 Wall St., New York, received bids Mar. 4, (1) building addition to central heating plant, (2) building underground distributing piping in female group tunnel (3) furnishing steam heating plant equipment, from G. B. Wright Co., Gromerville, (1) $32,200; P. Keeler Bldg. Co., 425 Orange St., Albany, (1) $37,880; Winters Bros., New York City, (1) $37,930; Kelly & Keeley, Inc., 12th St., Long Island City, (1) $39,500; Almirall & Co., Inc., 1 Dominick St., New York City, (2) $29,242 (3) $59,421; Baker, Smith & Co., Inc., 576 Greenwich St., New York City, (2) $29,950, (3) $61,500; J. C. Williams, Inc., 233 Bway., New York City, (2) $30,277, (3) $60,970; Lord Constr. Co., 105 West 40th St., New York City, (2) $31,027, (3) $63,937; G. E. Eng. Co., 417 Canal St., New York City, (2) $33,185, (3) $76,376; Austin Heating Corp., New York City, (2) $34,635; Adams Brittz & Co., Inc., 1761 Park Ave., (2) $35,385 (3) cost and 10% overhead and 10% profit. Cleghorn Co., 54 Batterymarch St., Boston, Mass., (2) $40,519; E. Joy Co., 133 Market St., Syracuse, (2) $45,000, (3) $97,330; Merrill Co., (3) $46,984; Howe & Bassett Co., 23 Stillson St., (3) $81,990. Noted Jan. 16.

★N. J., New Brunswick—Eastern Potash Co., 120 Bway., New York City, will build plant consisting of ten 1 and 3 story, steel and brick buildings, rein.-con. flooring, concrete foundation, here. About $2,000,000. Work will be done by day labor.

★Pa., Scranton—Heath Silk Co. let contract building 3 story, 50 x 170 ft. brick mill on Maple St. and Meadow Ave., to P. Stipp, 327 North Washington Ave.

★O., Cleveland—Giatrou-Silver Co., 727 Bolivar Rd., let contract building 3 story, 40 x 80 ft., brick and concrete warehouse and store, to A. A. Lane, 1836 Euclid Ave. About $75,000.

★O., Cleveland—Home Specialty Co., 1051 Power Ave., let contract building 2 story, 80 x 160 ft., brick, steel and concrete factory, rein.-con. flooring and concrete foundation, on East 152nd St. and Woodworth Ave., to S. W. Emerson, 1900 Euclid Ave. About $75,000.

★O., Cleveland—Sterling Spring Co., 2148 Scranton Rd., let contract building 1 story, 100 x 150 ft., brick, steel and concrete factory, rein.-con. flooring and concrete foundation, to S. W. Emerson, 1900 Euclid Ave. About $30,000.

★Mich., Battle Creek—Nichols & Shepard let contract building 2-story, rein.-con. boiler plant, rein.-con. flooring, concrete foundation, to Westinghouse, Church & Kerr, 37 Wall St., New York City. About $120,000.

★Mich., Detroit—Holley Carburetor Co., 145 East Willis St., let contract building 1 and 2 story, 60 x 224 ft. and 40 x 94 ft. factory and 23 x 44 ft. boiler house, brick and rein.-con., rein.-con. flooring and concrete foundation on Epworth Blvd., to O. Misch, 725 Chamber Commerce Bldg. Noted Feb. 27.

★Mich., Detroit—Morgan & Wright Tire Co., foot Bellevue St., let contract building 7 story, 140 x 215 ft. brick and rein.-con. warehouse, rein.-con. flooring and concrete foundation, to Bryant & Detweiler Co., 2336 Dime Bank Bldg. About $700,000. Noted Feb. 20.

★Ill., Chicago—Bankers Supply Co., 2251 South Park Ave., let contract building 1 story, 100 x 370 ft. mill construction printing plant, concrete foundation on State and 59th Sts., to J. Rodatz, 209 South La Salle St. About $120,000. Noted Feb. 13.

★Mo., St. Louis—Chester Knitting Mill Co., 416 South 4th St., let contract building 1 story, 50 x 100 ft., brick and rein.-con. addition to mill at 3864 Laclede Ave., to Woermann Constr. Co., Century Bldg. About $25,000.

★Wash., Seattle—Bekins Moving & Storage Co., 12th and Madison Sts., let contract building 6 story, 50 x 200 ft., concrete warehouse, rein.-con. flooring, to Ferro Concrete Co., Empire Bldg. About $100,000.

★N. B., St. Leonard Station—Canadian Government Ry., Ottawa, Ont., let contract building 2 stall timber engine house, concrete foundation, to H. Post, Woodstock. About $25,000; actual cost, plus 10%.

★Que., Temiskaming—Kipawa Fibre Co., 355 Beaver Hall Sq., Montreal, let contract for sulphite mill and extension to power house here, to G. Fuller Co., Ltd., 45 St. Alexander St., Montreal. About $1,016,000. Noted July 18.

★Ont., London—McClary Mfg. Co., 333-343 Wellington St., let contract building addition to stove plant, to W. Insel, c/o owner. About $40,000. Noted Nov. 21.

★Ont., Port Arthur—Ontario Hydro Electric Comn. plans to build 1-story, 100 x 200 ft. rein.-con. and brick power station, with 50,000 hp. capacity, on Nipigon River, near here. Work will be done by day labor. Noted Mar. 6.

Buildings

PROPOSED WORK

Mass., Boston—Office—Park Sq. Real Estate Co., having plans prepared by Dinsmore & LeClear, archts., 88 Broad St., for 10 story, 75 x 600 ft. rein.-con., rein.-con. flooring and concrete foundation, on Park Sq.

Mass., Cambridge—Fire House and Police Station—City rejected bids for remodeling 3 story brick, steel and concrete, concrete flooring on Central Sq. About $85,000. Work will be refigured. C. H. Blackall, 20 Beacon St., Boston, archt. Noted Jan. 23.

Mass., Natick—Housing—Northway Motors Co. plans to build one hundred 1½ story, 28 x 38 ft. brick and concrete residences, macadamized roads, concrete walks and curbs, sewers, etc. About $500,000. J. J. Smith, Old South Bldg., Boston, archt.

Mass., Taunton—Church—Immaculate Conception congregation receives bids about Apr. 1, building 2 story, 45 x 80 ft. brick and concrete, concrete foundation on Bay St. About $50,000. M. J. Reilly, pastor.

R. I., Providence—Dormitory—Women's College of Brown University, 172 Meeting St., receives bids about Apr. 1, building 4 story brick, steel and concrete dormitory, concrete foundation, to include reading, recreation and dining rooms. About $150,000. L. S. Ping, dean. Andrews, Jacques & Jones, 50 Congress St., Boston, archts.

R. I., Providence — Hospital — Rhode Island Hospital, Eddy St., receives bids about May building 3 story brick, steel and rein.-con. addition, rein.-con. flooring and concrete foundation. About $100,000. K. Taylor & Co., Federal St., Boston, Mass., archts.

R. I., Woonsocket — Theatre — Social Amusement Co., c/o W. F. Fontaine, archt., Federal Bldg., having plans prepared for moving picture theatre on Cumberland St. About $50,000.

Conn., Bridgeport—Hotel—H. Frank, 426 Boston Ave., plans to build 4 story 85 x 112 ft. brick, concrete foundation on Broad and Liberty Sts. About $80,000. E. B. Caldwell, Jr., 886 Main St., archt.

Conn., Bridgeport—Hotel—H. E. Frank, 426 Boston Ave., purchased site on Washington Ave. and Coleman St. and plans to build 4 or 6 story. About $200,000.

Conn., Bridgeport—Memorial—Chamber Commerce plans to construct building to be known as Liberty Memorial Bldg. About $750,000. Address W. T. Hincks, member of com.

Buildings (Continued)

Conn., Bridgeport—School—St. Michaels Polish congregation, 310 Sterling St., plans to build 3½ story brick, steel and concrete, rein.-con. flooring and concrete foundation on Sterling St. About $125,000. A. Figlewski, pastor.

Conn., Danielson—Recreation—St. James congregation receives bids in fall building 4 story, 70 x 100 ft. brick, steel and rein.-con., concrete foundation. About $60,000. W. H. Cox, 53 State St., Boston, Mass., archt.

Conn., Milford—Memorial—Town plans to construct memorial building, to include armory, community hall, auditorium and club house. About $100,000. Address M. J. Cheney, 8 Green St.

Conn., New Haven—Hotel—H. A. Leonard, 902 Chapel St., receives bids about May 15, building 10 story, 150 x 190 ft., brick and steel apartment hotel, rein.-con. flooring, concrete foundation, on College and Chapel Sts. About $250,000.

Conn., New London—Theatre—H. R. Brewster, archt., 295 East 17th St., Brooklyn, N. Y., receives bids in April building 3 story, 70 x 165 ft., brick and concrete, rein.-con. flooring, concrete foundation, on Bank St., for C. J. Ducy, Methodist St. About $75,000. Noted Jan. 16.

Conn., Newtown—High School—Town plans to build memorial high school. About $100,000. E. O. Grisbrook, chn. com.

Conn., Torrington—Church—Polish Congregation Society plans to build on Union St., brick. About $75,000. Address A. Krukor, Torrington.

Conn., Torrington—Club House—I. O. R. M., Mohawk Tribe, Main St., plans to build on Main and East Main Sts. About $60,000.

Conn., Wethersfield — Library — Town plans to build library on Main St. and Hartford Ave. About $50,000. Address A. W. Hanmer, 71 Main St.

N. Y., Buffalo—Community House—Lafayette Presbyterian congregation, Lafayette and Elmwood Ave., plans to build memorial community house adjoining church. About $150,000. E. D. Emerson, 587 Ashland Ave., chn. finance com.

N. Y., Cortland—Normal School—State Legislature Capitol, Albany, petitioned to appropriate $600,000 to rebuild school here. T. E. Finegan, Capitol, Albany, comr. state bd. educ.

N. Y., New York—Store and Loft—S. B. Eisendrath, archt., 18 East 41st St., soon lets contract building 6 story, 49 x 100 ft., brick and steel, concrete foundation, at 255-257 5th Ave., for Musher & Co., 140 Liberty St. About $80,000.

N. Y., Salisbury—Hospital—Bd. Supervs., Herkimer Co. (Herkimer), having plans prepared for brick and concrete tuberculosis hospital on Heller site here, ½ mi. from Salisbury Center. Election soon to vote on $150,000 bonds for project.

N. Y., Syracuse—Memorial Hall—Chamber of Commerce plans to build memorial hall. About $250,000. C. A. Chase, 111 Wyoming St., chn. executive com.

N. Y., Wards Island—Dining Room—State Hospital Comn., Capitol, Albany, received bids Mar. 4, building 3 story, 22 x 114 ft., brick, steel and concrete, rein.-con. flooring, concrete foundation, at State Hospital here, from Faillace Bros., 7 East 42nd St., New York City, $97,630; Carleton Co., Longacre Bldg., New York City, $103,858; C. L. Dooley, Inc., 257 Adelphi St., Brooklyn, $105,700. Noted Feb. 13.

N. J., Soho—Tuberculosis Hospital—Bd. Freeholders Essex Co., Newark, having preliminary plans prepared by R. W. Erler, archt., 45 Clinton St., building here.

N. J., Union Hill—School—Bd. Educ. receives bids in April building 3 story, 105 x 192 ft., brick and steel, concrete foundation, on Hudson Ave. between 1st and 2nd Sts. About $200,000. J. Lugosch, 21 Bergenline Ave., archt. Noted Jan. 16.

N. J., West Orange—Civic Center—City plans to construct civic center building between Valley Rd. and Fairmount Ave., to be known as Liberty Hall. About $100,000.

Pa., Juniata—College—Juniata College having sketches prepared by G. E. Brumbaugh, archt., Real Estate Trust Bldg., Phila., for group of college buildings here to include auditorium, etc.

Pa., Phila.—Office—Finance Co. of Pennsylvania, 1420 South Penn Sq., plans to build 21 story office building. About $1,500,000. G. H. Earle, Jr., pres.

Md., Baltimore — Church — Emmanuel Protestant Episcopal congregation, Cathedral and Read Sts., had plans prepared by W. Ritter, archt., Cambridge, Mass., for 1 story, 25 x 65 ft. steel and stone addition to church, stone and concrete foundation, with 133 ft. tower. About $125,000. H. D. Harlan, 9 West Biddle St., chn. bldg. com.

S. C., Elk Point—Church—St. Joseph congregation soon lets contract building 1 story, 50 x 143 ft. brick and stone. About $60,00. F. R. Salmon, pastor. W. L. Steele, 502 United Bank Bldg., Sioux City, Ia., archt.

Ga., Bibb City—School—Bibb Mfg. Co., Main St., Macon, soon lets contract building 2 story, brick school and auditorium here. About $50,000.

Ga., Dublin—Schools—Bd. Educ. plans to issue $50,000 bonds to enlarge and improve various schools.

La., New Orleans—Hospital—City having plans prepared by E. A. Christy, archt., City Hall, for 3 story, rein.-con., steel and brick, rein.-con. flooring, concrete pile foundation, on Tulane and Carr Ave. About $200,000.

O., Cincinnati—Home Financing Co., 1209 Union Commercial Bank Bldg., having plans prepared for 8 story, brick, steel and concrete freight terminal, warehouse and storage plant, on Smith and Mill Sts. About $3,000,000. A. M. Allen Co., 1900 Euclid Bldg., engrs.

O., Cincinnati—School—Bd. Educ. received bids building Hoffman school, 2 story brick, on Bloody Run Blvd., from D. Meinken Co., 2126 Western Ave., $318,857; Ohio Bldg. & Constr. Co., Burnet Ave., $333,500; David Cordon Bldg. & Constr. Co., Burnet Ave., $337,554.

O., Cleveland—Bank and Office—Cleveland Federal Reserve Bank, Williamson Bldg., plans to build 10 or 12 story, 150 x 200 ft. on East 6th St. and Superior Ave. About $1,550,000.

O., Cleveland—Commercial Warehouse Co., 250 Arcade Bldg., had preliminary plans prepared by Fulton & Taylor, archt., 631 Hippodrome Annex, for 10 story, brick steel and concrete warehouse on Abbey Ave. About $1,500,000.

O., Cleveland—Sales and Office—Automobile Hospital Co., 2076 East 22nd St., plans to build 65 x 150 brick, steel and concrete. About $75,000.

O., Cleveland—Salesroom—Paul Bros. Co., Citizens Bldg., having preliminary plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., building 3 story, 99 x 133 ft. on East 18th St. near Euclid Ave. About $115,000.

O., Cleveland—School—Bd. Educ. plans to build 1 story, brick, steel and concrete school on Miles Ave., and 1 story addition to school on Warner Rd. Cost $100,000 each. W. R. McCormack, East 6th St. and Rockwell Ave., archt.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., plans to build 2 story, brick, steel and concrete on West 20th St. and Spring Rd. About $75,000. W. R. McCormack, East 6th St. and Rockwell Ave., archt.

O., Dayton—Commercial—Gem City Bldg. and Loan Assn., 12 North Main St., plans to build 1 story, 37 x 110 ft. steel and concrete, rein.-con. flooring and concrete foundation, by Schenck & Williams, archts., Mutual Home Bldg.

O., Dayton—Office—Refiners Oil Co., 515 South Main St., plans to build 3 or 4 story.

Mich., Detroit—Office—Buhl Malleable Co., Wight and Adair Sts., had plans prepared by Smith, Hinchman & Grylls, archts., 1318 Book Bldg., for 3 story, 34 x 82 ft. brick, rein.-con. and steel rein.-con. flooring and concrete foundation. About $50,000.

Mich., Highland Park (Detroit P. O.)—Hospital—City recives bids about May 1, building 4 story, 48 x 138 ft. brick and rein.-con. hospital, with 48 x 54 ft. wing, also 2 story, 32 x 60 ft. power and heating plant. About $300,000. M. J. Sturm, 114 South Michigan Ave., Chicago, archt. Noted June 20.

Ill., Chicago—Hotel—J. A. Taggert, archt., 108 South La Salle St., receives bids about Mar. 25, building 9 story, 56 x 96 ft. brick and rein.-con. addition, rein.-con. flooring and concrete foundation on Clarendon and Windsor Aves., for Blackwood Hotel Co. About $250,000.

Ill., Forest Park (Oak Park P. O.)—Theatre and Stores—A. Harris, 35th and Iron Sts., Chicago, having plans prepared by H. L. Newhouse, archt., 4630 Prairie Ave., Chicago, for 1 story, 120 x 200 ft. brick and timber, brick foundation, on Madison and Des Plaines Sts., here. About $8[illegible],000.

Ia., Sioux City—Hotel—Purslow Estate, c/o L. B. Longnecker, 914 Jones St., plans to build 18 story, 150 x 150 ft., rein.-con., brick and steel, rein.-con. flooring and concrete foundation on 5th and Nebraska Sts. About $1,000,000.

Ia., Sioux City—Hotel—War Eagle Corporation, 507 Trimble Blk., plans to build 8 story, 150 x 200 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation on 6th and Pierce Sts. About $750,000.

Minn., Duluth—School—Bd. Educ., Glencoe Bldg., having plans prepared by Croft & Boerner, archts., Lonsdale Bldg., building 2 story, rein.-con. grade school, rein.-con. flooring, concrete foundation on Bayview Heights. About $60,000.

Kan., Lawrence—High School—Bd. Educ. plans election to vote on $250,000 bonds to build memorial high school. R. A. Kent, supt.

Kan., McPherson—Hospital—McPherson Co. having plans prepared by Mann & Gerow, archts., Hutchinson, for 4 story, 44 x 155 ft. brick and stone, concrete foundation. About $100,000. A. J. Cederholm, co. clk. Noted Jan. 30.

Kan., Salina—School—Sisters of St. Joseph plan to build brick and rein.-con. girls school. About $300,000.

Kan., Wellington — Auditorium — City plans election in April to vote on $150,000 bonds to build 2 story brick, stone, concrete and steel auditorium. C. Boller & Bros., archts., Kansas City, Mo., preparing plans. About $150,000.

Kan., Wichita—Hotel—Wichita Union Stockyards Co., Stockyards Exch. Bldg., having plans prepared by E. R. Meier, archt., for 3 story rein.-con. and brick, cement flooring, concrete foundation, on 21st St. About $75,000. D. C. Smith, mgr.

Neb., Falls City—Bank and Temple—Richardson Co., State Bank and Masonic Bldg. Assn. having plans prepared by Fiske & Meginnis, archts., 533 Bankers Life Bldg., Lincoln, for 3 story, 50 x 113 ft., rein.-con. and brick. About $100,000.

Neb., Lincoln — Church — Westminster Presbyterian congregation having plans prepared by J. R. Smith, archt., 406 Nebraska State Bank Bldg., for 2 story, 38 x 98 ft., rein.-con. and brick on 23rd and Garfield Sts. About $110,000. R. A. Lyman, chn. bldg. com.

S. D., Watertown—High School—Bd. Educ. receives bids in spring, building brick, concrete and stone on 1st Ave. S. E. About $300,000.

N. D., Walhalla—Farmers Seed Potato Growers Assn. plans to build 2 story 70 x 130 ft. tile warehouse, 100,000 bushel capacity.

N. D., Williston—Hospital—Wittenberg Hospital Assn. plans to build hospital here. About $50,000.

Mo., Brookfield—School—Bd. Educ. having plans prepared by M. Martin, archt., Hannibal, for rebuilding brick and stone school recently destroyed by fire. About $60,000.

Mo., Columbia—Dormitory—Knights of Columbus plan to build brick and stone dormitory to include 25 rooms, hall, etc. About $50,000.

Mo., Ozark—Court House—Christian Co. plans election to vote on $90,000 bonds to build court house. About $10,000 subscribed to aid project.

Mont., Harlowton—School—City will sell $50,000 bonds Mar. 24, to build school.

Mo., St. Louis—High School—Bd. Educ. purchased site on Louisiana Ave. and Arsenal St. and plans to build 3 story, brick and concrete, rein.-con. flooring and con-

Buildings **(Continued)**

crete foundation. R. M. Milligan, 600 Bd. Educ. Bldg., archt.

Mo., Kansas City—Mausoleum—Kansas City Mausoleum Co. having plans prepared by S. Lovell, archt., 30 North Michigan Ave., Chicago, for 3 story rein.-con. on 20,000 sq.ft. site here. About $500,000.

Tex., Dallas—Schools—City election Apr. 1 to vote on $750,000 bonds to build schools. G. D. Fairtrace, city engr.

Okla., Blackwell—Hotel—Blackwell Hotel Co. having plans prepared by L. H. Bailey, archt., 1214 North Oklahoma St., Oklahoma, for 4 story, 100 x 140 ft., rein.-con. and brick.

Okla., Durant—High School—City election about Mar. 22 to vote on $120,000 bonds to build high school.

Okla., Enid—Schools—Bd. Educ. soon receives bids building 2 story, 70 x 140 ft. rein.-con. and brick grade school, cost $110,000; also 3 story, 64 x 125 ft. rein.-con. and brick addition to high school, $100,000. R. W. Shaw, Beck Bldg., archt.

Okla., Enid—Theatre—G. H. Harryman, 113 West Pine St., plans to build 50 x 150 ft. brick and stone, on Independence St. About $50,000.

Okla., Oklahoma—Office—Sterling Refining Co., 319 Mercantile Bldg., plans to build 2 story, 50 x 50 ft. marble and brick. About $50,000.

Okla., Ponca City—Church—Christian congregation having plans prepared by Layton & Smith, archts., 701 Southwest Reserve Bank Bldg., Oklahoma, for 2 story, 70 x 150 ft., brick and stone on 5th and Grand Aves. About $50,000.

Okla., Ponca City—School—Bd. Educ. having plans prepared by Layton & Smith, archts., 701 Southwest Reserve Bank Bldg., Oklahoma, building 1 story, brick and stone. About $60,000.

Okla., Tulsa—Church—Trinity Episcopal congregation plans to build. About $150,000.

Idaho, Idaho Falls—Court House—Bonneville Co. election June 3, to vote on $275,000 bonds to build court house here.

Ore., Eugene—University—University of Oregon having plans prepared by E. F. Lawrence, dean, for constructing woman's building adjacent to Hendricks Hall. About $125,000. Noted Feb. 27.

Ore., Heppner—Hotel—Heppner Hotel Co. and Heppner Impvt. Co. having plans prepared for 80 x 100 ft.

Ore., Lakeview—Hotel—Commercial Hotel Co. having plans prepared by F. J. De Longchamps, archt., Lakeview, for large concrete building.

Ore., Marshfield—Armory—City plans to build armory. About $40,000 now available and $20,000 will be voted on under reconstruction bond issue election.

Ore., Oregon City—High School—Willamette, West Linn and Bolton School Dists. plan election to vote on $62,500 bonds to purchase site and build union high school. Bd. Educ. Dist. No. 3 in charge.

Cal., Los Angeles—Studio, etc.—Bonnie-Reed Film Mfg. Co., Niles, plans to build motion picture plant consisting of studios, offices, laboratories, warehouse, grand stands, power plant, etc., all frame and plaster construction, on Sunset Blvd. and Bronson Ave. About $1,000,000. Train & Williams, 225 Exch. Bldg., archts.

Cal., Visalia—Bank and Office—Natl. Bank of Visalia considering tentative plans for 4 or 5 story. About $200,000.

Que., Quebec—School—School Bd. purchased site on 13th St. near 1st Ave., and plans to build school. About $50,000. G. E. Tanguay, Quebec, archt.

Ont., Guelph—School—Bd. Educ. having plans prepared by S. B. Coon & Son, archts., Excelsior Bldg., Toronto, for school. About $50,000.

Ont., Mimico—Cottages—Dept. Pub. Wks., Toronto, plans to build 2 cottages at Hospital for Insane here. About $75,000. O. F. G. McDiarmid, minister.

Ont., Mimico—School—Town plans to build school. About $55,000. J. Kay, secy.-treas.

Ont., Ottawa—Store and Office—C. J. Booth having plans prepared by J. A. Edward, archt., Bootn Bldg., for 9 story, 100 x 190 ft. on Bank St., corner Slater St. About $700,00.

Ont., Weston—School—Town plans to build school. About $60,000 voted for project. Noted Jan. 9.

BIDS DESIRED

Conn., Fairfield—School—W. Schmidt, archt., 1188 Main St., Bridgeport, is receiving bids for 2 story, 62 x 96 ft. brick, concrete and steel, rein.-con. flooring and concrete foundation, for St. Thomas congregation, Boston Post Rd. W. J. Blake, pastor. About $65,000. Noted Jan. 16.

Conn., New London—Dormitory—Ewing & Chappelle, archts., 101 Park Ave., New York City, receiving bids building dormitory for Connecticut College for Women, Mohegan Ave. About $125,000. Noted Dec. 19.

N. Y., Brooklyn—Hospital—Until Mar. 17, by Carlson & Wiseman, archts., 226 Henry St., for 4 story, 75 x 100 ft., brick and steel, concrete foundation, on Bushwick Ave. and Cedar St., for Bushwick Maternity Hospital, 761 Bushwick Ave. About $70,000. Former bids rejected. Noted Feb. 20.

N. Y., Huntington Park (Huntington P. O.)—Museum—Until Mar. 18, by Maynicke & Franke, archts., 25 East 26th St., New York City, building 1 story, 44 x 113 ft., limestone and marble, here, for A. Heckscher, 56 East 42nd St., New York City. About $100,000. Noted Jan. 30.

N. Y., New York—Dormitory—Until Mar. 19, by B. S. Coler, comr. pub. charities, building and repairing in male dormitory, on Randalls Island.

N. Y., New York—Hospital—Until Mar. 14, by B. S. Coler, comr. pub. charities, building and repairing in Woodside Bldg., on Randalls Island.

N. Y., New York—Theatre—Until Mar. 18, by H. J. Krapp, archt., 114 East 16th St., building 2 story, 189 x 213 ft., brick and steel, concrete foundation, at 4827 Bway., for City Real Estate Co., 176 Bway. About $100,000. B. Cleveland, pres. Noted Feb. 20.

Pa., Phila.—Comfort Building, etc.—Until Mar. 17, by Dept. Pub. Wks., City Hall, constructing group of 1 story, rein.-con., brick and timber buildings, rein.-con. flooring, concrete foundation, at League Island Park to include comfort building, stable, yard, superintendent's quarters, boat house and band stand. About $250,000. R. E. White, Pennsylvania Bldg., archt.

W. Va., Montgomery—High and Grade Schools—Until May 1, by Bd. Educ., building 2 story 88 x 144 ft. brick high school also 45 x 82 ft. grade school. Cost, $80,000 and $20,000 respectively. A. F. Wysong, Princeton, archt.

La., Edgard—Church—Until Mar. 31, by St John Baptist congregation building 55 x 135 ft. brick and concrete. About $60,000. J. B. Favrot & Livaudais, Title Guarantee Bldg., New Orleans, archts. Noted June 13.

O., Columbus—Bank and Office—Until Apr. 3, by F. L. Packard, archt., Hayden Bldg., building 6 story 25 x 96 ft., concrete and brick, concrete foundation, on High and East Main Sts., for Franklin Loan and Savings Co., 347 South High St. About $100,000. Noted Mar. 6.

O., Dayton—Bank and Office—Until Mar. 23, by Pretzinger & Musselman, archts., Reibold Bldg., for 6 story, 45 x 70 ft. rein.-con. addition, rein.-con. flooring, to Callahan Bank Bldg., 3rd and Main Sts. About $125,000.

Ill., Chicago—Grade School—Until Mar. 19, by Bd. Educ. for altering existing building and constructing 3 story, 105 x 120 ft. brick and timber addition to Darwin School, rein.-con. flooring and concrete foundation, on Edgewood and North Albany Aves. About $250,000. A. F. Hussander, 5 South Dearborn St., archt.

Mich., Detroit—Mercantile—Until Mar. 15, by A. Kahn, archt., Marquette Bldg., for 8 story, 40 x 100 ft. brick, rein.-con. and steel, rein.-con. flooring and concrete foundation, on Woodward Ave., for Heyn's Bazaar, 147 Woodward Ave. E. Heyn, pres. Noted Feb. 27.

Wash., Seattle—Hall—Until Apr. 4, by Regents University of Washington, building, grading and excavating for philosophy hall. About $200,000. Bebb & Gould, Securities Bldg., archt.

PRICES AND CONTRACTS AWARDED

★Indicates award of contract

★Mass., Middleton—Hospital—Essex Co. (Newburyport) let contract building 1 and 2 story, 40 x 600 ft. brick and concrete tuberculosis hospital, rock foundation, to C. E. Currier Co., 10 High St., Boston. About $500,000. Plans include power plant, administration and ward buildings.

Mass., Watertown (Middlesex P. O.)—School—Bd. Educ. received bids building 3 story brick, concrete foundation, from L. Mitchell, Milk St., Boston, $78,983; S. J. Kelley, Central Sq., Cambridge, $79,750.

★R. I., Central Falls—Church—Our Lady of Perpetual Help congregation, 310 High St., Pawtucket, let contract building 2 story, 50 x 100 ft. brick, here, to T. Walczak, Mill St. About $90,000.

★R. I., Newport — Memorial — Cushing Memorial, c/o Delano & Aldrich, archts., 126 East 38th St., New York City, let contract building 39 x 56 ft. stone and marble, on Bellevue Ave., to Central Bldg Co., 58 Front St., Worcester, Mass. About $58,000.

★Conn., Hartford—Hotel—N. Carabillo, 5 Edwards St., will build 5 story, 46 x 126 ft. brick and steel, rein.-con. flooring and concrete foundation on Farmington Ave. About $80,000. Work will be done by day labor. Noted Feb. 20.

★Conn., New Haven—Hotel—DeBussey-Kusterer Co., 116 Church St., will build 6 story, 226 x 250 ft. brick, steel and concrete, rein.-con. flooring and concrete foundation at 239 Whitney Ave. Plans include garage, gymnasium and swimming pool. About $750,000. Work will be done by day labor.

★N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York City, let contract building P. S. 29, 5 story, 118 x 192 ft., steel and brick, concrete foundation, Henry and Harrison Sts., to Frymer & Hanna, 25 West 45th St., New York City, $463,960. Noted Feb. 20.

★N. Y., Far Rockaway—Theater—Far Rockaway Strand Theater, 47th St. and Bway., New York City, let contract building 1 story, 144 x 250 ft., brick and steel, concrete foundation, on Central Ave., to M. Shapiro, 52 Vanderbilt Ave., New York City. About $100,000. Noted Feb. 20.

★Ga., La Grange—Community House—International Cotton Mills let contract building 1 story, tile and stucco, including swimming pool and gymnasium to H. N. Marshall, Whaley St., Columbia, S. C. About $65,000. Noted Feb. 27.

★O., Cleveland—Hall—City let contract for concrete walls and fireproofing on proposed 6 story, concrete and steel public hall, on East 6th St. and Lakeside Ave. to Cleveland Fireproof Constr. Co., Anisfield Bldg., $80,285; total cost, $3,000,000. Noted Feb. 6.

★O., Cleveland—Office—D. R. Hanna, 511 Leader-News Bldg., let contract building 18 story, 199 x 210 ft., brick, rein.-con. and steel, rein.-con. flooring and concrete foundation, on East 14th St. and Euclid Ave., to J. Gill & Sons Co., 1301 Citizens Bldg. About $2,500,000. Noted Feb. 20.

★O., Cleveland—Store—See "Industrial Works."

★Wis., Milwaukee—High School—City let contract building Bay View High School to P. Riesens Sons Co., 1018 Humboldt St. About $50,000.

★Ia., Sioux City—Home—Comrs. Woodbury Co. let contract building 2 story, 60 x 180 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Bronson Rd., to W. F. Kucharo & Co., 622 Hubbell St., Des Moines. $87,880. Noted Feb. 13.

★Kan., Hillsboro—College—Tabor College let contract building 3 story, 90 x 132 ft. college and 1 story heating plant, brick and rein.-con., to M. J. Green, Manhattan. About $100,000. Noted Jan. 23.

★Mont., Bozeman—Bank—Commercial Natl. Bank, 40 West Main St., let contract building 4 story, 55 x 133 ft., brick and steel, concrete foundation, to Hoggson Bros., 485 5th Ave., New York City; cost plus percentage basis.

★Ark., Blytheville—Auditorium—City let contract building auditorium, to M. Seligman, Citizens Bank Bldg., Pine Bluff. About $50,900.

★Okla., Pauls Valley—High School—Bd. Educ. let contract building 2 story, 72 x 112 ft., rein.-con. and brick, to Manhattan Constr. Co., 3rd and Fondulac Sts., Muskogee, $54,985. Noted Feb. 6.

Que., Montreal—Central Y. W. C. A. received only bid constructing 4 story, 50 x 100 ft. rein.-con. and brick building, rein.-con. flooring and concrete foundation, on Dorchester St., from A. F. Byers & Co., University St. About $300,000. Noted Jan. 23.

Federal Government Work

PROPOSED WORK

R. I., Newport—Water Tanks—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to erect here; Spec. 3826. About $15,000.

Pa., Phila.—Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in Navy Yard here; Spec. 3828. About $30,000.

Federal Government Work (Continued)

Pa., Phila.—Layout for Quartermaster Department—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans layout for Quartermaster's Dept., Marine Corps, Broad and Washington St. Yard. Local Navy Yard will receive bids; Spec. 3825.

D. C., Wash.—Grading—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to grade west extension of Navy Yard; Spec. 3830. About $8000.

Va., Norfolk—Cranes—Bureau yards and Docks, Navy Dept., Wash., D. C., plans to install in galvanizing plant; Spec. 3827. About $24,000.

W. Va., South Charleston—Officers Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 4 officers quarters here; Spec. 3829. About $65,000.

BIDS DESIRED

Mass., Boston—Cranes—Until Mar. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in steel stock storage shed at Navy Yard here; Spec. 3822. About $15,000. Noted Mar. 6.

N. Y., Albany—Post Office and Custom House—Until Mar. 27, by J. A. Wetmore, superv. archt., Wash., D. C., altering post office and custom house.

N. Y., Stapleton—Sewer and Water Supply—Until Apr. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing sewer and water supply connections in U. S. Marine Hospital here.

Pa., Phila.—Forced and Induced Draft Fans—Until Mar. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3793. About $35,000; $10 deposit required for plans and spec. Noted Feb. 6.

Md., Indianhead—Incinerator—Until Mar. 24, (change of date) by Bureau Yards and Docks, Navy Dept., Wash., D. C., building at Naval Proving Grounds; Spec. 3790. About $7000; $10 deposit required for plans and spec. Noted Mar. 6.

D. C., Wash.—Grading—Until Mar. 26, by Dist. Comrs., Dist. Bldg., Wash., for 30,000 cu.yd. grading in various streets; advertised in this issue.

Va., Norfolk—Forced and Induced Draft Fans—Until Mar. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3793. About $35,000; $10 deposit required for plans and spec. Noted Feb. 6.

S. C., Paris Island—Extension to Fresh Water System—Until Mar. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3805. About $12,000; $10 deposit required for plans and spec. Noted Feb. 20.

Fla., Pensacola—Power Plant Improvements—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Air Sta.; Spec. 3389. About $85,000; $10 deposit required for plans and spec. Noted Sept. 5.

O., Conneaut Harbor—Cement—Until Apr. 1, by Lighthouse Supt., Buffalo, N. Y., furnishing 500 bbl. Portland cement here; advertised in this issue.

O., Youngstown—Post Office—Until Mar. 28, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building additions and altering post office, etc.

Mich., Mt. Pleasant—Post Office—Until Apr. 18, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C. About $68,600 available. Noted Feb. 20.

Wis., Rhinelander—Post Office—Until Apr. 21, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C. About $85,000 available.

Mont., Great Falls—Roads—Until Mar. 22, by Dist. Engr. U. S. Dept. Agriculture, 413 Montana Bldg., Missoula, building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co. Work involves 79,000 cu.yd. earth excav., 10,000 cu.yd. rock excav., clearing and grubbing 30 acres, building ten 8-40 ft. span bridges, etc. Former bid rejected. L. I. Hewes, 202 Bway., Yamhill Bldg., Portland, Ore., dist. engr. Noted Feb. 27.

Tex., Gilmer—Post Office—Until Apr. 23, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C. About $50,000 available. Noted Feb. 20.

Tex., North Ft. Worth—Argon Production Plant—Until Mar. 17, (change of date) by Bureau Yards and Docks, Navy Dept., Wash., D. C.; Spec. 3800. About $607,250; $100 deposit required for plans and spec. Noted Feb. 20.

Cal., Mare Island (Vallejo P. O.)—Fuel Oil Storage Plant—Until Mar. 24, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building storage plant consisting of 2 rein.-con. oil reservoirs and pump pit, brick and steel boiler house, pump-well house, heater house on wharf, pits for expansion bends, sludge pits, mechanical and electrical equipment and piping, etc.; Spec. 3631. About $400,000; $5 deposit required for plans and spec. Former bids rejected. Noted Feb. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—Coal and Ash Handling Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in central power plant addition at Navy Yard here, to Guarantee Constr. Co., 140 Cedar St., $9925 (150 days). Noted Feb. 20.

★N. Y., New York—Piping and Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in power house here, to Lord Constr. Co., 105 West 40th St., $42,069 (120 days). Noted Feb. 6.

Pa., Ft. Mifflin—Railroad Extension—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at Naval Ammunition Depot, (1) price and time, work complete, in accordance with drawings and specifications, (2) amount deducted from (1) omitting two drains (tile drains and open ditches), from H. A. McClemmen, 13th and Shunk Sts., Phila., (1) $19,450 (35 days); Central Constr. Corp., 222 Market St., Harrisburgh, (1) $24,000 (50 days), (2) $1150; E. C. Fish Co., 704 Real Estate Trust Bldg., Phila., (1) $25,600 (45 days), (2) $450. Noted Feb. 13.

★Pa., Phila.—Additions to Crane Runways—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building for bulkhead handling and storage shipbuilding slips Nos. 2 and 3, at Navy Yard, here, to Amer. Bridge Co., Wilkins Bldg., Wash., D. C., $137,300 (120 days). Noted Feb. 20.

★Pa., Phila.—Addition to Shipbuilding Slip—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building shipbuilding slips Nos. 2 and 3, to M. H. McCloskey, Jr., 1620 Thompson St., $295,040 (115 and 45 days respectively). Noted Feb. 27.

★D. C., Wash.—Cement Sidewalks—Dist. Comrs., Dist. Bldg., let contract laying 30,000 sq.yd. cement sidewalks, to W. F. Brenizer Co., 1st St. and New York Ave., N. W., (a) $1.99, (b) $2.19.

★D. C., Wash.—Office and Loft—International Assn. of Machinists, 9th St. and Massachusetts Ave., let contract building 5 story, 68 x 100 ft., steel and brick, concrete foundation, on 9th St. and Mt. Vernon Pl., to R. P. Whitty & Co., Union Trust Bldg. About $300,000. Noted Jan. 30.

D. C., Wash.—Paving—Dist. Comrs., Dist. Bldg., received only bid Mar. 6, paving various streets, (1) laying standard asphalt pavement, 2½ in. asphalt surface, 2 in. binder (before compression), 6 in. concrete base, (2) vitr. blocks on concrete base, (3) standard asphalt pavement, 2½ in. asphalt surface, 2 in. binder (before compression) on 5 in. concrete base, (4) vitr. blocks on 5 in. concrete base, (a) using natural pitch lake asphalt, (b) using reduced oil asphalt, from Cranford Paving Co., 2620 E St., N. W., (1a) $3.34, (1b) $3.04, (2) $2.95, (3a) $3.19, (3b) $2.89, (4) $2.80. Noted Feb. 27.

★Va., Hampton Roads—Coal and Ash Handling Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Naval Operating Base here, to R. H. Beaumont Co., 315 Arch St., Phila., (1) and (2) $49,850 (120 days). Noted Feb. 20.

★Va., Hampton Roads—Extending Pneumatic Tube System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract extending at Naval Operating Base, to Standard Carrier Co., 51 East 42nd St., New York City, $27,637 (120 days). Noted Jan. 30.

★Va., Hampton Roads—Grandstand and Bleachers—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Operating Base, to Harwood & Moss, Law Bldg., Newport News, $64,430. Noted Feb. 27.

S. D., Rapid City—School and Assembly Hall—C. Sells, comr. Indian affairs, Wash., D. C., received bids Mar. 10, from W. O'Neil & Son Co., Faribault, Minn., $61,208; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $66,000; W. MacDonald Constr. Co., St. Louis, Mo., $69,978. Noted Feb. 20.

N. D., Wahpeton—School and Assembly Hall—C. Sells, comr. Indian affairs, Wash., D. C., received bids Mar. 7, building at Wahpeton School here, from F. A. Hancock, Morris, Minn., $38,156; W. O'Neil & Son Co., Faribault, Minn., $40,153 (160 days); Lawrence & McCann, Eveleth, Minn., $41,180 (160 days). Noted Feb. 13.

★Mont., White Sulphur Springs—Roads—Dist. Eng., U. S. Dept. of Agriculture, 413 Montana Bldg., Missoula, let contract to W. L. Tillman, Roundup, building in Meagher Co., (a) 5 mi. Sect. 1, Sheep Creek Natl. Forest Rd., involving 350,000 cu.yd. earth excav., 1600 cu.yd. excav., clearing and grubbing 18 acres, etc., $27,605; (b) 5.3 mi. Sect. 2, Sheep Creek Natl. Forest Rd., involving 28,000 cu.yd. earth excav., 1000 cu.yd. rock excav., 1 log truss bridge, clearing and grubbing 10 acres, etc., $21,811. Noted Feb. 27.

★Ark., Russellville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $54,700. Noted Jan. 30.

★Tex., Ft. Worth—Elevator, etc.—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract installing electric passenger elevator in post office and court house here, to Kaestner & Hecht Co., 500 South Throop St., Chicago, $5948 (90 days). Noted Jan. 23.

N. M., Shiprock—Lavatory Annexes—C. Sells, comr. Indian affairs, Wash., D. C., received bids Mar. 7, building 2 lavatory annexes at Toadlena School near San Juan, from W. MacDonald Constr. Co., St. Louis, Mo., $15,222 (150 days); and W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $15,458 (180 days). Noted Feb. 13.

Cal., Mare Island (Vallejo P. O.)—Structural Shop—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids.

(1) Structural steel and crane rails, (a) 6120 tons structural steel, (b) 85 tons crane rails.

(2) Steel stairs, steps and landings, (a) 53,300 lb. steel stair framing, (b) 70,000 lb. treads and landings (c) 450 sq. ft. safety treads.

(3) 1000 lin.ft. pipe railings.

(4) Structural steel and crane rails, (a) 6120 tons structural steel, (b) 85 tons crane rails.

(5) Steel and stairs, steps and landings, (a) 53,300 lb. steel stair framing, (b) 70,000 lb. treads and landings, (c) 450 sq. ft safety treads.

(6) 1000 lin.ft. pipe railing.

4, 5 and 6 are same as one, two and three, except for method of delivery of materials; from

Amer. Bridge Co., Wilkins Bldg., Wash., D. C., (1a) $130, $95 (2a) $0.85; (2b) $0.11; (2c) $2; (3) $1.90; (4a) $134; (4b) $99; (5a) $0.87, (5b) $0.11, (5c) $2.00; (6) $1.90; (180 days).

McClintic Marshall Co., Munsey Bldg., Wash., D. C., (1a) $130.00; (1b) $130.80; (2a) $0.0893; (2b) $0.0893; (2c) $3.68; (3) $1.50; (4a) $132.80, (4b) $132.80; (5a) $0.0893; (5b) $0.0893; (5c) $3.68; (6) $1.50 (180 days).

Bethlehem Steel Co., Bethlehem, Pa., (4a) $130.20; (4b) $107; (5a) $0.0885; (5b) $0.111; (5c) $2.80; (6) $1.80 (180 days).

Cal., San Diego—Barracks—Local Navy Yard received bids building 7 rein.-con. and hollow-tile barracks, concrete flooring and foundation, including barracks A, 2 story, 42 x 182 ft. with 1 story, 41 x 66 ft. dormitory wings, 1 story, 29 x 43 ft. kitchen wing, barrack C, 154 x 182 ft. ell shaped with 41 x 92 ft. and 41 x 73 ft. dormitory wings, 14 ft. connecting arcade, etc.

(1) net price and time for work complete in accordance with drawings and specifications.

(2) amount to be deducted from net price under (1) if toilet and wash rooms are finished as specified under alternative No. 1, paragraph No. 286, of specifications.

(3) net price and time for buildings A-2 to A-6 inclusive, and C-1 in accordance with drawings and specifications.

(4) amount deducted from net price under (2) if toilet and wash rooms are

Federal Government Work (Continued)

finished as specified under alternative No. 1, paragraph No. 286, of specifications.

(5) net price and time for buildings A-3 to A-6 inclusive and C-1 in accordance with drawings and specifications.

(6) amount deducted from net price under (5) if toilet and wash rooms are finished as specified under alternative 1, paragraph No. 286, of the specifications.

(7) price per lin.ft. for concrete piles in place to be used as specified in paragraph No. 36.

(8) price per cubic yard for preliminary excav. and disposal of excavated material in accordance with provisions of paragraph No. 28.

(9) amounts, (a) (b) and (c) to be deducted from or added to prices stated under (1), (3) and (5) respectively, for arranging and equipping all casement windows to swing inward in accordance with requirements of "Alternative Construction No. 2" as specified in Addendum No. 1, including all costs in connection with use of outside fixed screens instead of inside swinging screens and any other costs incident to such alternative construction, from

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $1,096,156; (2) $15,000; (3) $950,000; (4) $12,500; (5) $800,000; (6) $11,000; (7) deduct $0.60, add $2; (8) $1; (9) "A" $600, "B" $509, "C" $400 (time as specified).

Clinton Constr. Co., 140 Townsend St., San Francisco, (1) $1,125,418; (2) $2500; (3) $964,417 (405 days); (4) $27,900; (5) $803,391; (6) $23,300; (7) $1; (8) $0.50; (9) "A" add $1544, "B" add $1522, "C" add $1286, time (3) 405 days; (5) 370 days.

Lange & Bergston, 819 Timkin St., (1) $1,167,960; (2) $32,433; (3) $999,961—320 days to 330 days; (4) $27,867; (5) $843,069; (6) $23,317; (7) deduct $0.50, and $1.50; (8) $0.75; (9) "A" add $6248, "B" add $5439, "C" add $4625. Time 320 to 330 days. Noted Mar. 6.

★H. T., Pearl Harbor—Boiler Setting—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to A. Ewery, Hilo, $1609 (80 days). Noted Oct. 24.

Miscellaneous

PROPOSED WORK

Capstans, Hoists, etc.—Albany, N. Y.—L. Nixon, supt. pub. wks., Capitol, Albany, soon receives bids installing electric capstans and trolley hoists at various points along canal, $15,000.

Canal—Lake Placid, N. Y.—Town plans to build canal 12 ft. wide between Lake Placid and Mirror Lake; also boardwalk along Mirror Lake frontage. About $200,000. Address town clk.

Cranes—New York, N. Y.—L. Nixon, supt. pub. wks., Capitol, Albany, soon receives bids installing two 1½ ton electric overhead wharf cranes at Pier 6, East River, $28,000; four 3 ton semi-portable revolving jib cranes, 2 each at Greenpoint and West 53rd St., $93,598.

Freight Shed—New York, N. Y.—L. Nixon, supt. pub. wks., Capitol, Albany, soon receives bids building barge canal terminal freight shed at pier 93, West 53rd St., North River, here, $53,969.

Truck, Tractor, etc.—New York, N. Y.—C. D. Van Name, pres. Richmond Boro., rejected all bids received Feb. 18, furnishing and delivering 2½ tons automobile truck and 3 ton automobile tractor and semi trailer. Work will be readvertised. Noted Feb. 27.

Amusement Pier—Asbury, N. J.—City plans to build on site of present fishing pier. About $200,000.

Cofferdam and Memorial Fountain—Detroit, Mich.—Park Dept., Farwell Bldg., plans to build cofferdam and fill in acreage at west end Belle Isle to provide for foundation for Scott Memorial Fountain, $75,000. Fountain will probably be built by day labor, cost $400,000. C. Gilbert, 244 Madison Ave., New York City, archt.

Floating Dry Dock—Green Bay, Wis.—Morrison & Beck, engrs., 140 South Dearborn St., Chicago, receives bids about Mar. 15 building 80 x 600 ft. rein.-con. floating dry dock; to include two 15 ft. working platforms made in twelve 50 ft. sections for C. Hartmann Co., Green Bay. About $500,000. Work involves 5400 cu.yd. rein. con; 100 tons twisted square bar reinforcing steel; 3 in. walls, bottom and partitions, total weight over 500 tons; 12 direct-connected centrifugal pumps, 1200 gal. capacity with alternating current motors, 16 direct-connected capstans with a.c. motors. Noted Feb. 6.

Parks—Dallas, Tex.—City election Apr. 1 to vote on $750,000 bonds to build parks. G. D. Fairtrace, city engr.

Pier—Portland, Ore.—City having plans prepared building Pier No. 2 at St. Johns terminal; $1,250,000 bonds will be sold in April to provide funds. G. B. Hegardt, ch. engr. Noted Jan. 9.

Playground—Portland, Ore.—City plans to convert Marquam Gulch into playground. O. Laurgaard, city engr.

Grandstands — Los Angeles, Cal. — See "Buildings."

Dam—Oakdale, Cal.—F. B. Pattee urged Oakdale Irrigation Dist. to coöperate with him in building dam 200 ft. high, 1000 ft. long at top, to impound 15,000 acre feet of water and develop 15,000 hp. by hydro-electrical energy. B. Smith, Oakdale, engr.

Asphalt—St. John, N. B.—City soon lets contract for 400 tons of asphalt, to be delivered in spring. G. F. Fisher, comr.

Sewer Pipe—Guelph, Ont.—City soon lets contract furnishing 7110 ft. 18-48 in. rein.-con. pipe. F. W. McArthur, Guelph, engr.

Stone Crusher, etc.—Lindsay, Ont.—City plans to purchase 1 stone crusher, 1 steam roller, 6 drags and road scraper. J. R. McNeille, city clk.

Dam, Intake, etc.—Squamish, B. C.—Dept. Railways, Victoria, soon lets contract for dam, intake water supply system, hydro-electric power plants and transmission system here. About $50,000. A. E. Proctor, Victoria, engr.

BIDS DESIRED

Plant Operation—Springfield, Mass.—Until Mar. 20, by Bd. Supervs. Dept. Streets & Eng., Administration Bldg., for operation of Logan St. plant for salvage of waste materials. R. P. Marsh, supt.; advertised in this issue.

Miscellaneous Supplies—New Haven, Conn.—Until Mar. 18, by F. L. Ford, city engr., furnishing blue stone, long leaf yellow pine, vitr. pipe, cement and granite catch basin stone required by Dept. Pub. Wks. from Apr. 1 to July 1. J. J. Lane, dir. pub. wks. Noted Feb. 20.

Miscellaneous Supplies—New York, N. Y.—Until Mar. 19, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering, Contr. 1, 600 tons asphaltic paving cement, Contr. 2, 70,000 gal. fuel oil, Contr. 3, 6000 cu.yd. paving sand, Contr. 4, 40,000 new granite paving blocks, Contr. 5, 200,000 sewer brick, Contr. 6, 3000 cu.yd. paving grit.

Paving Blocks—New York, N. Y.—Until Mar. 19, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering $630,000 granite paving blocks.

Trailers, etc.—New York, N. Y.—Until Mar. 19, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 5 trailers and 2 express bodies.

Boardwalk—Seaside Heights, N. J.—Until Mar. 31, by Boro., building wooden and iron board walk, 1 mi. long, 20 ft. wide, along ocean front. M. H. Esher, boro. clk.

Column Foundations—Phila., Pa.—Until Mar. 25, by W. S. Twining, dir., dept. city transit, 1211 Chestnut St., building 68 concrete column foundations in Front St., from above Arch St. to Callowhill St., Frankford Elevated Ry., contr. No. 500.

Pier—Phila., Pa.—Until Mar. 27, by Dept. Wharves, Docks and Ferries, 550 Bourse Bldg., building with appurtenant work, Wolf St. Pier No. 82 South, and Otter St. Pier No. 84 South. G. S. Webster, dir.; advertised in this issue.

Island, Seawall, etc.—Miami, Fla.—L. T. Highleyman, Point View, is receiving bids for island in Biscayne Bay, 4800 ft. long, 700 ft. wide, also seawall across island and building various streets and pavements. About $300,000.

Air Compressor — Marion, Ind. — Until Mar. 25, by Bd. Pub. Wks. furnishing air compressor. T. E. Petrie, pres.; advertised in this issue.

Levee—Newport, Ark.—Until Apr. 10, by C. R. Hite, secy. Newport Levee Dist., Jackson Co., building new earth levee and enlarging old levees, etc., involving 279,500 cu.yd. earth embankment, 2150 cu.yd. concrete, 65 ton reinforcing steel, 5 ton miscellaneous c. i. and steel, 116,000 ft. B.M. wood sheet piling, 8270 lin.ft., 4 and 10 in. tile, 550 lin.ft., 18 and 24 in. corrugated iron pipe, 290 lin.ft., 24 and 36 in. c. i. or concrete pipe, four 24 in., four 36 in. and two 48 in. sluice gates, and 162,000 sq.yd. sodding embankment. About $200,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. Noted Nov. 28.

Pipe—Ottawa, Ont.—Until Mar. 19, by Dept. Pub. Highway, Toronto, furnishing 7000 lin. ft. 18 in. inside diam. culvert pipe for farm and house entrances and side road intersections of Ottawa-Prescott Highway. About $12,000. G. Hogarth, Toronto, ch. engr. dept. pub. highways.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conduits, Cables, Etc.—New York, N. Y.—Fire Dept. received bids Mar. 10, furnishing, delivering and installing conduits, cables, wiring, protecting frame, etc., in Manhattan Central office on Transverse Rd. No. 2, Central Park, from Croker Natl. Fire Eng. Co., 1270 Bway., $45,195; Bates Co., 2 Rector St., $47,325; G. E. Eng. Co., 417 Canal St., $59,527.

Miscellaneous Supplies—New York, N. Y.—C. D. Van Name, pres. Richmond Boro., received bids Mar. 11, (1) furnishing and delivering 65,000 gal. bituminous material for road surfacing, (2) 800 cu.yd. 1½ in. broken stone, 300 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 1, (3) 1900 cu.yd. 1½ in. broken stone, 750 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 2, (4) 1250 cu.yd. 1½ in. broken stone, 550 cu.yd. screenings and 60 cu.yd. ¾ in. broken stone of trap rock in Dist. 3, (5) 300 cu.yd. grits in Dist. 1, (6) 300 cu.yd. grits in Dist. 3, (7) 475 cu.yd. grits in Dist. 3, from Barrett Co., 17 Battery Pl., (1) $7150; New York Trap Rock Corp., 17 Battery Pl., (2) $4020, (3) $9488, (4) $6882; J. E. Donovan, Port Richmond, (5) $550, (6) $855, (7) $1401.

★Boilers, Piping, etc.—Thiells, N. Y.—F. A. Vanderlip, pres. bd. mgrs. Letchworth Village, 7 Wall St., New York City, let contract building chimney, to P. Keeler Bldg. Co., 425 Orange St., Albany, $18,750; furnishing boilers and stoker equipment, to Heine Safety Boiler Co., 11 Bway., New York City, $67,600. Noted Jan. 16.

★Redecking Boardwalk—Atlantic City, N. J.—City will redeck boardwalk from Illinois to Texas Ave. Cost between $110,000 and $115,000. City will purchase lumber in open market and work will be done by day labor.

★Pier and Bulkhead—Baltimore, Md.—Bd. Awards let contract building creosote treated wood pier on creosoted wood piles, and creosote treated timber bulkhead, both 300 ft. long, pier 37 ft. wide, at Bodkin Creek, opposite Ft. Howard, to Dorsey & Miller Co., 420 Equitable Bldg., $18,591. Noted Mar. 6.

★Swimming Pool—La Grange, Ga.—See "Buildings."

★Cement—Rockford, Ill.—Winnebago Co. let contract furnishing cement for 1919 road work on Grant Highway east of here, to Skandia Coal & Lumber Co., 708 7th St., $3.05 per bbl. in cloth sacks, $2.00 per bbl. in bulk.

Road Oil and Tar—Clayton, Mo. (St. Louis P. O.)—St. Louis Co. received bids Mar. 5th furnishing and delivering 100,000 gal. No. 1 road oil, from Sinclair Refining Co., 5.27c. per gal.; 100,000 gal. No. 2 and 100,000 gal. No. 2 road oil, from Amer. Oil & Tank Line Co., 3rd Natl. Bank Bldg., St. Louis, 5.7c. per gal.; 100,000 gal. refined tar from Trinidad Asphalt Co., Title Guarantee Bldg., St. Louis, 9.9c. per gal. Noted Feb. 20.

★Levee-Menfro, Mo.—Levee Dist. No. 3 let contract for improving levee, to Bartson & Millard, 8-9 Mayer Bldg., Peoria, Ill. About $50,000.

★Culvert—Dallas, Tex.—City let contract building concrete box culvert in Mill Creek from City Park across Ervay St., to Klein Bros., Junius and Walton Sts. About $37,000.

★Grand Stand—Oklahoma, Okla.—Western Baseball League let contract building frame and concrete grand stand, to Campbell & Price, 611 Southwest Reserve Bank Bldg., $25,000. Noted Feb. 13.

★Piers—Fernie, B. C.—See "Bridges."

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: March 18.

Bituminous Materials

State of New York.

State of New York, Office of the State Commission of Highways, Albany, N. Y.—Pursuant to the provisions of Chapter 30, Laws of 1909, as amended by Chapter 646, Laws of 1911, and Chapter 80, Laws of 1913, sealed proposals will be received by the undersigned for furnishing and delivering bituminous materials f.o.b. cars at destination, for use by the State Highway Department in the maintenance and repair of improved State and County Highways in all of the counties of the State unless otherwise specified, at the office of the State Commission of Highways, 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Tuesday, the 18th day of March, 1919, for the following contracts:

B. M. Contract No. 1—Bituminous Matetrial Cold Patch Asphaltic Emulsion in Divisions Nos. 1, 2, 3, 4 and 5.

B. M. Contract No. 2—Bituminous Matetrial Cold Patch Asphaltic Emulsion in Divisions Nos. 6, 7, 8 and 9.

B. M. Contract No. 3—Bituminous Material Asphaltic Cut-Back.

B. M. Contract No. 4—Bituminous Material A. Binder.

B. M. Contract No. 5—Bituminous Material A. Light Cold Oil and Light Hot Oil.

B. M. Contract No. 6—Bituminous Material T. Cold Patch.

B. M. Contract No. 7—Bituminous Material T. Binder and Cold Application.

All proposals except Contracts Nos. 1 and 2 will be for furnishing the specified material at any railroad delivery point within this state. Proposals for Contracts 1 and 2 will be for furnishing that specified material at any railroad point within the counties comprising the divisions named in the proposal.

Tables showing approximate quantities and railroad delivery point specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Each proposal must be accompanied by cash or certified check payable to the order of the State Commission of Highways for an amount equal to at least five per centum of the amount of the proposal which such cash or check accompanies. This cash or check will be held by the Commission until the contract is executed and the bond is filed. The successful bidder on each proposal will be required to give a bond for fifty per centum of the amount of the contract, such bond to be executed by a surety company to be approved by the Commission. The bond is for the purpose of insuring the delivery of the bituminous material as called for by the Commission. The right is reserved to reject any or all bids.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: March 21.

Water Main Extension

Spencer, Iowa.

Sealed bids will be received until eight o'clock P.M., March 21, 1919, at the office of R. M. Cornwall, city clerk of Spencer, Iowa, for furnishing and laying about six thousand four hundred (6400) feet of four (4) inch Class "D" cast iron water pipe together with the necessary valves, hydrants, and other specials. Bids will be received for

1. Furnishing materials.
2. Furnishing tools and labor for laying.
3. Furnishing materials and laying.

All bids received by the city clerk will be publicly opened and read at eight o'clock P.M. All bids must be on regular forms furnished by the city and plainly marked 'Bids for Water Mains." Any changes made in this form or additions thereto may cause the rejection of the bid. No bid will be considered which contains a clause in which the contractor reserves the right to accept or reject a contract awarded by the city council. The council reserves the right to reject any or all bids or to award separate contracts on material and labor.

A certified check for five per cent. of bid, on a local bank of Spencer, Iowa, made payable to the city treasurer of Spencer, Iowa, shall be filed with each bid. In case the successful bidder should fail to execute a contract and file a bond within ten days after the acceptance of his bid, his certified check shall be forfeited to the City of Spencer, Iowa, as liquidated damages.

The successful contractor will be required to furnish a bond equal to fifty (50) per cent. of his contract, issued by responsible security, approved by the council, and drawn to protect them and any subcontractor and shall be conditioned upon the faithful performance of the work named in the contract in strict conformance with the plans and specifications.

Plans and specifications may be secured at the office of the city engineer.

R. M. CORNWELL,
City Clerk.

W. L. FAHEY,
City Engineer.

OFFICIAL PROPOSALS

Bids: March 25.

Steel Pipe and Appurtenances

Jersey City, N. J.

Sealed proposals for furnishing and laying, complete, 34,590 ft. of 72-in riveted steel pipe and appurtenances, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, March 25, 1919, at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal forms, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

he Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: Feb. 18, 1919.

Bids: March 27.

Concrete Bridge

OFFICE OF BOARD OF PUBLIC WORKS
City of Janesville, Wis.

Sealed proposals will be received at this office until March 27th, 1919, for the construction of a reinforced Concrete Bridge over Rock River on Jackson Street consisting of six 54 foot spans 55 feet wide in accordance with plans and specifications, plans and details on file in this office. A certified check for 5% of bid required. Copies of official notice, specifications and form of contract and bond furnished on application.

C. L. VALENTINE, Chairman.
C. V. KERCH, City Engr.
Feb. 24, 1919.

PROPOSALS FOR SOUTH WING SOUTH CADET Barracks and Guard House. Office Qaurtermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., March 27, 1919, and then opened, for construction of South Wing South Cadet Barracks and Guard House. Information on application.

Bids Close		See Eng. News-Record
Apr. 3	Flemington, N. J. Adv. Mar. 13 and 20.	Mar. 13
Apr. 3	New York	Mar. 20
Apr. 4	New York	Mar. 20
Apr. 5	South Dakota	Mar. 20
Apr. 5	Tylertown, Miss.	Mar. 20
Apr. 7	Moulton, Ala.	Feb. 20
Apr. 7	Salem, N. J. Adv. Mar. 13 and 20.	Mar. 13
Apr. 7	San Jose, Cal.	Mar. 20
Apr. 8	Mt. Vernon, Wash.	Mar. 20
Apr. 8	Indiana	Mar. 20
Apr. 9	Hackensack, N. J. Adv. Mar 13 and 20.	Mar. 13
Apr. 9	New Jersey Adv. Mar. 20.	Mar. 20
Apr. 9	Center, N. D.	Mar. 20
Apr. 10	Indiana	Mar. 20
Apr. 10	Middlebourne, W. Va.	Mar. 20
Apr. 11	Jamestown, N. D.	Mar. 20
Apr. 14	Johnson City, Tenn.	Mar. 20
Apr. 14	Tunica, Miss.	Mar. 20
Apr. 15	Billings, Mont.	Mar. 20
Apr. 15	Greenville, Miss. Adv. Mar. 13 and Mar. 20.	Mar. 13
Apr. 15	St. Louis, Mo.	Mar. 20
Apr. 22	Spencer, W. Va.	Mar. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Buffalo—Bd. Pub. Wks. plans to lay 15,000 ft. 6 in. water main throughout city, cost, $150,000; also install new equipment and alter pumping station on Massachusetts Ave., $150,000. A. W. Kreinheder, comr.

N. Y., Coxsackie—B. A. Deane, pres. water bd., soon receives bids building addition to waterworks system. About $38,000.

N. Y., Nassau—City plans election to vote on $5000 bonds to increase water supply.

Pa., McKeesport—City plans to issue $60,000 bonds to rehabilitate waterworks system. L. F. Savage, People's Bank Bldg., city engr.

W. Va., Benwood—S. G. Smith, Wheeling, receiver for Benwood & McMechon Water Co., receives bids about Apr. 1 for electrifying plant installing motors, etc., and laying 7700 ft. 4 and 6 in. water pipe. G. H. Davies, Harrisburg, Pa., and S. H. R. Hudson, Pittsburgh, Pa., engrs.

Ga., Atlanta—City voted $500,000 bonds to improve waterworks system, including pumps. H. L. Collier, city engr.

Miss., Senatobia—City plans to issue $15,000 bonds to build water-works and electric light plant.

O., Fremont—City plans to build filtration plant, cost $90,000; also deep well system, $52,000. G. W. Lesher, city engr.

Mich., Port Huron—City plans to lay 10-in. c.i. water main in Connor St. from St. Clair River to 32nd St. About $32,000. E. Whitmore, city engr.

Wis., Radisson—Wisconsin - Minnesota Light & Power Co., Eau Claire, had plans prepared by L. A. De Guere, engr., Grand Rapids, building reservoir here. About $500,000.

Kan., Council Grove—City plans election to vote on $67,000 bonds to purchase and improve water plant.

N. D., Underwood—City rejected bids building water-works system. C. Bauer, clk. Noted Feb. 27.

Tex., Waxahachie—City plans to sell $15,000 bonds May 13 for improving waterworks and sewerage systems. W. D. Hines, city secy.

Okla., Picher—City plans election to vote on $250,000 bonds for water-works and sewerage systems.

Okla., Sapulpa—City voted $75,000 bonds to improve waterworks system. Noted Feb. 27.

Okla., Tulsa—City rejected bids building 150 ft. rein.-con. stack, also installing boilers and 12,000,000 gal. pump and new water supply intake system. R. E. Cuvian, comr. waterworks. Noted Feb. 20.

Ariz., Phoenix—City plans election to vote on $800,000 bonds to build 40 mi. water pipe line from point on Verde River, also for large reservoir to provide gravity flow for city. L. B. Hitchcock, city engr.

Ore., Monmouth—City plans to build gravity water system.

Ore., The Dalles—Bd. Water Comrs. soon lets contract digging ditch and laying 21,000 ft. 14-in. wood pipe. J. A. Garron, city engr.

Cal., Blythe—City plans election in April to vote on $35,000 bonds to build waterworks system.

Cal., Glendale—City having plans prepared by H. B. Lynch, engr., 716 Central Bldg., Los Angeles, for extensions to water system and power plant. Plans include extensions to distributing system, large storage reservoir, settling basin, pumping plant, wells, trunk lines between pumping plant and reservoir and between reservoir and main on Glendale Ave., electric generating plant at reservoir, etc. Bonds must be voted and shares purchased in Verdugo Canyon Water Supply Co. J. C. Sherer, city clk.

Cal., Independence—Bd. Pub. Serv., Los Angeles, entered into contract with Big Pine Water Users Assn., Inyo Co., whereby city acquires 2 reservoir sites and sites for 3 power plants. (Construction will not be undertaken for some time.) Association will build concrete waterways down Big Pine Canyon and across reservoir sites; city to furnish $45,000 for cement and other materials. W. Mulholland, 654 South Olive St., ch. engr.

Cal., Oildale—Bd. Supervs. Kern Co. authorized A. E. Stegeman, co. surv. to take charge of installation of water system for Kern Co. Water Wks. Dist. No. 1. Plans include drilling wells, installing water mains, buildings, laterals, making provision for fire protection and for domestic and irrigation uses. Bonds for $20,000 voted for project. Noted Dec. 19.

Ont., New Toronto—City having plans prepared by James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, supplying and laying 1100 ft. 24 in. riveted steel intake. About $35,000.

BIDS DESIRED

Mo., Kansas City—Until Apr. 16, by J. R. Samuel, purchasing agt., for building and completing 15,000,000 gal. storage basin at Wabash and St. John Aves. W. G. Goodwin, ch. engr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., East Providence (Providence P. O.)—Amer. Electrical Wks. let contract building 1 story, 20 x 25 ft. brick, steel and rein.-con. pump house, concrete foundation and 30 in. x 310 ft. rein.-con. intake pipe, to Wilmarth Mackillop, Inc., Freeman St., Pawtucket. About $30,000.

★O., Akron—City let contract furnishing turbine driven centrifugal pumps, (contract No. 120), to Westinghouse Electric & Mfg. Co., 6905 Susquehanna St., Pittsburgh, Pa.; improving water-works system, (contract No. 133), to A. P. Smith Mfg., Norman St., East Orange, N. J. About $4524.

★Kan., Baxter Springs—City let contract furnishing and erecting machinery and pumping equipment for one or more units, to Fairbanks Morris & United Iron Wks.; erecting tower and tank of 100,000 gal. capacity, not more than 125 ft. high, to Chicago Bridge & Iron Wks., 105th and Throop Sts., Chicago, total cost $10,100; constructing power house, oil house and concrete work, to Ray & Son, $22,369. Noted Mar. 6.

Sewers

PROPOSED WORK

N. Y., Watertown—City having surveys made and plans prepared by E. W. Sayles, city engr., for sewage disposal plant in 8th ward.

N. J., North Bergen—City having plans prepared by P. A. Daly, engr., 34th St., installing and connecting trunk line sewer in Fisher Ave. About $15,000.

Ky., Bridgeport—City plans to build sewers in Wood and Hillside Aves., cost $15,000; Island Brook Ave. and River St., $25,000; combined sewer in East Washington Ave., $6300; Spring St., $25,000; storm sewer in Railroad Court extension, $18,000; sanitary intercepting sewer in Bay St., $17,000. J. B. McElroy, city engr.

O., Findlay—State Bd. of Health, Columbus, has ordered city to build sewage treatment plant. U. K. Stringfellow, city engr.

Wis., Manitowoc—Bd. Pub. Wks. receives bids in April building sewers in 27 streets. L. K. Pitz, city engr.

Ia., Iowa City—City soon lets contract building West Side Intercepting Sewer, involving 15,000 ft. 8-15 in. pipe, cost, $25,000; Black Springs extension to sewer on west side, $25,000; also paving 1000 yd. under Rock Island tracks, $3000. S. M. Hands, city engr. Noted Feb. 20.

N. D., Underwood—Village rejected bids building sewerage system in Dist. No. 1. C. Bauer, clk. Noted Feb. 27.

Mont., Whitefish—City receives bids about Apr. 21, building 7000 ft. 4-8-12 in. vitr. and tile sewer in Lakeside Dist. Work involves earth trenching, 3-23 ft. deep, small septic tank, etc. About $23,785. W. K. Trippet, engr.

Ark., Forrest City—City soon lets contract building 2½ mi. storm sewers, manholes and catch basins. Lund & Hill, 527 Southern Trust Bldg., Little Rock, engrs.

Tex., Waxahachie—See "Waterworks."

Okla., Picher—See "Waterworks."

Idaho, Moscow—City plans to build 1 mi. sewers. Cost between $60,000 and $80,000. H. J. Smith, city engr.

Wash., Yakima—City plans election to vote on $300,000 bonds to build complete trunk line sewerage system.

Cal., Los Angeles—Bd. Pub. Wks. soon receives bids building cement on vitr. clay pipe sewers, brick manholes, junction chambers, etc., in Bairdstown Sewer Dist. About $150,000. W. T. Knowlton, city engr.

Ont., Orillia—City receives bids in April supplying and laying 9,600 ft. 8-24 in. vitr. sewers in Front, King, Mississauga, Neywash and Coldwater Sts. About $20,000. James, Loudon & Hertzberg, Excelsior Life Bldg., Toronto, engrs.

BIDS DESIRED

R. I., Central Falls (Pawtucket P. O.)—Until Mar. 31, by city, laying 8-18 in. pipe in Hunt St., ¾ mi. straight and ⅜ mi. with connections. City will furnish pipe; contractor to furnish cement and brick. About $25,000.

N. Y., Brooklyn—Until Mar. 26, by E. Riegelmann, boro. pres., building sewer in Ave. M from West St. to Ocean Parkway, East 3rd St. from Ave. M to point 320 ft. northerly, East 4th St., from Ave. M to point 320 ft. northerly, East 5th St. from Ave. M northerly 480 ft., Ocean Parkway, west side, from Ave. M to point 300 ft. northerly, outlet sewer crossing West St. from Ave. M to 23rd Ave., 23rd Ave. from West to 60th Sts., cost, $39,924; 60th St. from 23rd Ave. to Bay Parkway, 59th St. from 20th Ave. to 21st Ave. and outlet sewer in 21st Ave. from 59th to 60th Sts., $5045.

N. Y., New York—Until Mar. 24, by M. E. Connolly, pres. Queens Boro., building sewers in Grand St. from Willow Ave. to Columbia Pl., Columbia Pl. from Grand St. to Brown Pl., Ralph St. from Fresh Pond Rd. to Traffic St., Traffic St. from Ralph St. to Grove St., Tompkins Pl. from Central to Edsall Aves., 91st St. from Jamaica Ave. to Ashland St., Willard Ave. from Jamaica Ave. to Ashland St., Oakland St. from Kaiser St. to Manor Ave., Brandon Ave. from Woodhaven to Willard Aves., Elmwood St. from 91st St. to Willard Ave., Avondale St. from 91st St. to Willard Ave., Ashland St. from Woodhaven to Willard Aves., Manor Ave. from Ashland St. to point 175 ft. northerly, Syosset St. from Woodhaven to Bigelow Aves., Atlantic Ave. from Rockaway Blvd. to Bigelow Ave., Yarmouth St. from Atlantic Ave. to Syosset St., temporary open drain in Genesee St. from South Conduit to Wortman Aves., etc.

N. J., Kearney—Until Mar. 25, by town laying 12 in. pipe in Ivory St. from borough line to Boyds Farm; and 500 ft. blind drain in Kearney Ave. About $15,000.

Pa., New Essington (Eddystone P. O.) See "Streets & Roads."

Md., Hagerstown—Until Mar. 30, by Sewerage Comn., building intercepting storm and sanitary sewers in various streets and alleys. Work includes 2800 lin. ft. each of 18 in. sanitary and 66 in. storm water sewers with manholes, inlets, foundations, etc., both largely in tunnel. W. Wingert, chn.; advertised in this issue.

O., Youngstown—Until Mar. 25, by J. W. Kuhus, dir. pub. serv., building 3000 ft. 15 and 18 in. sewer in Parkview Ave. and 6600 ft. 15-24 in. sewers in Sugar Creek Sewer Dist.; also in Irving Pl., Tod Ave., Grandview Ave., Hunter St. and Hilton Ave. Cost $12,000, $33,000 and $25,000 respectively. F. M. Lillie, city engr.

Sewers (Continued)

Ill., Chicago—Until Mar. 28 by Bd. Local Impvts., building sewers from north branch of Chicago River to west line of block 1, Elstons Addition to Elston Ave., Augusta St. to California Ave.; Noble St. from Augusta to Kinzie Sts., North Leavitt St. from North Ave. to Kinzie St. Work involves 2210 ft. rein.-con. sewers, 21,340 ft. brick sewers, 8000 cu.yd. excav., removing old work and making connections, building concrete bulkhead and pile foundations, etc. Total cost, about $535,000. J. Ericson, city engr.

Mont., Great Falls—Until Apr. 1, by city, building storm sewer in 4th Ave. S., from 14th St. to Missouri River, 3rd St. from 2nd Alley N. to 4th Ave. S., and 7th St. from 2nd Ave. S. to 4th Ave. S. Work involves 36,000 cu.yd. excav.; 1670 lin.ft. monolithic section double barrel concrete sewer; 8505 lin.ft. 8-66 in. pipe; 6000 lin. ft. 10 in. sub-drain; 25 manholes; 46 inlets; rebuilding 1020 sq.yd. block pavement and 135 sq.yd. bitulithic pavement, 100 cu.yd. extra concrete; 5000 ft. B. M. lumber and 100 cu.yd. gravel fill. About $235,000. L. B. Evenson, city engr. Noted Feb. 6.

Sask., Sutherland—Until Apr. 9, by town, building 5885 ft. 6-18 in. sewers, 23 manholes and 4 catch basins. Murphy & Underwood, Saskatoon, consultg. engrs.

PRICES AND CONTFACTS AWARD

(★Indicates award of contract)

N. Y., New York—S. H. Bruckner, pres. Bronx Boro., received bids building sewers in Birchall Ave. between Sagamore St. and White Plains Rd., Van Courtlandt Park, S., between Exterior Pl. and Orloff Ave., Bailey Ave. between Van Courtlandt Park S. and Sedgwick Ave., East. 180th St. from 3rd to Monterey Aves., from McLaughlin & Buckley, Bronx, type B. $66,826; Boniface Constr. Co., New York City, type A, $66,668. Noted Mar. 13.

O., Cleveland—City received low bids building sewers in
(a) St. Mark Ave., involving 1080 ft. 12, 15 and 20 in. vitr. pipe.;
(b) Linndale Ave., 1080 ft. 12, 15 and 20 in. vitr. pipe;
(c) Mullberry Ave., 280 ft. 12 in. and 18 in. pipe;
(d) Winslow Ave., 370 ft. 12, 15 and 18 in. vitr. pipe;
(e) West 110th St., 640 ft. 12, 20 and 24 in. vitr. pipe; 380 ft. No. 3 brick and 850 ft. No. 4 brick pipe;
(f) Governor Ave., 710 ft. 12, 15 and 20 in. vitr. pipe;
(g) West 117th St., 420 ft. 12, 20 and 24 in. vitr. pipe, 510 ft. No. 2 C, 810 ft. No. 4 C and 810 ft. No. 5 C brick pipe;
(h) Washington Ave., 600 ft. 12 in. vitr. pipe;
(i) Bosworth Rd., 1440 ft. 12, 15 and 18 in. vitr. pipe;
(j) Fortune Ave., 1110 ft. 12, 15 and 20 in. pipe;
(k) Severn Ave., 1210 ft. 12 and 15 in. vitr. pipe;
(l) Clarence Ave., 2275 ft. 12, 15 and 18 in. vitr. pipe;
(m) St. Olga Ave., 710 ft. 12, 15 and 18 in. vitr. pipe;
(n) Clyde Ave., 550 ft. 12 in. vitr. pipe;
(o) St. Tichan St., 880 ft. 12 and 18 in. vitr. pipe;
(p) East 143rd St., 3430 ft. 6 in. vitr. pipe;
(q) East 24th St. from Superior to St. Clair Aves., from
N. Iafornaro, 3218 Murray Hill Rd., (a) $3183; (e) $18,053; (f)) $2326; (j) $3157; (l) $5362; (n) $1533.
H. Hahn, 2973 East 78th St., (a) $3194; (b) $3123; (f) $2226; (i) $4697; (j) $3249.
Brookside Constr. Co., 3905 West 20th St., (a) $3348; (b) $3254; (j) $3485.
Amata Constr. Co., 343 Arcade, (b) $3116; (e) $19,763; (f) $2305; (q) $16,282.
G. Sam, 2418 Central Ave., (c) $1127; (d) $1582; (h) $2712; (m) $1967; (n) $1520; (o) $2092.
Joseph & Kalill, 1200 Bolivar Rd., (c) $1257; (d) $1662; (h) $2208; (l) $5261; (m) $1945; (n) $1439.
W. P. Gibbons, 340 Leader-News Bldg., (c) $1534; (d) $2022; (h) $2675; (k) $2632.
Randall & Cooper, Lorain, (e) $19,261.
A. Marra, Park Bldg., (g) $14,984.
Manson & Co., 343 Arcade, (g) $16,649.
P. Ciraci, 11811 Browning Ave., (g) $16,956; (i) $5731.
M. Yahya, 3539 Independence Rd., (k) $2297.
Fredericks & Hossaine, 635 Bradley Court, (k) $2675; (l) $5138; (m) $1959.
S. Gardio, (o) $1978.
N. Salem, 237 Bradley Court, (o) $2207.
Gallagher-Burke Co., 1339 Irene Ave., (p) $45,890; (q) $16,230.
River Constr. Co., 12109 Mayfield Rd., (p) $48,923.
Gawne Constr. Co., 10510 Euclid Ave., (p) $49,287; (q) $15,049.
Iannatta Bros., 2064 East 125th St., (i) $4400.

★Ind., Terre Haute—City let contract laying sewer pipe in Poplar St., to P. O. Leary. About $18,000. Noted Mar. 13.

Mich., Detroit—Bd. Pub. Wks. received bids building sewers in Erwin, Burns and Peter Hunt Aves. from Harper to Edgewood Aves., from R. D. Baker, 1454 Penobscot Bldg., $41,711; J. M. Affeld, Ford Bldg., $54,949; J. Wagner, Penobscot Bldg., $63,598; in Dexter Blvd. from Joy Rd. to Davison Ave., from W. Porath, 1410 West Grand Blvd., $136,539; Jeynes & Affeld, Ford Bldg., $139,979; J. A. Mercier, 216 Hammond Bldg., $144,508. Noted Feb. 27.

Cal., Seal Beach—City received only bid installing sewers in various streets, from Mlagenovich & Gillespie, 219 Bloom St., Los Angeles, as follows: 23,500 lin.ft. 6 in. pipe, $0.47 per lin.ft., 11,500 lin.ft. 8 in. pipe, $0.67 per ft., 1535 lin.ft. 10 in. pipe, $0.75 per lin.ft., 310 lin.ft. 14 in. pipe, $1.00 per lin.ft., 1040 lin.ft. 16 in. pipe, $1.10 per lin. ft., 1070 lin.ft. 18 in. pipe, $1.25 per lin.ft., 76 manholes, $50 each, 20 x 24 ft. rein.-con. Imhoff septic tank, $6500; pumping plant consisting of rotary pump and electric motor with automatic control and two auxiliary booster pumps, $11,000. Total cost, $42,000. Noted Feb. 20.

Bridges

PROPOSED WORK

Conn., Middletown—City having plans prepared by State Highway Comn., Hartford, building memorial bridge on Main St. extension. About $150,000. C. A. Campbell, city engr.

N. J., Jersey City—Hudson Co. Blvd. Comn. having plans prepared for repairing bridge over Morris Canal. About $10,500. Work involves removing old iron and replacing new iron, concrete and 2 coats of painting.

Pa., Bethlehem—City had plans prepared by C. Hudson, engr., 21 Park Row, New York City, building 1 mi. rein.-con. and steel bridge, 64 ft. wide, between here and South Bethlehem. About $2,000,000. Noted Aug. 29.

W. Va., Lewisburg—See "Streets and Roads."

Ala., Huntsville—See "Streets and Roads."

Wis., Appleton—City plans election in April to vote on $80,000 bonds to build bridge on Lowe St. and $190,000 bonds for one on Cherry St., probably rein.-con.; total length, 608 ft. O. F. Weissberg, city engr.

Wis., Shawano—Comrs. Shawano Co. plan to build 25 rein.-con. bridges. About $1000 each.

Wis., Sheboygan—City having plans prepared for 67 ft. steel bridge with concrete approaches on 8th St. About $60,000. C. U. Boley, city engr.

Ia., Des Moines—City soon lets contract building 7 span, rein.-con. arch bridge, 42 ft. wide over river on 18th St. About $300,000. D. E. Johnson, bridge engr. Noted Dec. 12.

Minn., Long Prairie—Comrs. Todd Co. plan to build 4 rein.-con. and steel bridges, 1 to have 70 ft. span. About $15,000. E. M. Berg, co. aud.

Mont., Billings—Comrs. Yellowstone Co. will sell $75,000 bonds Mar. 31, to build Huntley Bridge and $25,000 bonds for South Bridge. C. E. Durland, co. engr.

Mo., Kansas City—Holmes St. Import Assn., temporary organization, plans to build viaduct over terminal railway tracks on Holmes St. and regrading street from viaduct to 23rd St. T. Carroll, chn.

Tex., Ballinger—Runnels Co. having plans prepared by Hess & Skinner, engrs., South West Life Bldg., Dallas, building bridge 524 ft. long, 20 ft. wide, with 4 ft. walk, over Colorado River. About $48,000.

Tex., Denison—Grayson Co., (Sherman) and Marshall Co., (Madill) Okla., plan to build steel bridge over Red River, near here on Preston Rd. About $100,000.

Okla., Madill—See Denison, Tex.

Ariz., Kingman—State Legislature, Phoenix, appropriated $40,000 to build bridge over Colorado River providing Mohave Co. appropriates like amount. B. M. Atwood, state engr.

Cal., Eureka—Bd. Supervs. Humboldt Co. receives bids about May 1, building 240 ft. girder span rein.-con. bridge over Salt River near Pt. Kenyon. H. Brunnier, Sharon Bldg., San Francisco, engr.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co., soon receives bids building steel bridge over flood diversion channel and railway tracks near Long Beach. About $125,000. J. W. Reagan, co. engr.

Ont., Barrie—Simcoe Co. having plans prepared for 3 bridges. About $17,000. R. J. Fletcher, co. clk.

B. C., Victoria—City, Provincial Government and Esquimalt & Nanaimo Ry. having plans prepared for steel bascule bridge with concrete approaches on Johnson St. F. M. Preston, city engr.

BIDS DESIRED

N. Y., Kingston—Until Apr. 22, by E. Duffy, state highway comn., 55 Lancaster St., Albany, building bridge consisting of two steel arches, each 320 ft. long, two rein.-con. approaches and retaining walls, one 1300 ft. macadam approach, etc., to carry Rd. No. 5599 over Rondout Creek. Work involves 960 tons structural steel, 270,000 lb. metal reinforcements, 14,030 bbl. Portland cement, 2100 cu.yd. first class, 5490 cu.yd. second class and 1530 cu.yd. third class concrete, etc.

Va., Copper Valley—Until Apr. 15, by G. P. Coleman, comr. state highway dept., Capitol, Richmond, building steel bridge 86 ft. long over Indian River near here.

Va., Rawlins—Until Apr. 7, by G. P. Coleman, comr. state highway dept., Capitol, Richmond, building steel truss superstructure of bridge 84 ft. long over Waqua Creek near here.

Va., Stella—Until Apr. 7, by G. P. Coleman, comr. state highway dept., Capitol, Richmond, building steel bridge 94 ft. long at Mayo Forge, 3 mi. from here.

W. Va., Lewisburg—Until Apr. 8, by Comrs. Greenbrier Co. building bridge across Culberson Creek in Williamsburg Dist. Alternate plans prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the court, and in both cases plans and bids will be submitted covering (1) bridge of 2 spans, 30 ft. each, 12 ft. roadway; (2) 1 span, 50 ft., 12 ft. roadway. F. K. Rader, co. rd. engr., advertised in this issue.

Ill., Taylorville—Until Mar. 22, by Christian Co., building Pasfield Bridge, 60 ft. rein.-con girder span, 16 ft. roadway, 14 ft. high, involving 98 cu.yd. concrete and 24,340 lbs. reinforcing steel in superstructure, 62 cu.yd. concrete and 3530 lbs. reinforcing steel in 2 abutments. W. L. Hawk, South Fork, comr. highways.

Ia., Ft. Dodge—Until Apr. 1 by city, building rein.-con. bridge over Des Moines River, between North 1st and 2nd Sts., N. W. W. L. Tank, city clk. Noted Feb. 20.

Mont., Roundup—Until Mar. 24, by Comrs. Musselshell Co., building 25 pile bridges, various lengths. R. E. Bushnell, engr.

Wash., Adna—Until Apr. 7, by Comrs. Lewis Co., (Chehallis), building 220 ft. steel span bridge with 500 ft. approach, 16 ft. wide, and changing grade of road near here. About $20,000. E. C. Bechly, co. engr.

Que., St. Remi—Until Mar. 28, by city, building concrete bridge with iron fenders, 16 ft. wide. About $15,000. J. A. Collette, St. Remi, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Rochester—New York Central R.R., Grand Central Terminal, New York City, let contract building bridge over tracks on Main St., E., to Terry & Tench, Grand Central Terminal, New York City.

★Ariz., Douglas—Comrs. Cochise Co. let contract building concrete bridge over Silver Creek, 13 mi. east of here, to El Paso Bridge & Iron Co., 517 El Paso & South Western Bldg., El Paso, Tex.; bridges and culverts on Sect. 1, Douglas-East Rds., to Chiado & Correll, Warren; bridges on Pearce-Servoss-Cochise highway, to J. B. Smith, Lowell; grading and surfacing Pearce-Servoss-Cochise highway, to McKay & Reddin, Johnson. Noted Feb. 6.

Structural Steel

PROPOSED WORK

Pa., Bethlehem—See "Bridges."

Wis., Sheboygan—See "Bridges."

Tex., Denison—See "Bridges."

Cal., Los Angeles—See "Bridges."

B. C. Victoria—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. Y., Carthage—See "Buildings."

Pa., Bethlehem—See "Bridges."

Pa., Phila.—See "Industrial Works."

Wis., Shawano—See "Bridges."

Minn., Long Prairie—See "Bridges."

Cal., Eureka—See "Bridges."

Cal., Fresno—See "Buildings."

Cal., Redondo Beach—See "Miscellaneous."

Cal., San Francisco—See "Industrial Works."

BIDS DESIRED

Que., St. Remi—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ala., Mobile—See "Industrial Works."

★Tex., De Leon—See "Buildings."

★Ore., Portland—See "Industrial Works."

Railways

PROPOSED WORK

Massachusetts—See "Industrial Works."

New York—International Ry Co., Ellicott Sq., Buffalo, plans to raise and extend tracks in Bailey Ave. between Bway. and Genesee Sts. About $1,550,000 will be expended for project. G. W. Wilson, Buffalo, secy.

Ohio—Mahoning Shenango Ry. & Light Co., Boardman and Champion Sts., Youngstown, having preliminary plans prepared for 4 crossover special pieces of track, on Wick and Wilson Aves., Market and West Federal Sts., in Youngstown. About $19,000. J. B. Stewart, ch. engr.

Ohio—Millersburg Traction Co., Millersburg, plans tobuild new car line from Millersburg to Dover.

North Dakota—Capital Street Ry., Bismarck, plans to extend line to Minneapolis, St. Paul & Sault Ste. Marie R.R. and capital grounds.

Missouri—Charleston Commercial Club, Charleston, is back of project to form corporation to build and operate railroad between Charleston, Mo., and Hickman, Ky. About $250,000.

Oregon—Portland & Oregon City Ry., 654 Cypress St., Portland, plans to build 18 mi. line eastward from Oregon City through timber belt. F. M. Carr, mgr.

Ontario—Toronto Ry., 92 King St., East Toronto, having plans prepared building about 3½ mi. tracks. City appropriated $580,000 toward cost and balance of $220,000 will be paid by railway. F. G. Clark, 12 Adelaide St., Toronto, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Missouri—United Rys., 39th and Park Aves., St. Louis, will lay tracks and improve streets, granite dressed blocks and concrete. About $700,000. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

Miss., Stiles—Ditch—Comrs. 1st D. D. Stiles and Lena Twps., at Court House, Oconto, rejected bids building 15 mi. open ditch. G. S. Hales, Port Washington, engr. Noted Feb. 6.

Minn., Fairmont—Ditch—Comrs. Martin Co. rejected bids building Judicial Ditch No. 82. H. W. Jones, Windom, engr. Noted Feb. 20.

Cal., Bakersfield—Irrigation—Kern Delta Irrigation Dist. being organized to acquire and supply water for irrigation system to cover 640,329 acres in Kern River Delta Dist. A. Hancock, Fairfax, chn.

Cal., Los Angeles—Irrigation—Bd. Pub. Serv. Comn. organizing district in portion San Fernando Valley to vote on $500,000 bonds to build mains for bringing water from Los Angeles acqueduct for irrigation and domestic purposes in Hansen Heights and Tajunga Sections. W. Mulholland, 645 South Olive St., ch. engr.

BIDS DESIRED

N. J., North Bergen—Excavation—Until Mar. 27, by Bd. Educ. for all earth and rock excavation for school building No. 3. About $10,000.

O., Cleveland—Excavation—Until Mar. 31, by Comrs. Cuyahoga Co., for excavating and building draining sewers for proposed jail on West 3rd St. and Lakeside Ave., to cost $1,500,000. W. S. Lougee, 500 Marshall Bldg., archt. Noted Feb. 21, 1918.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Jersey City—Ditches—Mosquito Extermination Comn. of Hudson Co. let contract for 100,000 ft. of drainage ditches on salt marsh meadows beginning at Bergen Co. line and extending along either side of Hackensack River to Kill von Kull to J. D. Manahan, Red Bank, at $0.75 per lin.ft. Noted Mar. 13.

★S. C., York—Ditch—Comrs. Turkey Creek D. D. let contract dredging 26 mi. ditches in York and Chester Counties, involving 861,860 cu. yd. excav., to Sigmunds & Rhinehart, York. Noted Feb. 6.

★Ia., Garner—Drainage—Comrs. Hancock Co. (Garner) and Kossuth Co. (Algona) let contract for tile for improving Hancock-Kossuth Joint D. D. No. 5-87, to A. N. Gjellefald, Forest City; open work, to I. O. Florence & Co., Thompson. Noted Feb. 20.

★Minn., Marshall—Ditch—Comrs. Lyon Co. let contract building Judicial Ditch No. 20, to T. Jensen, Slayton, $149,300; Co. Ditch No. 43, to Marshall Concrete Tile Co., Marshall, $34,976.

★Minn., Windom—Cottonwood Co. let contract building Ditch No. 11, to Rude & Wold, Windom. About $14,959.

Industrial Works

PROPOSED WORK

Mass., Cambridge (Boston P. O.)—W. H. Taylor & Son, archts., 50 Bromfield St., Boston, receives bids in April building 2 story, 90 x 240 ft. brick and concrete factory, rein.-con. flooring and concrete foundation on Aberdeen Ave. here, for Atwood & McManus, Vale St., Chelsea. About $110,000.

Mass., Chelsea (Boston P. O.)—Winnisimmet Shipyard, Inc., Winnisimmet St., having plans prepared for remodeling present building and building machine shop, blacksmith shop, drydock and marine railway on Winnisimmet Wharf and Division St.

Mass., Springfield—United Mfg. Co., 57 Willow St., soon receives bids building 1 story brick and concrete factory and radial brick stack, rein.-con. flooring and concrete foundation on Birnie Ave., About $35,000. H. L. Sprague, 310 Main St., archt.

Mass., Worcester—Morgan Spring Co., West Boylston St., plans to build 1 story, 41 x 80 ft. concrete addition to plant.

R. I., Elmwood—(Providence P. O.)—Providence Body Co., 32 Eagle St., Providence, receives bids about Mar. 25, building 1 story, 80 x 300 ft. mill construction factory, and 1 story 30 x 30 ft. brick office on Elmwood Ave. here. About $55,000. Noted Feb. 6.

R. I., Pawtucket—Arbeka Webbing Co., Central Ave., purchased 4½ acre site adjoining present plant and plans to construct new buildings.

N. Y., Brooklyn—J. Bene & Sons, 641 Dean St., had revised plans prepared by M. Freehof, archt., 405 Lexington Ave., New York City, for 1 story, 100 x 100 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Clinton Ave. near Fulton St. About $35,000. Noted Dec. 19.

N. Y., Brooklyn—Cohn Bros., archts., 361 Stone Ave., receive bids about Mar. 26, building 1 story, 100 x 150 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Pitkin Ave. and Hinsdale St., for H. Fein, 626 Essex St. About $40,000.

N. Y., Brooklyn—F. Savignano, archts., 6004 14th Ave., preparing plans for 1-story, 66 x 100 ft., brick and steel foundry, rein.-con. flooring, concrete foundation, on 60th St. and 12th Ave. About $25,000. Owner's name withheld.

N. Y., Buffalo—Bd. Pub. Wks. plans to build barn on Maryland, Hudson and 4th Sts. About $80,000. A. W. Kreinhede comr.

N. Y., Johnstown—Adams & Co. having plans prepared for 2 story, 145 x 180 ft. leather mill. About $65,000.

N. Y., Long Island City—A. Cohen, 212 5th Ave., New York City, had plans prepared by D. Seabury, archt., 12 East Ave., Pawtucket, R. I., for 3 story, 73 x 193 ft., brick mill, rein.-con. flooring, concrete foundation, at William and Freeman Sts. here. About $60,000.

N. Y., New York—J. Goldstein, c/o J. Fisher, archt., 25 Ave. A, soon receives bids building 2 story, 70 x 154 ft., brick and concrete storage building, rein.-con. flooring, concrete foundation, on East 3rd and Tompkins Sts. About $75,000.

N. Y., New York—Industrial School, 418-420 West 41st St., having plans prepared by G. M. McCabe, archt., 96 5th Ave., for 2 story, 50 x 99 ft., rein.-con. and brick garage, rein.-con. flooring, concrete foundation. About $50,000.

N. Y., Niagara—Union Carbide Co., Union St., plans to build electric switching station. About $45,000.

N. Y., Rochester—Beechnut Packing Co., Canajoharie, plans to build 2 story, 120 x 180 ft., rein.-con. addition to plant on Main St., E. About $70,000.

N. Y., Syracuse—Sun Oil Co., 244 West Jefferson St., plans to build barrel plant on Sunset Ave. and Turtle St. About $69,000. C. E. Brown, mgr.

N. J., Camden—W. H. Dollar Mfg. Co., 312 North Front St., having plans prepared by C. P. Berger, archt., 1416 South Penn Sq., Phila., building 3 story, 53 x 70 ft., brick and concrete factory on North Front St. About $30,000.

N. J., Newark—F. Homs, 940 South 19th St., plans to build 6 story, 22 x 69 ft. factory and office at 107 Mulberry St. Cost between $50,000 and $60,000.

Pa., Phila.—J. J. Felin Co., Inc., 4148 Germantown Ave., soon lets contract building 3 story, 40 x 89 ft., brick and steel packing plant, rein.-con. flooring, concrete foundation, at 4142 Germantown Ave. About $70,000. C. B. Comstock, 110 West 40th St., New York City, archt. Noted Mar. 13.

Pa., Phila.—Gold Medal Bakery Co., 1211 Commonwealth Bldg., plans to build 2 story, 50 x 50 ft., brick and timber factory, concrete and wood floors, concrete foundation, on 3rd St. and Washington Ave. About $30,000. R. Beard, 1211 Commonwealth Bldg., archt.

Pa., Phila.—Loose-Wiles Biscuit Co., 23rd and Arch Sts., plans to build 2 story, 80 x 191 ft., rein.-con., concrete, brick and timber warehouse, rein.-con. flooring, concrete foundation, on 2nd and Poplar Sts. About $65,000. R. Beard, 1211 Commonwealth Bldg., archt.

Pa., Phila.—P. M. Sax, engr., Franklin Bank Bldg., preparing plans for 12 story, 43 x 80 ft., concrete, steel and brick factory, rein.-con. flooring, at 1220-24 Sansom St. Owner's name withheld.

Del., Wilmington—Standard Kid Mfg. Co., 4th and Monroe Sts., having plans prepared by J. J. Kennedy, archt., 925 Market St., for 1 story, 40 x 60 ft., power plant. About $25,000.

Md., Sollers Station (Sollers P. O.)—Aluminum Ore Products Co., Inc., 800 Maryland Trust Bldg., Baltimore, having plans prepared for plant to cost $8,000,000. Project includes one 4 story, two 3 story, two 2 story and seven 1 story buildings for storage room, machine and forge shops, boiler house, etc., all 75 x 400 ft., steel and brick; also open wood pier with creosoted wood piles. J. E. Aldred, chn. bd. dirs., Consolidated Gas, Electric Light & Power Co., Baltimore, interested.

S. C., McColl—Marlboro Cotton Mills plans to build 1 story, 100 x 300 ft. mill construction plant, Robert & Co., 821 Candler Bldg., Atlanta, Ga., engrs.

O., Cleveland—J. L. Free Co., 1004 Prospect Ave., plans to build brick, steel and rein.-con. garage, rein.-con. flooring and concrete foundation on East 9th St. and Bolivar Rd. About $100,000. M. Dunning, 304 South Wabash Ave., Chicago, Ill., archt.

Industrial Works (Continued)

O., Cleveland—J. W. Smith, 10585 Quincy Ave., plans to build 2 story, 48 x 81 ft. brick, steel and concrete factory, rein.-con. flooring and concrete foundation, at 10611 Quincy Ave. About $25,000.

O., Toledo—Banting Mfg. Co., Dorr St. and Cavalry Cemetery, having plans prepared by H. H. Neff, archt., R. F. D. No. 9, building 3 story, 56 x 120 ft., brick, steel and concrete mill, concrete foundation, on Dorr St. About $30,000.

O., Toledo—Standard Oil Co. of Ohio, Gas Bldg., purchased site of 810 acres north east of city and having plans prepared building 24 crude oil stills, 12 running stills, 80 pressure stills, and from 12 to 24 other stills, steel storage tanks, warehouses and railroad tracks and yards. Cost between $4,000,000 and $5,000,000.

O., Youngstown—Thornton Laundry Co., 85 Thornton Ave., plans to build 2-story, 54 x 75 ft. laundry on Belmont Ave. About $25,000. Stanley & Schiebel, Wick Bldg., archts.

Mich., Detroit—Burkhardt Bldg. Co., 400 Penobscot Bldg., had plans prepared by R. W. Koch, archt., 306 South State St., Ann Arbor, building 5 story, 75 x 75 ft., brick and rein.-con. factory, rein.-con. flooring and concrete foundation on 2nd Ave. and Learned St.

Mich., Detroit—Central Forge Co., Euclid Ave., soon lets contract building 2 story, 70 x 302 ft., steel forge shop, rein.-con. flooring and concrete foundation and 2 story, 70 x 302 ft., steel heat treating plant, brick flooring and concrete foundation, on Euclid Ave. near Grand Trunk R.R. Smith, Hinchman & Grylls, 710 Washington Arcade, archts.

Mich., Detroit—Stecker Electric & Machine Co., 34 Bates St., had plans prepared by Beckett & Akitt, archts., Elks Temple, building 3 story, 75 x 250 ft. brick and rein.-con. factory, rein.-con. flooring and concrete foundation.

Mich., Lansing—Rector Transfer Co., 533 River St., purchased site of Northrop, Robertson & Carrier Co. on North Grand Ave., and plans to construct 5-story fireproof storage building. About $75,000. W. S. Foster, pres.

Ill., Chicago—See "Buildings."

Wis., Green Bay—Ft. Howard Paper Co. having plans prepared by T. O'Keefe, engr., Appleton, building 3 story, 70 x 220 ft., rein.-con., brick and mill construction paper mill, concrete foundation. About $75,000.

Wis., Manitowoc—Manitowoc Brewing Co. plans to remodel 2 story, 90 x 140 ft. rein.-con. and brick brewery into ice cream factory. About $72,000. R. Rauber, Manitowoc, archt.

Wis., Menasha—Peerless Paper Products Co. having plans prepared by L. A. De Guere, engr., Wood Co. Bank Bldg., Grand Rapids, building 3 story, 40 x 150 ft., rein.-con., brick and steel paper mill.

Wis., Menasha—U. S. Tractor Co., recently organized, plans to build factory. About $50,000.

Wis., Racine—Malbohm Motor Co., 15th and Clark Sts., soon lets contract building 1 story, 80 x 600 ft. factory. About $90,000. Noted Jan. 2.

Wis., Sheboygan—W. C. Weeks, archt., 730 Ontario Ave., receives bids about Apr. 1, for 6 story, 50 x 140 ft. factory on South Water St., for Northern Furniture Co. About $75,000.

Wis., Starlake—A. H. Strange Co., Merrill, plans to build saw and planing mill here. About $45,000. C. H. Strange, secy.

Wis., Two Rivers—Wisconsin Textile Co. plans to build 1 story, 90 x 200 ft,. concrete plant. About $50,000.

Kan., Oswego—City election Apr. 1. to vote on $50,000 bonds to build new lighting plant.

Mo., Kansas City—Clagett Transfer & Storage Co., 1316 West 8th St., purchased site at 1216-20 West 8th St. and plans to build 6 or 8 story building to contain 125,000 sq.-ft. storage room. About $150,000.

Mo., St. Louis—Hussmann Refrigerator Co., 911 North Bway., receives bids in April building 1 story, 130 x 200 ft., brick, concrete and steel factory, rein.-con. flooring, concrete foundation, on Leffingwell Ave. and North Market St. About $50,000. H. J. Schulte, 1517 North 23rd St., archt. Noted Jan. 9.

Mo., St. Louis—A. A. Marquardt, engr., 930 Chouteau Ave., receives bids about Apr. 15, building 2 story, 50 x 150 ft., brick and concrete factory, concrete foundation, for St. Louis Wire & Iron Co., 926 Chouteau Ave. About $30,000. Noted Feb. 27.

Ark., Forest City—D. C. Webb having plans prepared for 60 x 150 ft. grocery plant. About $25,000.

Okla., Blackwell—Lek Tro Mfg. Co. soon lets contract building 2 story, 40 x 150 ft., rein.-con. and pressed steel factory. About $25,000. L. H. Bailey, 1214 North Oklahoma St., Oklahoma, archt.

Idaho, Caldwell—Bales Bros., 7th and Railroad Sts., plan to build warehouse. About $50,000.

Utah, Ogden—Sperry Flour Co. having plans prepared by M. C. Couchot, engr., 110 Sutter Bldg., San Francisco, building rein.-con. elevator and flour mill. About $300,000.

Ore., Astoria—Montana Union, Amer. Society of Equity plans to build 2,000,000 bu. terminal elevator here, on Lewis and Clark River, west of Port of Astoria.

Ore., Astoria—Mutual Lumber Co., Bucoda, Wash., plans to rebuild saw mill, 130,000 ft. daily capacity.

Ore., Dallas—Mason-Ehrman Grocery Co., 74 North 5th St., Portland, plans to build large warehouse on Southern Pacific Ry. property here. Address H. A. Woods, Dallas, representative.

Ore., Eugene—Eugene Fruit Growers' Assn. purchased lots adjoining cannery and plan to build large cold storage and packing plant. J. Holt, mgr.

Ore., Portland—Oregon Milk Producers' Assn., 208 2nd St., plans to build milk producing plant. About $50,000.

Cal., Camarillo—G. Lewis, Camarillo; W. A. Brown, Santa Paula; B. Reece, Venice, and associates, organizing company with $50,000 capital stock and plans to build cannery, packing and shipping plant, 200 ft. long, concrete flooring and foundation, here.

Cal., Frenso— Dirs. California Associated Raisin Co., Holland Bldg., voted $750,000 for new plants and alterations to existing ones. Plans include stemming plant here, additions to plants at Fowler, Selma and Kingsburg; improvements to packing houses at Hanford, Aromas, Dinuba, Reedley, Del Rey, Lone Star, Sanger and Clovis. W. M. Giffen, pres.

Cal., Fresno—Union Oil Co., Divisadero and Roosevelt Sts., having plans prepared building addition to oil distributing plant and building 6 substations. About $200,000.

Cal., Los Angeles—Pan American Petroleum & Transport Co., Security Bldg., plans to build refinery on 15 acre site in Vernon Industrial Dist. About $250,000.

Cal., Porterville—City Trustees retained Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, to prepare plans for gas plant.

Cal., San Francisco—Independent Paper Co., 268 Market St., plans to build 185 x 200 ft. rein-con. factory and warehouse at 10th and Bryant Sts. About $120,000.

Que., Montreal—Cardinal & Beauchamp, archts., 26 St. James St. E., preparing plans for garage on Park Ave. About $60,000. Owners name withheld.

Que., Montreal—J. Goodman, 11 Lagantiere St., plans to build 75 x 100 ft. garage on Lagantiere St. About $60,000.

Que., Quebec—Harbor Comrs. plan to build cold storage plant at Pointe-a-Carcy Wharf. About $1,000,000. G. Boswell, c/o Harbor Comrs., engr.

Que., St. Lamberts—Waterman Pen Co., 191 Bway., New York City, had plans prepared by D. J. Spence, archt., 256 Beaver Hall Hill, Montreal, for 3 story, 109 x 130 ft. rein.-con. factory, rein.-con. flooring, concrete foundation on Main St. here. About $175,000. F. S. Waterman, pres.

Que., Three Rivers—International Paper Co., 30 Broad St., New York City, plans to build paper plant on 100 acre site to consist of several 1 and 2 story, rein.-con. buildings, rein.-con. flooring, concrete foundation. About $3,000,000.

Ont., Guelph—James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, soon receives bids building 3 story, 60 x 100 ft., rein. con. and brick addition to plant, rein.-con. flooring, concrete foundation, for F. E. Patridge Rubber Co., on Metcalf St. About $60,000.

Ont., Guelph—James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, receives bids in about 5 weeks building 4 story, 80 x 200 ft., rein. con. factory, rein. con. flooring and rock foundation, on Metcalf St., for Premier Rubber Co. About $135,000. Noted Mar. 13.

Ont., Parry Sound—City having plans prepared by G. Murray, engr., Parry Sound, building electrical plant. About $125,000.

Ont., Port Arthur—Saskatchewan Cooperative Elevator Co., New Grain Exch. Bldg., Winnipeg, Man., having plans prepared for addition to terminal elevator here, to have capacity of 2,000,000 bu.

Ont., Rockland—W. C. Edwards & Co., Ltd., Sussex St., Ottawa, soon receives bids building pulp and paper mill here. About $3,600,000.

Ont., Wyoming—P. I. Nicholson, Alvinston, plans to build flax-mill here. About $25,000.

BIDS DESIRED

Ill., Chicago—Wilson & Co., Union Stock Yards, is receiving bids for 2 story, 81 x 125 ft. mill construction factory, brick foundation, at 4225 South Western Ave. About $40,000. C. P. Barnett, c/o owner, archt.

Wis., Sheboygan—Until Apr. 15 by Juul & Smith, archts., 801 North 8th St., building 4 story, 100 x 250 ft., rein.-con., brick and steel tannery, rein.-con. flooring, brick foundation, on Illinois and Water Sts. for Badger State Tannery Co. About $45,000.

Mo., Boonville—Until Apr. 1, by C. C. Ross, supt., Hamilton-Brown Shoe Co., Jefferson and Randolph Sts., St. Louis, building 3 story, 60 x 250 ft., mill construction factory, concrete foundation. About $40,000. I. Taylor Architectural Co., 717 Locust St., St. Louis, archts. Noted Mar. 6.

Ore., Astoria—Until Apr. 1, by Port of Astoria, building addition to and remodeling existing warehouse in Sect. 6. R. R. Bartlett, chief engr., Port Seattle.

Que., Montreal—Until Apr. 1, by C. Dufort, archt., 195 St. Catherine St. E., building and equipping 2 story, 75 x 77 ft. garage on City Councillor and Ontario St., W., for Bramson Auto Service, 455 Phillips Pl. About $50,000. Noted Jan. 16.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—See "Buildings."

★Mass., New Bedford—W. C. Jones Co., Nash Rd., let contract building 1 story, 100 x 200 ft. brick and concrete storehouse, rein.-con. flooring and concrete foundation, on Nash Rd., to E. A. Abbott Co., 185 Devonshire St., Boston. About $70,000. Noted Mar. 20.

★Mass., Quincy—(Boston P. O.)—Murray & Tregurtha Co., 340 West 1st St., South Boston, let contract building 1 story, 60 x 204 ft. brick and concrete addition to machine shop, rein.-con. flooring and concrete foundation on Atlantic and Hancock Sts., to Wilson & Tomlinson Co., 79 Milk St., Boston. About $50,000.

★Mass., Somerville (Boston P. O.)—Standard Envelope Sealer Mfg. Co. let contract building 2 story, 65 x 120 ft. mill construction factory, concrete foundation on Winter and Spring Sts., to A. M. Pride, Somerville, $30,000.

★Mass., Worcester—C. O. Johnson & Sons, 22 Lakewood St., let contract building 1 story, 40 x 256 ft. timber factory, concrete flooring and foundation on Ludlow St., to F. W. Mark, 4 Walnut St. About $28,000.

★R. I., Providence—J. C. Doran & Sons, Inc., 150 Chestnut St., let contract building 2 story, 60 x 75 ft. brick and mill construction factory, concrete flooring and foundation, on Elbow St., to C. I. Bigney Constr. Co., 898 Westminster St. About $35,000.

★R. I., Providence—J. A. Foster Co., 69 Dorrance St., let contract building 4 story, 72 x 100 ft. mill, on Harrison St., to C. I. Bigney Constr. Co., 898 Westminster St. About $30,000.

★R. I., Providence—H. A. Thayer, 404 Weybosset St., let contract building 1 story, 40 x 90 ft. and 16 x 38 ft. brick garage and service station, rein.-con. flooring and concrete foundation, on Weybossett and Winslow Sts., to C. I. Bigney Constr. Co., 898 Westminster St. About $25,000.

Industrial **Works (Continued)**

★**R. I., Providence**—United States Finishing Co., Charles St., let contract building 2 story, 40 x 55 ft. mill construction addition to power house on Charles St., to Day & Zimmerman, 611 Chestnut St., Phila. About $35,000.

★**Conn., Ansonia**—S. F. Yudkin, 403 Main St., let contract building 1 story, 200 x 202 ft. concrete garage, rein.-con. flooring and concrete foundation, on Central St., to Concrete Constr. Co., Ansonia. About $50,000. Noted Mar. 6.

★**Conn., Bridgeport**—Conlin & Green, Inc., 70 Elm St., let contract building 3 story, 40 x 70 ft. brick plant, concrete foundation and flooring, on Elm St., to T. J. Pardy Constr. Co., 15 Fairfield Ave. About $25,000.

★**Conn., Bridgeport**—T. J. Pardy Constr. Co., 15 Fairfield Ave., will build 1 and 2 story, 40 x 60 ft. and 50 x 80 ft., brick, steel and concrete mill, concrete flooring and foundation on Seaview Ave. About $30,000. Work will be done by day labor.

★**Conn., Hartford**—L. and J. Weinstein, Asylum St., will build 3 story, 42 x 42 ft. brick bakery, brick foundation, on Village St. Work will be done by day labor.

★**Conn., New Haven**—Bradley-Smith Co., 102 Hill St., let contract building 6 story, 88 x 108 ft. brick and steel addition to factory, concrete foundation, on Hill St., to Dwight Bldg. Co., 24 Center St. About $100,000.

★**Conn., Plainville**—Landers, Frary & Clark, Commercial and Centre Sts., New Britain, let contract building 4 story, 60 x 100 ft. brick and steel factory, concrete flooring and foundation on Woodford Ave., here, to Torrington Bldg. Co., 197 Water St., Torrington. About $50,000.

★**N. Y., Brooklyn**—Saba Constr. Co., 301 East 16th St., will build 1 story, 100 x 105 ft., brick and rein.-con. garage at 1402 Newkirk Ave. About $25,000. Work will be done by day labor.

★**N. Y., New York**—L. Klosk, 40 West 111th St., will build 1 story, 97 x 148 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 419-425 East 109th St. About $30,000. Work will be done by day labor.

★**N. Y., New York**—J. F. Murray, 33 Clifton Terrace, Weehawken, N. J., let contract building 8 story, 50 x 100 ft., brick and steel warehouse, rein.-con. flooring, concrete foundation, at 548 West 39th St., here, to Harby, Abrons & Melins, 15 East 40th St. About $150,000.

★**N. Y., New York**—Natl. Ice & Coal Co., 7-15 East St., let contract building 2 story, 120 x 120 ft., brick and steel refrigerating plant, rein.-con. flooring, concrete foundation, at 8-10 Tompkins St., to J. Brody, 8-10 Tompkins St. About $75,000.

★**N. Y., New York**—S. K. W. Shellat, Newport, R. I., will build 2 story, 98 x 117 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 536-546 West 42nd St. here. About $50,000. Work will be done by day labor, Marcus & Goldstein, 141 Bway., lessee. Noted Mar. 6.

★**N. Y., Rochester**—Eastman Kodak Co., Kodak Park, let contract building 6-story, 162 x 182 ft., rein.-con. factory on Hanford Landing Rd., to Ferro Concrete Constr. Co., Richmond and Harriet Sts., Cincinnati, O. About $350,000. Noted Mar. 6.

★**N. Y., Staten Island**—Proctor & Gamble Co., 100 Broad St., New York City, let contract building concrete, steel and brick warehouse at Port Ivory to H. J. Ferguson, 6523 Euclid Ave., Cleveland, O. About $150,000.

★**Md., Baltimore**—Maryland Glass Corp., Bromo Seltzer Tower Bldg., let contract building 2 story, 69 x 110 ft., concrete, brick and steel addition, rein.-con. flooring, stone and concrete foundation, on Ontario St. near Baltimore & Ohio R. R., to Price Constr. Co., 210 Maryland Trust Bldg. About $50,000.

★**Ga., Albany**—McLin & Norris, Greenville, S. C., let contract building large shuttle block plant, here, to F. B. Leonard, Albany.

★**Ala., Mobile**—Mobile Cotton Mills, c/o Standard Oil Cloth Co., 320 Bway., New York City, let contract building concrete addition to weaving plant here, rein.-con. flooring, concrete foundation, to T. C. Thompson, 609 North Smith St., Charlotte, N. C. About $275,000. Costs plus percentage basis.

★**Mich., Detroit**—Bd. Water Comrs., 232 Jefferson Ave., let contract building 54 x 90 ft. steel, brick and concrete boiler house and steel coal hoppers, to Lennane Bros., Union Trust Bldg. and F. E. Chapper Iron Wks., 128 Fort St., E., $27,238.

★**Mich., Detroit**—Sanders Co., 381 Woodward Ave., let contract building 3 story, 40 x 200 ft. rein.-con. and brick addition to bakery and candy factory at 381 Woodward Ave., to A. A. Albrecht Co., 1130 Penobscot Bldg.

★**Mich., Grand Rapids**—Arctic Ice Cream Co., 507 Grand River St., Detroit, let contract building 2-story, 150 x 250 ft. brick and rein.-con. ice cream factory, on Market Ave., here, to F. A. Horner, Grand Rapids.

★**Ill., Chicago**—Chicago Transfer & Storage Co., 5861 West 65th St., let contract building 1 story, 140 x 250 ft., mill construction warehouse, concrete foundation, on 65th St. and 60th Ave., to Walter Co., 1st Natl. Bank Bldg. About $60,000.

★**Wis., Eau Claire**—Dells Paper & Pulp Co. let contract building 2 story addition to paper mill, to A. Larson & Co., Eau Claire. About $25,000.

★**Wis., Glenbeulah**—Glenbeulah Canning Co. let contract building 2 story, 45 x 110 ft., brick canning factory, rein.-con. flooring, brick foundation, on Main St., to O. R. Pakel, Plymouth. About $42,000.

★**Wis., Green Bay**—Conradson Machine Tool Co. let contract building 1 story, 192 x 192 ft., concrete, brick and steel machine shop, to H. J. Selmer Co., Green Bay. About $55,000. Noted Feb. 6.

★**Wash., Wenatchee**—Cashmere Apple Co. let contract building 2-story, 90 x 107 ft., brick warehouse on Wenatchee Ave. and Spokane St., to Bird & Hobson, Wenatchee. About $30,000. Noted Feb. 27.

★**Ore., Portland**—H. Wagner, 475 Burnside St., let contract building 2 story, 50 x 150 ft., concrete garage, on 1st and Alder Sts., to Hurley Mason Co., Gasco Bldg.

★**N. B., Moncton**—J. Eaton & Co., Ltd., 190 Yonge St., Toronto, Ont., let contract building factory here, to G. Fuller Co., Ltd., 45 St. Alexander St., Montreal, Que. About $782,000. Noted Mar. 6.

★**Ont., Thorald**—Pilkington Bros., Ltd., let contract building steel, brick and timber box making plant, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O. About $65,000. Address owners c/o contractor.

Buildings

PROPOSED WORK

Mass., Boston—Office—Henderson & Ross, 148 State St., having plans prepared by McNaughton & Robinson, archts., 101 Tremont St., for 6 story, rein.-con. and steel, rein.-con. flooring and concrete foundation. About $300,000.

Mass., Fall River—Stations—City plans to build 4 comfort stations at parks. About $50,000. J. H. Kay, mayor.

Mass., Lenox—School—Bd. Educ. plans to build school at North Lenox. About $75,000 including site.

Mass., New Bedford — Bank — Textile Trust Co. purchased site on Union and 6th Sts. and plans to build. About $100,000.

Mass., New Bedford—Business—S. Genensky, 69 Russell St., soon receives bids building 2 story, 70 x 70 ft. brick, concrete foundation on 6th St. About $50,000. C. Hammond & Son, North Water St., archts.

R. I., Providence—Theatre—W. R. Walker & Son, archts., 17 Custom House St., receive bids in April building 32 x 72 ft. brick, steel and concrete addition here, for J. Bartley, Seekonk, Mass. About $50,000. Noted Jan. 23.

Conn., Hartford—Bank—Amer. Industrial Bank & Trust Co., 688 Main St., plans to build 15 story, on Main St.

Conn., Hartford—Church—Second Church of Christ Scientist, 25 High St., purchased site on Lafayette and Russ Sts., and plans to build church.

Conn., Hartford—Market—Bd. Contract & Supply soon receives bids building 1 story public market on Connecticut Blvd. About $100,000. Whiton & McMahon, 36 Pearl St., archts. Noted Feb. 27.

Conn., Meriden—Infirmary—City plans to build infirmary at Cold Spring Home on West Mountain St. About $50,000. Address J. B. Dinnan, West Mountain St.

Conn., New London—Hospital—J Lawrence Hospital, Ocean Ave., receives bids about May for 3 story, 40 x 90 ft. brick, rein.-con. flooring. About $100,000. Kendall, Taylor & Co., 93 Federal St. Boston, Mass., engrs.

Conn., New London—Office, etc.—Hilderbeck & Langdon, archts., 253 State St. receive bids about Apr. 20, for 3 story, 60 x 100 ft., office, to include stores, and dance hall, rein.-con. flooring, for L. Hall Estate. About $100,000. B. A. Copp, trustee.

Conn., Southington—Hospital—Town received bequest of $100,000 from will of A. Bradley to build memorial hospital to be known as Bradley Memorial Hospital.

Conn., Stamford — School — Bd. Educ. plans to build 2 story, grammer school on State and South Sts. Cost between $130,000 and $150,000.

Conn., Watertown—School—Bd. Educ. receives bids in April building 2 story brick addition to South School, rein.-con. flooring and concrete foundation, on Oakville St. About $50,000. L. Asheim, 211 State St., Bridgeport, archt.

N. Y., Albany—Theatre—M. Spiegel, Strand Theatre Bldg., New York City, having plans prepared by T. Lamb, archt., 644 8th Ave., New York City, for 2 story, 75 x 175 ft., brick and stone, concrete foundation, on Monroe St. here. About $150,000.

N. Y., Brooklyn—Hospital—Beth Moses Hospital, Hart St. and Stuyvesant Ave., having plans prepared by H. J. Nurick, archt., 957 Bway., for 5 story, 90 x 100 ft., brick and steel addition, concrete flooring. About $350,000.

N. Y., Brooklyn—Synagogue—New Hebrew School, 479 Ashford St., had plans prepared by E. M. Adelsohn, archt., 1778 Pitkin Ave., for 3 story, 46 x 70 ft., steel and brick, concrete foundation, on Ashford St. and Sutter Ave. About $60,000.

N. Y., Brooklyn — Theatre — Courtney Marshall Estate, c/o Brooklyn Trust Co., Pierpont St., having plans prepared by De Rosa & Pereira, archts., 110 West 40th St., New York City, for 1 story, 100 x 100 ft., brick and steel, concrete foundation, on Saratoga Ave. and Macon St. About $100,000.

N. Y., Brooklyn—Theatre—R. T. Short, archt., 370 Macon St., receives bids about Mar. 29, building 1 and 2 story, 80 x 180 ft., brick, steel and limestone moving picture theatre, concrete foundation, on Flatbush Ave. and Farragut Rd., for A. H. Schwartz, 815 Flatbush Ave. About $60,000.

N. Y., Carthage—School—St. James Parish Bldg. Com. plans to build 40 x 100 ft., concrete school on Mechanic St. to be known as St. James Augustina Academy. About $60,000.

N. Y., Lockport—Hall—City plans to build. About $125,000. J. F. Freshee, city engr.

N. Y., New York—Mission—Natl. Bible Institute, 213 West 35th St., plans to construct 15-story, 100 x 100 ft., brick and limestone cremorne mission building, concrete foundation at 214-216 West 35th St. McKenzie, Voorhies & Gemlin, 1123 Bway., archts.

N. Y., New York—Office and Loft—Lawyers' Realty Co., 160 Bway., having plans prepared by R. Higgins, archt., 126 East 38th St., for 5-story, 25 x 100 ft., brick and steel, concrete foundation, at 45 Maiden Lane.

N. Y., Penn Yan—Hospital—City plans to build Soldiers and Sailors Memorial hospital. About $150,000.

N. Y., Rochester—Temple—Rochester Masons selected site on East Ave. north of Scio St., and plans to build large temple.

N. Y., Troy—Bathhouses, etc.—City plans to build bath houses and comfort stations in Frear Park; also extend ornamental lighting zone from River to State Sts. on 1st St. A. E. Roche, city engr.

N. Y., Watertown—Cottages—Bd. Trustees Jefferson Co. Orphans Asylum acquired 14 acre site on State St., and having plans prepared for 10-12 cottages

N. J., Dunnellen—School—Bd. Educ. having plans prepared for addition to Whittier School. About $82,000.

N. J., Jersey City—School—Bd. Educ. plans to build school. About $700,000. E. A. Rowland, Sip Ave., archt.

N. J., Soho (Newark P. O.)—Hospital—Bd. Freeholders, Essex Co. (Newark), having plans prepared by P. Mertens, archt., 1091 Clinton Ave, Irvington, for smallpox building here. About $50,000.

Buildings (Continued)

Pa., Farrell—Bank and Office—Colonial Trust Co., Bway., having plans by A. C. Bossum, archt., 336 5th Ave., New York City, building 3 story, 55 x 125 ft., brick and steel, concrete foundation. About $75,000. J. Stevenson, pres.

Pa, Phila.—Stores and Office—E. Wolf, 1517 North 16th St., plans to build 7 story, 76 x 156 ft., rein.-con., brick and timber, rein.-con. flooring, concrete foundation, on 16th and Market Sts. About $400,000. Hoffman Co., Finance Bldg., archt.

Pa., Phila.—Temple—A. A. O. Nobles Mystic Shrine, 1337 Spring Garden St., plans to build. at 24th and Spring Garden Sts. and Pkway. About $750,000. W. F. Kendrick, chn. bldg. com.

Pa., Pittsburgh — Church, Training School, etc.—Methodist Episcopal congregation, 7th and Smithfield Sts., plans to build brick and stone church, training school, social headquarters and auditorium. About $500,000. D. L. Marsh, pastor.

Del., Wilmington—Office—A. I. Du Pont, Delaware Trust Co. Annex having plans prepared for 15 or 18 story, on 9th and Market Sts.

Md., Baltimore—Hotel—C. H. Consoloo, Hotel Belvedere, plans to remodel and alter hotel on Charles and Chase Sts. About $100,000. Parker, Thomas & Rice, Union Trust Bldg., archts.

Va., Pulaski—Bank—Pulaski Natl. Bank plans to build brick or stone addition. About $50,000.

Ga., Atlanta—Museum—City voted $100,000 bonds to build in Grant Park. H. L. Collier, city engr. Noted Feb. 13.

Ga., Canton—Hotel—Canton Hotel Co. plans to build hotel. About $50,000.

Ga., Macon—Court House—Bibb Co. voted $400,000 bonds to build court house. Noted Jan. 9.

Ga., Macon—Schools—Bibb Co. voted $400,000 bonds to build several schools and pay debt of new high school. Noted Jan. 9.

Ga., Savannah—Church—First Baptist congregation, Bull St., plans to build church. About $100,000. L. R. Christie, pastor.

Fla., Jacksonville—Bank—Atlantic Natl. Bank having plans prepared by Mowbray & Uffinger, archts., 56 Liberty St., New York City, for altering existing building and constructing 1 story, 50 x 100 ft., brick and stone addition, concrete foundation.

Fla., Melbourne—School, etc.—Bd. Educ. Brevard Co., rejected bids building 2 story, 80 x 183 ft., rein.-con. school and 54 x 72 ft. auditorium extension. Noted Jan. 9.

Ala., Tuscaloosa—Church—First Presbyterian congregation plans to build church. About $75,000.

Miss., Hattiesburg — Dormitory — Mississippi Women's College plans to build dormitory to replace one recently damaged by fire. About $75,000.

Ky., Bowling Green—High School—City election Nov. 4, to vote on $60,000 bonds to build school. W. W. Williams, secy. bd. educ.

Ky., Lexington—Hotel—Phoenix Hotel Co., East Main St., plans to build addition to hotel, which was partially destroyed by fire. About $1,000,000. Richards, McCarty & Bulford, Hartman Bldg., Columbus, archts.

O., Cincinnati—School—Bd. Educ. rejected bids building Hoffman School, 2 story, brick, on Bloody Run Blvd. About $250,000. Hannaford & Son, Hulbert Blk., archts. Noted Mar. 13.

O., Youngstown—Hospital—City plans to build 5-story contagious unit to city hospital on Homestead and Indianola Sts. About $250,000. F. M. Lillie, city engr.

Mich., Benton Harbor—Home, etc.—Knights of Columbus plan to build 3-story home and convention hall. About $50,000.

Ill., Chicago—Infirmary, etc.—Cook Co. election Apr. 1, to vote on $290,000 bonds for cottages at infirmary, $50,000 for agents office, $20,000 for bakery, $75,000 for laundry, $89,000 for factory and $36,000 for tunnels between various buildings at infirmary. P. Reinberg, pres. bd. co. comrs. E. E. Hall, 5 North La Salle St., archt. Noted Feb. 20.

Ill., Chicago—Memorial—Victory Memorial Assn. recently incorporated, plans to build 200 x 200 ft. steel, rein.-con. and granite memorial here with 500 ft. triangular shape shaft to surmount rotunda, 80 ft. interior diam. with 140 ft. vaulted dome to contain 6 elevators. About $2,000,000. C. F. Frybott, 134 South Dearborn St., archt.

Ill., East St. Louis—Community—Natl. Catholic Community Center Serv. c/o Union Trust & Savings Bank, having plans prepared by J. Ware, archt., Washington, D. C., for 3 story, brick and concrete community center, concrete foundation, on 5th and St. Louis Aves. About $150,000. P. Murray, chn.

Ill., East St. Louis—H. L. Nevins, archt., 19 South La Salle St., Chicago, soon receives bids building 2 story building here for Y. M. C. A., 19 South La Salle St., Chicago. About $50,000. W. G. Clark, c/o Y. M. C. A., Federal Bldg., engr.

Ill., East St. Louis—Y. M. C. A. 19 South La Salle St., Chicago, plans to build central building here. About $200,000. H. L. Nevins, 19 South La Salle St., Chicago, archt.

Wis., Eau Claire—Church—First Norwegian congregation receives bids about Apr. 15, building 1 story, 78 x 130 ft., brick and steel, rein.-con. flooring. About $60,000. C. Valkman, 106½ Grand Ave., archt. Noted Jan. 30.

Wis., Fond du Lac—Hall—Park Bd. plans to build 2 story memorial hall. About $50,000. H. R. Potter, chn.

Wis., New London—Hall—City having preliminary plans prepared by J. Thompson, archt., New London, building 3 story memorial hall. About $60,000.

Wis., New London—High School—Bd. Educ. receives bids in spring building 3 story, 65 x 200 ft., rein. con., brick and steel. About $85,000. A. Jensen, Oshkosh, archt. Noted May 2.

Wis., Sheboygan—Office—W. C. Weeks, archt., 730 Ontario Ave., receives bids about Apr. 5, building 4 story, 70 x 80 ft. on 9th and Center Sts. for Citizens Telephone Exch., 701 North 8th St. About $70,000. Noted Jan. 30.

Wis., Sheboygan—School—Bd. Educ. plans to build school. About $250,000.

Wis., Wales—Infirmary—State Bd. Control receives bids in spring building 2 story, 40 x 140 ft. here. About $100,000. A. Peabody, Capitol, Madison, archt. Noted Feb. 27.

Ia., Clinton—Office—Iten Biscuit Co., 1320 Walnut St., Des Moines, plans to build 88 x 120 ft. here. About $60,000.

Ia., Newton—Bank—First Natl. Bank, c/o C. F. Eckland, chn. bldg. com., soon lets contract building 2 story, 52 x 100 ft. rein.-con. and stone. About $50,000. A. H. Edwards Co., 107 South Wabash Ave., Chicago, Ill., archts. and engrs.

Ia., Tama—Hotel—E. L. Beard Co. having plans prepared by G. L. Lockhart, archt., 391 Endicott Bldg., Minneapolis, Minn., building 5 story, 80 x 80 ft. About $125,000.

Minn., Rice—Church and Parish House—Immaculate Conception congregation having plans prepared for church and parish house. About $75,000.

Kan., Fredonia—Grade School—Bd. Educ. having plans prepared by T. W. Williamson & Co., archt., 418 Central Natl. Bank Bldg., Topeka, building 1-story, 80 x 140 ft. About $50,000. C. R. Cantrall, clk.

Kan., Wichita—Schools—Bd. Educ. plans election to vote on $850,000 bonds to build two intermediate schools.

S. D., Pierre — Office — State Capitol Comrs. plan to build on Capitol Grounds. About $400,000.

S. D., Rapid City—Hall—State Bd. Educ. Pierre, plans to build engineering hall for South Dakota School of Mines, on College Grounds here. I. D. Aldrick, Big Stone City, secy. bd. regents. About $100,000.

N. D., Pembina—School—Bd. Educ. plans to rebuild combined school recently destroyed by fire. About $80,000.

Wyo., Cheyenne—Hospital—Comrs. Larimer Co. plan election Apr. 22, to vote on $75,000 bonds to build hospital. Total cost $100,000; remainder to be paid by public subscription.

Mont., Bozeman—Theatre—F. W. Wilson, archt., Bozeman, preparing plans for 2 story, 54 x 140 ft., brick and concrete. About $50,000. Owners' name withheld.

Mont., Helena—Laboratory—State Legislature appropriated $50,000 to build laboratory here.

Mo., Kansas City — Hospital — Church Charity Assn., which includes all Episcopal churches in Kansas City and diocese of West Missouri, plans to build new St. Luke's Hospital, cost $350,000. S. C. Partridge, bishop.

Mo., Kansas City—Schools—Bd. Educ. having preliminary plans prepared for several school buildings. About $2,000,000. J. Cowgill, mayor.

Mo., St. Louis—Bank and Office—St. Louis Union Trust Co., 4th and Locust Sts., having plans prepared by C. Gilbert, 244 Madison Ave., New York City, and Mauran, Russell & Crowell, Chemical Bldg., archts., building rein.-con. and steel, 7th and Locust Sts. J. H. Grover, vice-pres. Noted Jan. 9.

Mo., St. Louis—Hotel—Argonne Realty Co., 2407 North Bway, having plans prepared by Kennerly & Stiegemeyer, archts., Benoist Bldg., for 8 story, 77 x 234 ft., brick and rein.-con., concrete flooring and foundation, at 3664 Washington Ave. About $350,000. S. Hamburg, mgr.

Ark., Blytheville — Auditorium — Blytheville Auditorium Co., having plans prepared by M. Seligman, archt., Citizens' Bank Bldg., Pine Bluff, building 60 x 140 ft. auditorium and theatre on West Main St. About $50,000.

Ark., Winslow—School—Winslow School Dist. soon lets contract building 2-story brick. About $50,000. I. H. Russell, secy. J. A. Bliss, 607 Southern Trust Bldg., Little Rock, archt.

Tex., Oakville—Courthouse and Jail—Comrs. Live Oak Co. receive bids about May building courthouse and jail. About $100,000. Lone Star Eng. Co., San Antonio, archts.

Tex., Paris—Church—Van Slyke & Woodruff, archts., 403 Reynolds Bldg., receives bids about May 1 building concrete, brick and steel here. About $130,000. Noted Feb. 27.

Okla., Elk City—Convention Hall—City election Apr. 1, to vote on $75,000 bonds to build convention hall.

Okla., Elk City—High School—Bd. Educ. plans to issue $50,000 bonds to build high school.

Okla., Idabell—Courthouse and Jail—McCurtain Co. election Apr. 16, to vote on $125,000 bonds to build courthouse and jail. H. A. Smith, co. clk.

Okla., Jefferson—School—Bd. Educ. soon lets contract building school. About $50,000. Tonini & Bramblet, Terminal Bldg., Oklahoma, archts.

Okla., McAlester—High School—Bd. Educ. soon receives bids building 2-story, 175 x 225 ft., rein.-con. and brick. About $300,000. J. Hicks, 19½ West Main St., Oklahoma, archt. Noted Feb. 27.

Okla., Tulsa—Hospital—L. D. Layton, c/o Thompson & Fleming, archts., 222 Iowa Bldg., having plans prepared for 3 story, 40 x 95 ft., rein.-con. and brick. About $75,000.

Okla., Vinita—Court House—Craig Co. plans election soon to vote on $150,000 bonds to build court house. Layton & Smith, 701 Southwest Reserve Bank Bldg., Oklahoma, archts.

Ariz., Globe—School—School Trustees plan election to vote on $75,000 bonds to build grammar school on Sycamore and Sutherland Sts.

Ariz., Morenci—Schools—School Trustees voted $150,000 bonds to build high school, 2 grade schools and addition to manual art building. J. P. Hodgson, trustee. Noted Feb. 13.

Ore., Astoria—Schools—Bd. Educ. plans to build 2 grade schools. Whitehouse & Fouilhoux, Ry. Exch. Bldg., Portland, archt. About $180,000.

Ore., Pendleton — Home — Commercial Assn., Milarkey Bldg., having tentative plans prepared for home for dependent children and aged, of Women of Woodcraft Institution. Large fund available. C. C. Van Orsdale, grand guardian.

Ore., Salem—Cottage, etc.—State having plans prepared by L. I. Thompson, archt., 91 North 10th St., Portland, for new pavilion and superintendent's cottage at State Tuberculosis Hospital; also 2 dormitories at State Home for Feeble Minded, $27,000 each.

Cal., Fresno — Mausoleum — Mountain View Cemetery Assn. considering building rein.-con. mausoleum. About $250,000.

Cal., Los Angeles—Church—Hollywood Christian congregation retained R. H. Orr, archts., 1301 Van Nuys Bldg., to prepare plans for 85 x 120 ft., hollow tile, concrete foundation, on Hollywood Blvd. and Gower St.

Buildings (Continued)

Cal., San Joaquin—Store, Hotel, etc.—San Joaquin Lands Co., Fresno, having plans prepared by E. Matheson, archt., Cory Bldg., for concrete and brick, store, hotel, hall, theatre and bank here. About $80,000.

Cal., Wasco—School—Wasco School Dist. voted $60,000 bonds to build 2-story, 146 x 182 ft. grammar school. Plans being prepared by J. M. Saffell, archt., New Fish Bldg., Bakersfield. Noted Feb. 20.

Cal., Wilmington—School—Tower Hill School Assn. having plans prepared by Brown & Whiteside, archts., Du Pont Bldg., for 2 story, on 17th St. and Tower Hill Rd. About $250,000.

N. S., Halifax—School—School Bd., 81 Sackville St., soon receives bids building Richmond School. About $85,000. A. R. Cobb, Tramway Bldg., archt. Noted Aug. 15.

Que., Chicoutimi — Church — Cathedral Church of Chicoutimi having plans prepared by Beale & Lamontagne, archts., 21 D'Aiguillon, Quebec, for 2 story, rein.-con. church and 3 story sacristry. About $175,000 and $25,000 respectively.

Que., Drummondville—Hall, etc.—Town having plans prepared for town hall and court house. About $60,000. N. C. Moisan, city clk.

Que., Montreal — Office — International Trust Co. had plans prepared by P. L. W. Dupre, archt., 15 St. Lawrence Blvd., for 10 story on St. Lawrence and James Sts. About $250,000.

Que. St. Jean de Chantel—School—Parish Church of St. Jean de Chantel plans to build school. About $50,000.

Que., Sherbrooke—Technical School—City plans to build. About $150,000. E. C. Gatien, clk. Noted Mar. 14, 1918.

Ont., Amherstburg—Theater—N. A. Marra, River Front, plans to build theatre. About $50,000.

Ont., Kingston—School—Bd. Educ. soon receives bids building in Cataraqui Ward. About $100,000. J. R. Stuart, Kingston, inspector.

Ont., Ottawa—School—School Bd. soon receives bids building 3 story brick and timber addition to Creighton St. school, rock foundation. About $120,000. W. C. Beattie, Elgin St., bldg., supt.

Ont., Ottawa—Theatre and Office—Jackson Booth Syndicate, c/o G. Ewart, archt., Booth Bldg., had plans prepared for 10 story, on Metcalf St. About $175,000.

Ont., Peterborough—School—School Bd. plans to build 2 story school, consisting of 20 rooms and auditorium. About $200,000. Preliminary sketches will be received until Apr. 5. E. G. Patterson, Peterborough, chn., property com.

Ont., Scarborough — School — School Comrs. had plans prepared building 3 story fireproof. About $60,000. W. S. Annis, clk.

Ont., Toronto—Memorial School—School Bd. plans to build 2 story, brick school to be known as John Ross Robertson Memorial School on Glengrove Ave. Cost not to exceed $100,000. Competitive plans will be received until Apr. 1. W. C. Wilkinson, 155 College St., secy.-treas.

Ont., Weston—School—School Bd. receives bids in April building 2 story brick school. About $60,000. S. B. Coon, Excelsior Life Bldg., Toronto, archt. Noted Mar. 13.

Ont., Windsor—Club House—All Saints' congregation plans to build club house. About $75,000. A. Carlisle, Windsor Ave., rector.

B. C., Vancouver—Bank and Office—Union Bank, Hastings and Seymour Sts., having preliminary plans prepared by Somerville & Putnam, archts., 910 London Bldg., building 3 story, 50 x 120 ft. rein. con., tile and stone, rein. con. flooring and concrete foundation. About $200,000.

BIDS DESIRED

Pa., Phila.—Bank—Until Mar. 26, by P. A. Davis, archt., 1713 Samson St., altering and building 3 story, 20 x 109 ft., brick, steel and rein. con. addition, rein. con. flooring, concrete foundation, on Front and Norris St., for 9th Natl. Bank. About $75,000.

N. C., Charlotte—High School—Until Mar. 31, by Bd. Educ., building 3 story, rein.-con., brick and tile. About $135,000. Edwards, Sayward & Leitner, Chamber of Commerce Bldg., Atlanta, Ga., archts. Noted Mar. 6.

O., Akron—Theatre and Arcade—C. H. Crane and E. G. Kiehler, archts., 2325 Dime Bank Bldg., Detroit, Mich., receiving bids building 2 story, 99 x 136 ft. theatre with 30 x 103 ft. arcade, brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Main and Bowery Sts., for Hippodrome Arcade Co., 434 Akron Savings & Loan Bldg. About $100,000.

O., Cleveland—Theatre and Store—Greenwald & Bernstein, 641 Society Savings Bldg., receiving bids building 2 story 66 x 157 ft. brick, steel and concrete, rein-con. flooring and concrete foundation at West 25th St. and Lorain Ave. About $75,000. S. H. Weis, 1031 Schofield Bldg., archt.

Mich., Detroit—Theatre—C. H. Crane and E. G. Kiehler, archts., 2325 Dime Bank Bldg., receiving bids for 2 story brick, rein.-con. and steel rein.-con. flooring and concrete foundation on Gratiot Ave. and Raynor St., for H. Koppin, Breitmeyer Bldg. About $75,000. Noted Jan. 9.

Mich., Lansing—Library, etc.—Until Apr. 2, by Bd. State Auditors, building 6 story brick and rein.-con. library, office and steam heating plant, concrete foundation. About $800,000. E. A. Bowd, 127 Allegan St., W., archt.

Mich., Wakefield—School—Until May 1, by W. Covender, clk. bd. educ., building 2 story, 80 x 175 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, containing manual training, domestic science departments and gymnasium. About $150,000. Nystrom & Olsen, Palladio Bldg., Duluth, archts.

Ill., Chicago—Mail Order—Until Mar. 31, by T. Rodd, ch. engr., Chicago Union Station Co., 600 West Jackson Blvd., building 14 story, 180 x 380 brick and steel mail order building on Randolph and Canal Sts. About $2,500,000. Graham, Anderson, Probst & White, 80 East Jackson Blvd., archts.

Minn., Bovey—School—Until Apr. 22, by J. V. Coleraine, secy. bd. educ., building 3 story, 80 x 140 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation. About $150,000. W. T. Bray, Fidelity Bldg., Duluth, archt.

Minn., Hawley—School—Until Mar. 24, by Bd. Educ., building 2 story, 67 x 118 ft. brick and stone. About $50,000. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt. Noted Jan. 2.

Minn., Wakefield—School—Until May 1, by W. Covender, clk. bd. educ., building 2 story, 65 x 150 ft., rein.-con. and steel, rein.-con. flooring, concrete foundation. About $100,000. Nystrom & Olsen, Palladio Bldg., Duluth, archts.

Colo., Ordway—School—Until Apr. 7 by Bd. Dirs., School Dist. No. 12, Crowley Co., building school. About $80,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver., archts. Noted Feb. 13.

Cal., Fairfield—Hospital—Until Apr. 7, by Bd. Supervs. Solano Co., building 1 story, 100 x 300 ft., brick and frame. About $97,000. C. E. Perry, Jr., 1209 Sutter St., Vallejo, archt. Noted Feb. 13.

Que., Bury—Hall—Until Mar. 31, by town, building addition to town hall on Main St. About $50,000. J. H. Leonard, Bury, city engr.

Que., Montreal—Club House—Until Apr. 1, by Grand Trunk Football Club, building club house at Pointe St. Charles. About $60,000. H. Payne, 69 Charron St., pres.

Que., St. Tite—College—Until Apr. 1, by L. Auger, archt., 39 St. John St., Quebec, building on Notre Dame St. for Roman Catholic School Comrs. About $75,000.

Ont., King—Bank—K. Rea, archt., 285 Beaver Hall, Montreal, receiving bids building bank here, for Bank of Montreal, 109 St. James St., Montreal. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Sales, etc.—Coleman & Gilbert Co., 331 Huntington Ave., let contract constructing 3 story, 80 x 100 ft. rein.-con. sales building and auto repair factory, rein.-con. flooring and concrete foundation, at 1257 Boylston St., to N. Hurwitz, Dorchester. About $100,000.

★Mass., Southboro—Chapel—St. Marks School let contract building 1 story, 50 x 100 ft. concrete and brick, concrete foundation, on St. Marks Rd., to Leighton-Mitchell Co., 95 Milk St., Boston. About $60,000.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York City, received lowest bid building (a) P. S. 20, 5 story, 2 x 193 ft., brick and limestone, concrete foundation, on Roebling St., North 4th and North 5th Sts., (b) P. S. 182, 5 story, 118 x 192 ft., brick and concrete, concrete foundation, on Dumont Ave. and Wyona St., from P. J. Brennan, 624 Madison Ave., New York City, (a) $481,650, (b) $464,340. Noted Mar. 6.

★N. Y., New York—Theatre—The 181st St. Constr. Co., 729 Bway., let contract building 3 story, 150 x 200 ft., brick and terra cotta, concrete foundation, on Bway. and 181st St., to Fleishman Constr. Co., 39th St. and 7th Ave. About $500,000.

★N. Y., Richmond Hill (Jamaica P. O.)—Church and Sunday School—Richmond Hill Baptist congregation let contract building 1½ story, brick and limestone, concrete foundation, on 114th St. and 91st Ave., to Werner Huberty Co., 50 Court St., Brooklyn. About $70,000.

★N. J., East Orange—Hotel—Ridgewood Co., c/o E. V. Warren, archt., 31 Clinton St., let contract building 5 story, 135 x 218 ft. brick and rein.-con., rein.-con. flooring and concrete foundation, on South Munn Ave. north of Central Ave., to Kelly-Ackerson Co., 220 Main St. About $600,000.

★Pa., Phila.—Theatre—A. Wax, 937 South St., will build 1 story, 95 x 120 ft. concrete and steel, at 1523-25 South St. About $50,000. Work will be done by day labor.

★Fla., Melbourne—School—Bd. Educ., Brevard Co., let contract building 2 story, 113 x 185 ft., rein.-con., to W. E. Martin, 915 7th St., Miami, $70,141.

★Tenn., Memphis — Hospital — Methodist Churches of Mississippi, Arkansas and Tennessee let contract building on Lamar and Dudley Sts., here, to Kaucher-Hodges Co., Calhoun St., $85,000. Noted Sept. 12.

★O., Cincinnati—Office, Store, etc.—Dixie Terminal Co., 1st National Bank Bldg., let contract building 9 story, 150 x 180 ft., on 4th and Walnut Sts., to Ohio Bldg. & Constr. Co., Burnet and McMillian Aves. About $1,000,000. Noted Feb. 20.

★O., Kenmore—School—Bd. Educ. let contract, building 2 story, 69 x 127 ft., brick rein.-con. flooring and foundation, on North 9th St., to H. P. Moran, 425 2nd. Natl. Bank Bldg., Akron, $88,250. Noted Mar. 6.

★O., Norwood—School—Bd. Educ. let contracts building 2 story, 80 x 139 ft. school as follows; concrete, to Ferro Concrete Constr. Co., Richmond and Harriet Sts., Cincinnati, cost, $32,500; iron and steel, to South Ohio Iron Co., 458 East 2nd St., $10,470; fundation work, to F. Schmidt, 1750 Courtland Ave., $16,000. Noted Jan. 23.

O., Stoutsville—School—Bd. Educ. received bids building 2 story, 68 x 102 ft. school, from Taylor & Linn, 767 Fountain Sq., Zanesville, $57,000; S. O. Henke, Gallopolis, $58,000; J. K. Wilson, Lancaster, $61,000.

★Ind., Rockport—Court House—Comrs. Spencer Co. let contract building 2-story, 105 x 112 ft. rein.-con. and brick, rein.-con. flooring and concrete foundation, to English Bros., Church and Randolph Sts., Champaign, Ill. About $149,541. Noted Jan. 23.

★Mich., Muskegon — Hotel — Occidental Hotel Co., Western Ave. and 3rd St., let contract building addition, to Strom-Johnson Constr. Co., Muskegon. About $53,500.

★Mich., Portland — High School — Bd. Educ. let contract building 2 story rein.-con. and brick, concrete foundation, to C. Hoertz & Son, Grand Rapids. About $80,000. Noted Jan. 23.

★Tex., De Leon—Hotel—Chamber of Commerce let contract building 4 story, rein.-con., to G. W. Hewitt, 332 North Ervay St., Dallas, $118,400. Noted Feb. 27.

★Okla., Oklahoma—Hotel—Natl. Hotel Co. let contract building 3 story, 75 x 140 ft., 2310 Exchange Ave., to R. M. Crissman, 2230 West 13th St. About $100,000.

★Cal., Richmond—Office and Laboratory—Standard Oil Co., 200 Bush St., San Francisco, let contract building 3 story, concrete and brick office and laboratory here, to P. J. Walker & Co., Monadnock Bldg., San Francisco. About $250,000 and $175,000 respectively.

★Que., Quebec—Church—Sacred Heart congregation let contract building 75 x 180 ft., rein. con., concrete and brick, rein. con. flooring, concrete foundation, on Grande Allee, to E. Belanger, 185 Ste. Marguerite St. About $175,000.

Federal Government Work

PROPOSED WORK

Mass., Chelsea—Bulkhead—Bureau Yards & Docks., Navy Dept., Wash., D. C., plans to build; Spec. 3833. About $125,000.

Pa., Phila.—Gasoline System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install gasoline system for seaplane hangars at Navy Yard here; Spec. 3834. About $12,000.

Federal Government Work (Continued)

Va., Hampton Roads—Additional Emergency Hospital—Bureau Yards & Docks., Navy Dept., Wash., D. C., plans to build; Spec. 3832. About $110,000.

Va., Quantico—Officers Quarters and Administration Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3835.

Va., Yorktown—Barracks, Mess Hall and Officers Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3821. About $177,500.

S. D., Rapid City—School and Assembly Hall—C. Sells, comr. Indian Affairs, Wash., D. C., rejected all bids received Mar. 10, same being in excess of appropriation. Noted Mar. 13.

N. D., Wahpeton—School and Assembly Hall—C. Sells, comr. Indian Affairs, Wash., D. C., rejected all bids received Mar. 7, building here, same being in excess of appropriation. Noted Mar. 13.

Mont., Bozeman—Road—Dist. Engr. U. S. Dept. Agriculture, 413 Montana Bldg., Missoula, plans to grade 40 mi. West Gallatin Canyon Rd., 16 ft. wide, Gallatin Co. About $140,000. L. I. Hewes, 202 Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

N. M., Shiprock—Lavatory Annexes—C. Sells, comr. Indian Affairs, Wash., D. C., rejected all bids received Mar. 7, building 2 lavatory annexes at Toadlena School near San Juan, same being in excess of appropriation. Noted Mar. 13.

BIDS DESIRED

Mass., Chelsea—Roads—Until Apr. 7, by Bureau Yards & Docks., Navy Dept., Wash., D. C., building roads; Spec. 3796. About $15,000; $10 deposit required for plans and spec.

Mass., Chelsea—Timber Wharf—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building timber wharf; Spec. 3801. About $80,000; $10 deposit required for plans and spec.

R. I., Newport—Boathouse—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3786. About $30,000; $10 deposit required for plans and spec. Noted Feb. 6.

R. I., Newport—Quay Wall, etc.—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building concrete quay wall and fill; Spec. 3726. About $100,000; $10 deposit required for plans and spec.

R. I., Newport—Water Tanks—Until Mar. 24, by Bureau of Yards & Docks, Navy Dept., Wash., D. C., building 2,300,000 gal. steel water tank; Spec. 3826. About $15,000; $10 deposit required for plans and spec. Noted Mar. 13.

N. Y., Ft. Lafayette—Dredging—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging here; Spec. 3597. About $26,000; $10 deposit required for plans and spec. Noted Feb. 27.

D. C., Wash.—Swimming Pools—Until Mar. 24, by Dist. Comrs., Dist. Bldg., building swimming pools at Cardozo Playground, 1st and 2nd Sts., S. W., and at Reservation 126, on Virginia Ave. and 10th St., S. W.; advertised in this issue.

Va., Alexandria—Cranes—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing six I beam electric traveling cranes; Spec. 3794. About $10,800; $10 deposit required for plans and spec. Noted Feb. 6.

W. Va., Wheeling—Pass, Weir, etc.—Until Apr. 5, by U. S. Eng. Office, Wheeling, building pass, weir, beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River; advertised in this isue.

Miss., Meridian—Alterations—Until Mar. 26, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., for miscellaneous alterations in work room and basement of post office; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Repairing Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 10, repairing wharf at Lockwoods Basin, East Boston, (1) taking out existing decking stringers and pile caps, pulling old piles, furnishing and driving new piles, working tenons on same, placing and fastening braces in places, furnishing, laying and fastening new decking, and furnishing and placing new fender caps; (2) price per pile for furnishing and cutting tenons on same for all piles in excess of number indicated; (3) price per 1000 ft. (board measure) for old pile caps and stringers worked into place; (4) price per 1000 ft. (board measure) of "bense" yellow pine pile caps and stringers furnished and worked into place, from Aberthaw Constr. Co., 27 School St., (1) $11,690; (2) $38; (3) $38; (4) $109; (60 days).

W. L. Miller, 171 Alfred St., (1) $11,839; (2) $38; (3) $44; (4) $116; (90 days).

W. H. Ellis & Son Co., 479 Meridian St., East Boston, (1) $12,845; (2) $65; (3) $35; (4) $190; (60 days).

Lawler Bros., 16 City Sq., Charlestown, (1) $8,688; (2) $30; (3) $30; (4) $105; (60 days).

Rendle-Stoddard Co., 271 Marginal St., Chelsea, (1) $7,848.92; (2) $33; (3) $45; (4) $140; (60 days).

★N. Y., Fire Island—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to W. A. L'Hommedieu & Co., 1 Madison Ave., New York City, $29,629 (60 days). Noted Jan. 30.

★N. Y., New York—Coal and Ash Handling Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Specialty Eng. Co., Allegheny and Trenton Sts., Phila., Pa., $24,825 (110 days).

★N. Y., Rockaway—Addition to Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Rangely Constr. Co., 405 Lexington Ave., New York City, $14,840 (60 days). Noted Sept. 12.

★Pa., Ft. Mifflin—Railroad Extension—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Ammunition Depot, to H. A. McCleman, 13th and Shunk Sts., Phila., $19,450 (35 days). Noted Mar. 13.

Pa., Phila.—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 17, installing two 15 ton electric traveling bridge cranes in shipbuilding way No. 3,

(1) net price and time for 1 crane installed complete in accordance with drawings and specifications,

(2) net price and time for 2 cranes installed, complete in accordance with plans and specifications,

(3) net price and time for 1 crane installed complete in accordance with bidder's drawings and specifications, which he shall submit with his proposal,

(4) net price and time for 2 cranes installed complete in accordance with bidder's drawings and specifications, which he shall submit with his bid, from

V. R. Browning & Co., 17701 Lake Shore Blvd., Cleveland, O., (1) $30,130, (180 days); (2) $58,260, (180 days).

A. D. Grainger Co., 15 Park Row, New York City, (3) $25,300, (180 days); (4) $48,520, (180 days).

Bedford Fdry. & Machine Co., 1107 5th St., Bedford, Ind., (3) $29,800, (180 days); (4) $59,600, (180 days).

Pawling & Harnischfeger Co., 38th and National Aves., Milwaukee, Wis., (3) $31,500 and $35,000, (200 days); (4) $62,000 and $69,000, (200 days). Noted Mar. 6.

Pa., Phila.—Dredging—U. S. Eng. Office, Witherspoon Bldg., received bids Mar. 11, dredging in Delaware River, Philadelphia Harbor and New Castle, Reedy, Baker and Liston light house ranges, (1) Sect. 1, (2) Sect. 2, (3) Sect. 3, (4) Sect. 4, (5) Sect. 5, (6) Sect. 6, (7) Sect. 7, (8) Sect. 8, (9) Sect. 9, (10) Sect. 10, (11) alternate, Sect. 2 and 3 (12) alternate, Sect. 2 and 4, (13) alternate Sect. 3 and 4, from F. E. Jones, Norfolk, Va., (10) $0.36 per cu.yd. scow measure; Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, (1) $\$0.47\frac{3}{8}$ per cu.yd.; Morris & Cumings Dredging Co., 17 State St., New York City, (10) $0.33; Maryland Dredging & Contg. Co., Fidelity Bldg., Baltimore, Md., (7) $0.25 (8) $0.25 (9) $0.25; Bowers South Dredging Co., 914 Amer. Natl. Insurance Bldg., Galveston, Tex., (1) $\$0.58\frac{1}{2}$; Amer. Dredging Co., Marine & Merchant Bldg., (2) $\$0.21\frac{8}{10}$, (3) $\$0.18\frac{4}{10}$, (4) $0.21, (11) $\$0.20\frac{1}{10}$, (12) $\$0.19\frac{8}{10}$, (13) $\$0.19\frac{7}{10}$. Noted Feb. 12.

Md., Annapolis—Seamanship and Navigation Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at U. S. Naval Academy,

(1) net price and time for work, complete, in accordance with drawings and specifications;

(2) amount and time to be added to or deducted from (1) if concrete piles are used in lieu of timber piles, as specified under alternative, concrete piles;

(3) amount to be added to or deducted from (1) if nailing composition is used in lieu of wood sleepers and cinder fill;

(4) amount to be added to or deducted from (1) if alternative for double hung windows in lieu of counterbalanced, pivoted windows are adopted;

(5) amount to be added to or deducted from (1) if magnesite composition flooring is used in lieu of mastic composition;

(6) unit price per linear foot for both timber and concrete piles in addition to or reduction from length hereinbefore specified;

(7) amount to be deducted from (1) if pile cut off is made at 1 ft.

(8) amount to be added to or deducted from (1) if interior partitions are built of metal lath and plaster in lieu of gypsum block plastered as hereinbefore specified under alternative interior partitions from

Levering & Garrigue, 552 West 23d St., New York City, (1) $658,927, (270 days); (2) add $7400; (3) add $5300; (4) deduct $487; (5) add $700; (6) timber piles, add $.70 and deduct none; concrete piles, add $1.75 and deduct $.60; (7) deduct $1535; (8) add $4,400.

G. E. Wynne, 82 Home Life Bldg., Wash., D. C., (1) $687,888, (270 days); (2) add $9000; (3) add $3500; (4) add $2500; (5) add $900; (6) add $.60 and deduct $.10 for timber piles and add $1.50 for concrete piles; (7) deduct $2700; (8) add $8500 for 2 in. partitions and add $16,200 for 3 in. partitions.

Irwin & Leighton Co., 126 North 12th St., Phila., Pa. (1) $688,400, (270 days); (2) add $2500; (3) add $2500; (4) add $600; (5) add $700; (6) timber piles, add $.50 and deduct $.25; (7) deduct $2000; (8) add $4000. Noted Feb. 27.

D. C., Bellevue—Fuse and Primer House—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 17, building fuse and primer storehouse and loading shop,

(1) net price and time for work, complete, in accordance with drawings and specifications, based on use of steel trusses and purlins for framing roof of the loading shop, and use of steel beams for roof of storehouse;

(2) net price and time to be added to or deducted from (1) if roof of loading shop is framed in wood in place of steel;

(3) net price and time to be added to or deducted from (1) if reinforced concrete beams are used in place of steel beams on roof of storehouse;

(4) net price and time to be added to or deducted from (1) if wood block flooring is used in lieu of wood strip flooring, sleepers and cinder fill, in loading shop, from

H. S. Roberts & Co., 1123 Bway., New York City, (1) $26,500, (90 days); (2) deduct $750; (4) add $600.

Oscawana Bldg. Co., 101 Park Ave., New York City, (1) $34,100, (100 days); (2) $33,600; (3) $34,200; (4) $35,600.

F. L. Wagner, 1413 H St., N. W., Wash., (1) $37,500, (120 days); (2) deduct $134; (4) deduct $98. Noted Mar. 6.

D. C., Wash.—Forced Induced Draft Fans—Bureau Yards & Docks, Navy Dept., received bids Mar. 17, installing in Norfolk, Va. and Phila., Pa., Navy Yards.

(1) net price and time for 12 forced draft fans with their driving units, and accessories at Norfolk, Va.;

(2) net price and time for 2 forced draft fans with their driving units, and accessories at Phila., Pa.:

(3) net price and time for 2 induced draft fans with their driving units, flue connections and accessories at Norfolk, Va.;

(4) net price and time for 2 induced draft fans with their driving units, flue connections, and accessories at Philadelphia, Pa.;

(1a) and (2a) under these items bidders may submit proposals based on equipment called for in (1) and (2) respectively for alternative gear driven forced draft fans, from

H. E. Crook Co., 28 Light St., Baltimore, Md., (3) $14,240, (120 days); (4) $14,240, (120 days); (1a) $11,371, (120 days); (2a) $11,371, (120 days).

Carroll Electric Co., 714 12th St., N. W., (1) $11,240, (120 days); (2) $11,240, (120 days); (3) $12,500, (120 days); (4) $12,500, (120 days), from

Almiral Co., 1 Dominick St., New York City, (1) $10,505, (120 days); (2) $10,405; (3) $13,002; (4) $12,875; (1a) $10,647; (2a) $10,561.

Baker, Dunbar & Allen, 517 Stock Exch. Bldg., Phila., Pa., (1) $10,880, (120 days); (2) $10,880; (3) $22,870, (220 days); (4) $22,870; (1a) $12,250, (120 days); (2a) $12,250, (120 days).

Austin Heating Corp., 121 West 42nd St., New York City, (1) $10,875, (120 days); (2) $9875; (3) $13,875; (4) $13,425; (1a) $11,625; (2a) $10,625.

B. F. Sturtevant Co., 900 F St., N. W. (1) $11,336; (2) $11,336; (3) $10,948; (4) $10,948, (120 days); (1a) $8460; (2a) $8460. Noted Mar. 13 under "Norfolk, Va., and Phila., Pa."

Federal Government Work (Continued)

★D. C., Wash. — Turbo Alternators — Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract furnishing and delivering turbo alternators, to Baker, Dunbar, Allen Co., Stock Exch. Bldg., Phila., $10,180 (90 days). Noted Jan. 16.

Va., Yorktown—Wooden Pier and Approach—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 17, building at Navy Mine Depot,

(1) net price and time for work complete in accordance with drawings and specifications;

(2) net price and time to be added to or deducted from net price and time for work complete as required in (1) for each 60 ft. of single track trestle approach more or less than length of approach specified;

(3) unit price to be added to or deducted from (1) and (2), for each pile in excess of or less than number required by drawings, and based on length specified for piles in zone to which it belongs;

(4) unit price to be added to or deducted from (1), (2) and (3) for each lineal foot of pile in excess of or less than specified length, from

Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $156,209, (120 days); (2) add $3400, deduct $2600; (3) add $80, deduct $65; (4) add $1.20 and deduct $1.

McLean Contg. Co., Fidelity Bldg., Baltimore, Md., (1) $179,775, (120 days); (2) add $3200, deduct $3000; (3) $50 to $75, depending on length of pile; (4) add $1, deduct $0.20.

C. Meads Co., 38 Park Row, New York City, (1) $204,200, (time as specified). Noted Feb. 27.

Miscellaneous

PROPOSED WORK

Drydock—Chelsea (Boston P. O.), Mass. —See "Industrial Works."

Coal Pocket—Bridgeport, Conn.—F. A. Cooper, archt., 1024 Main St., soon receives bids building 50 x 150 ft. timber coal pocket with large belt conveyor, concrete foundation, on Housatonic Ave., for Slosberg & Handleman, 149 Housatonic Ave. About $25,000.

Dam, etc.—New Haven, Conn.—City soon lets contract building rein.-con. dam and retaining walls on West River, south of Congress Ave. F. L. Ford, city engr.

Replacing Wires—Amsterdam, N. Y.—Adirondack Edison Electric Light Co. plans to place all wire, etc., on more prominent streets, underground in conduits.

Lighting System—Belmont, N. Y.—Town plans election soon to vote on $10,000 bonds to install electric lighting system.

Docks—Buffalo, N. Y.—Bd. Pub. Wks. soon receives bids building docks at foot of Main St. A. W. Kreinheder, comr.

Steam Roller—Whitesboro, N. Y.—Town appropriated $2500 to purchase steam road roller. H. B. Cary, town clk.

Garbage Reduction Plant, etc.—Newark, N. J.—City plans to build garbage reduction and 2 rubbish utilization plants. J. W. Costello, eng. superv.

Bulkhead, etc.—Baltimore, Md.—Baltimore Pearl Hominy Co., Howard and Ostend Sts., petitioned War Dept., Wash., D. C., for permission to build bulkhead varying from 260-375 ft. beyond existing harbor lines foot of Howard St. and Fort Ave. About $50,000.

Elimination Grade Crossing—Cleveland, O.—Comrs. Cuyahoga Co. had preliminary plans prepared for elimination of grade crossing on North Randall St. W. A. Stinchcomb, co. engr.

Piers—Cleveland, O.—City soon receives bids building two 250 ft. concrete piers. About $30,000. M. Newman, 618 City Hall, engr.

Monument—Long Prairie, Minn.—Comrs. Todd Co. soon let contract building soldiers and sailors monument, granite. About $15,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. Noted Mar. 6.

Garbage-Disposal Plant—Kansas City, Mo.—City plans to build garbage-disposal plant. Bonds for $400,000 voted for project. J. Cowgill, mayor.

Fairground Improvements — Billings, Mont.—Comrs. Yellowstone Co. will sell $25,000 bonds Mar. 31, to improve fairgrounds. C. E. Durland, co. engr.

Cables—Austin, Tex.—City appropriated $10,000 for placing cables in conduits laid by Water & Light Dept.

Dam—Klamath, Ore.—California-Oregon Power Co., 131 Leidesdorff St., San Francisco, Cal., plans to build dam across Link River in connection with use of large power plant at Copco, Cal.

Retaining Wall—Portland, Ore.—Portland Gas and Coke Co., Gasco Bldg., plans to build concrete retaining wall on St. Helens Rd. between moorings and Shell Oil Sta. About $15,000.

Pier—Redondo Beach, Cal.—City retained W. K. Barnard, engr., Central Bldg., Los Angeles, to prepare plans for restoring rein.-con. pleasure pier. About $75,000.

Cement, Sewer Pipe, etc.—Brantford, Ont.—City soon lets contract supplying cement, sewer pipe and crushed stone required by city during 1919. T. H. Jones, city engr.

Sea Wall—New Toronto, Ont.—City having plans prepared by James, Loudon & Hertzberg, engrs, Excelsior Life Bldg., Toronto, building 360 ft. seawall to protect pumping grounds. About $10,000. Work includes 500 ft. cofferdam and involves 450 cu.yd. rein.-con.

BIDS DESIRED

Ballast—New York, N. Y.—Until Mar. 25, by Pub. Serv. Comn., 49 Lafayette St., furnishing ballast for use in building rapid transit railroads.

Gasoline and Kerosene—New York, N. Y. —Until Mar. 24, by Bellevue and Allied Hospital, Dept. Pub. Charities, Correction, Health, Docks & Ferries, St. Cleaning, Parks, (Bronx, Manhattan and Richmond) at office of Central Purchase Com., Municipal Bldg., furnishing and delivering gasoline and kerosene.

Rebuilding Crib Bulkhead—New York, N. Y.—Until Mar. 27, by Park Bd., rebuilding upper portion of crib bulkhead along water front of Thomas Jefferson Park between 111th and 114th Sts.

Structural Steel—New York, N. Y.—Until Mar. 31, by Pub. Serv. Comn., 49 Lafayette St., erecting structural steel on Sect. 2, Routes Nos. 19 and 22, 7th Ave.-Lexington Ave. Rapid Transit R. R.

Truck and Miscellaneous Supplies — Schenectady, N. Y.—Until Mar. 26, by Bd. Contr. & Supply, furnishing and delivering 3 or 3½ ton truck and asphalt cold mixture for resurfacing.

Road Materials—Columbus, O.—Until Apr. 1, by State Highway Comn., for stone, gravel, slag and sand to be used in maintaining and repairing state roads during 1919; advertised in this issue.

Paving Materials—Detroit, Mich.—Until Mar. 25, by Dept. Purchases & Supplies, 1302 Real Estate Exch. Bldg., furnishing and delivering 1,000,000 paving bricks. J. A. Martin, comr.

Road Machinery—Jamestown, N. D.—Until Apr. 4, by A. Blewett, aud. Stutsman Co., furnishing four 8 ft. road drags, 2 sections 6 in. detachable blades; weight, 275-300 lbs.; 4 slip scrapers, 4½-5½ cu.ft. capacity, weight 100 to 150 lbs.; 4 road plows, 10-12 in. cut weight, 100-150 lbs.; 2 blade graders, four-wheel, 5-6 ft. blades; weight 750-900 lbs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Insulating Rail—Brooklyn, N. Y.—Pub. Serv. Comn., 49 Lafayette St., New York City, received bids Mar. 17, for insulation of 3rd rail of Brooklyn Rapid Transit Co., from B. T. & A. J. Mack, 795 Gravesend Ave., $89,596; F. S. Julia Eng. Co., $96,700; L. H. Wood, $97,500.

★Tractors—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering seven tractors, to Yorkville Motor Co., 1324 Lexington Ave., $8750. Noted Mar. 6.

★Valves—New York, N. Y.—N. J. Hayes, comr. water supply, gas and electricity let contract (a) furnishing, delivering, unloading, stacking and storing valves, (b) hydrants, to A. P. Smith Mfg. Co., Norman St., (a) $7845, (b) $28,574. Noted Feb. 27.

★Steam Roller—Rome, N. Y.—City let contract furnishing steam roller, to Buffalo-Springfield Roller Co., Kenton St., Springfield, O. About $3300.

Truck—Schenectady, N. Y.—Bd. Contr. & Supply received only bid furnishing and delivering 2 ton motor truck, from Benns & Visscher Co., 277 Dock St., $2275.

★Steam and Heating Equipment—Thiells, N. Y.—L. F. Pilcher, state archt., Capitol, Albany, let contract installing in proposed addition at Letchworth Village, to Merrill Co., 98 Granite St., Boston, Mass., $46,984. Noted Mar. 13 under "Industrial Works."

★Underground Distributing System — Thiells, N. Y.—L. F. Pilcher, archt., Capitol, Albany, let contract building underground distributing piping in female group tunnel, to Almirall & Co., 1 Dominick St., New York City, $29,242. Noted Mar. 13, under "Industrial Works."

Road Oil—Orange, N. J.—City received bids furnishing 100,000 gal. road oil, from Standard Oil Co., foot Claremont Ave., Jersey City, $0.0769 per gal.; Acme Rd. Co., 141 South St., Newark, $0.175 per gal

★Repairing River Bank—Wilmington, Del.—Levy Court let contract repairing Delaware River bank between Delaware City and Port Penn, to Delaware River Dredging & Constr. Co. About $15,600.

★Dock—Detroit, Mich.—Parker Bros. Co., 15 Atwater West, let contract building 75 x 147 ft. rein.-con. storage dock on wood piling with 147 ft. frontage along Detroit River, at foot of St. Aubin St., to J. Ginzel Co., 404 Buhl Blk. About $30,000. Noted Dec. 5.

★Pipes—Detroit, Mich.—City let contract furnishing 800 pieces 24 in., 800 pieces 16 in., 2000 pieces 12 in. and 3500 pieces 8 in. c.i. pipes, to J. B. Clow & Son, Harrison St. Bridge, Chicago, $61.60 per ton.

★Loading and Unloading Machinery—Duluth, Minn.—Clarkson Coal Co., foot of Birch Ave., Rices Point, let contract installing machinery for loading and unloading coal at dock, to Mead, Morrison Mfg. Co.; installing electric convertor equipment, to Westinghouse Electric Co., 605 Providence Bldg. Total cost, $125,000.

Streets and Roads

PROPOSED WORK

Mass., Dighton—Town receives bids about May, widening and macadamizing 1½ mi. Elm, Tremont and Lincoln Sts., 18 ft. wide. About $33,000. H. F. Lane, clk.

Mass., Newton (Boston P.O.)—City having plans prepared by E. H. Rogers, city engr., widening, draining, grading and surfacing 15,000 ft. Dedham St., 80 ft. wide, to provide cut-off for motor traffic. About $145,000.

Conn., New Haven—City soon lets contract paving 7350 sq.yd. Boulevard; 3400 sq.yd. Fillmore St.; 8550 sq.yd. Chatham St.; 4040 sq.yd. Clinton Ave.; 3760 sq.yd. Goffe St.; 8380 sq.yd. Henry St.; 4280 sq. yd. Huntington St.; 5820 sq.yd. Pendleton St.; 3360 sq.yd. Winthrop Ave., all bituminous macadam; 2500 sq.yd. Day St.; 3930 sq.yd. Clark St.; 6070 sq.yd. Henry St.; 17,320 sq.yd. Howard Ave.; 2770 sq. yd. Humphrey St.; 15,400 sq.yd. James St.; 3660 sq.yd. Liberty St.; 11,550 sq.yd. Shelton Ave.; 3800 sq.yd. Spring St.; 7200 sq. yd. city area and 3000 sq.yd. trolley area Washington Ave., all sheet asphalt and national, on old macadam base; 5080 sq. yd. Cottage St., bituminous macadam and national on existing foundation; 5990 sq. yd. Humphrey St., batch concrete; 3200 sq.yd. Temple St., wood block on old concrete foundation; and 7500 sq.yd. Union Ave., sheet asphalt and national on new 6 in. foundation. F. L. Ford, city engr.

N. Y., Fulton—Bd. Pub. Wks. considering improving Gansevoort St., 20-30 ft. wide, cost, $15,573; 6th St., 20 ft. wide, $2956; Phillips St., 24 ft. wide, $14,085; 2nd St., 24 ft. wide, $23,913; Pine St., 24 ft. wide, $6156; 6th St., 16-24 ft. wide, $22,014; Van Buren St., 16 ft. wide, $8500; Highland St., 20 ft. wide, $11,106; South 4th St., $31,660; 4th St., 24 ft. wide, $8577; Academy St., 28 ft. wide, $4000; State St., 24 ft. wide, $4788; Pratt St., 24 ft. wide, $8910; Division St., 20 ft. wide, $2000; Worth St., 34 ft. wide, $10,260, all concrete; Buffalo St., 24 ft. wide, macadam, $1548.

N. Y., Ogdensburg—City plans to build concrete pavement on Lake St. through Main St. to connect with brick highway on Gibb St. G. A. Tate, city engr.

N. Y., Troy—City plans to macadamize 3000 ft. of boulevard in Spring St. entrance to city, curb and pave Lake Ave. from Hoosick St. to city line, grade and pave Oakwood Ave. from Northern turnpike to city line, grade and resurface St. Joseph St. and Van Emery Ave. and resurface Hutton St. from 7th Ave. to 12th St. A. E. Roche, city engr.

N. Y., Utica—Bd. Contr. & Supply soon lets contract resurfacing John St. from Mary to Rutger Sts. Work involves 70,000 sq.yd. resurfacing, 200 sq.yd. asphalt pavement, 50 tons binders, etc. G. D. Shay, city clk.

N. J., Jersey City—Bd. Chosen Freeholders soon receives bids improving Paterson Turnpike, granite block.

Pa., Avon—Town election April 1, to vote on $60,000 bonds to improve 30 mi. road.

Streets and Roads (Continued)

Pa., McKeesport—City plans to issue $375,000 bonds to improve various streets. L. F. Savage, Peoples Bank Bldg., city engr.

Pa., Pittsburgh—City passed ordinance to grade, pave and curb 3200 ft. Warrington Ave., from Montooth to Liberty Aves., 40 ft. wide, involving 10,660 sq.yd. stone block on 6 in. concrete base, 6565 lin.ft. curbing, 13,820 cu.yd. earth excav., 19,050 cu.yd. embankment and 1595 cu.yd. trench excav. About $135,000. N. S. Sprague, city engr.

Pa., Pittsburgh—Comrs. Allegheny Co. soon receive bids grading and building with Telford macadam, 10,500 ft. New England Rd. from Duquesne and Dravosburg. Improved rd. near Coal Valley Sta. along Pine Run to village of New England, in Mifflin Twp., 16 ft. wide. R. V. Warren, co. engr.

Del., Wilmington—City considering paving 1 block 25th St., 5 blocks Delaware Ave., 1 block Grant Ave., 6 blocks Washington St., 1 block West St., 2 blocks 20th St., 1 block 19th St., 2 blocks McCabe Ave., 2½ blocks Van Buren St., 1 block Harrison St., 2 blocks 27th St., 2 blocks 20th St., 2 blocks Poplar St., 1 block 14th St., 1 block 23rd St., 1 block Hamilton St. and 1½ blocks Madison St. E. M. Hoopes, city engr.

W. Va., Morgantown—Cass Dist., Monongalia Co., election Apr. 12 to vote on $300,000 bonds to build 3 main roads in district. Total amount of expenditure for road work, $428,000. W. S. Down, co. engr.

S. C., Anderson—Anderson Co. election May 15, to vote on $1,450,000 bonds to build various roads.

S. C., Chester—Comrs. Chester Co. plan to issue $450,000 bonds to build roads.

S. C., Chesterfield—Comrs. Chesterfield Co. plan to issue $65,000 bonds to build roads in 2 townships.

S. C., Gaffney—Comrs. Cherokee Co. plan to issue $225,000 bonds to build roads.

S. C., Greenville—Comrs. Greenville Co. plan to issue $960,000 bonds to build roads.

S. C., Greenwood—Comrs. Greenwood Co. plan to issue $600,000 bonds to build roads.

S. C., McCormick—Comrs. McCormick Co. plan to issue $175,000 bonds to build roads.

S. C., Pickens—Comrs. Pickens Co. plan to issue $250,000 bonds to build roads.

Ga., Americus—Sumter Co. election Apr. 2 to vote on $500,000 bonds to pave various roads. Federal Government will appropriate like amount if election carries.

Ga., Atlanta—City soon lets contract paving 9508 sq.yd. South Pryor St., 4795 sq.yd. Whitehall St., 20,203 sq.yd. Juniper St. 24,130 sq.yd. Marietta St. and 7468 sq.yd. Simpson St. Bids will be accepted on granite block or other block pavement, for car track area; sheet asphalt, asphalt concrete, wood blocks, vitrified pavement. concrete or other meritorious pavements for sides. H. L. Collier, city engr.

Ga., Macon—Bibb Co. voted $700,000 bonds to build various roads. Federal Government will appropriate like amount. Noted Jan. 9.

Ala., Attalla—City plans to pave 1 mi. 5th Ave.

Ala., Huntsville—Comrs. Madison Co. plan to build 8 mi. Big Cove Pike from here to Owens Cross Roads. About $58,685. County will appropriate $23,432 toward cost. State and Federal Government will pay balance.

La., Houma—Terrebonne Parish election Apr. 1 to vote on $150,000 bonds to build highway from here to Assumption Co. line. Federal Government and State Aid will be asked to appropriate toward cost.

La., Shreveport—City plans to pave various streets. Work involves 80,000 sq.yd. asphaltic concrete. H. E. Barnes, city engr.

O., Cincinnati—City plans to pave Central Ave. from Brighton to Liberty Sts., bitoslag. About $110,000. F. S. Krug, city engr. Noted Oct. 31.

O., Cincinnati—City plans to regrade and pave river front and public landing, with granite blocks on concrete foundation. F. Krug, city engr.

O., Cincinnati—Peters Realty Co., Mercantile Library Bldg., plans to grade and pave 3,000 ft. of streets in new subdivision on Delta Ave., 50 ft. wide, waterbound macadam. About $30,000. C. A. Peters, Mercantile Library Bldg., engr.

O., Cleveland—City plans to pave East 17th St. with brick or asphalt; Superior Ave. and Euclid Ave. from Pub. Sq. to East 9th St., also resurface Chester Ave. R. Hoffman, city engr.

O., East Liverpool—City plans to pave Pennsylvania and St. Clair Aves. and Lincoln Highway. A. George, city engr.

O., Toledo — Comrs. Lucas Co. receive bids about May 15, grading and paving 1.87 mi. Key St., 16 ft. wide, 1-2-3 concrete, 7 in. thick, involving 5403 cu.yd. clay excav.; 2.36 mi. Black Rd., 14 ft. wide, either 2 course waterbound macadam or 1-2-3½ concrete 7 in. thick, 19,500 sq.yd. concrete or waterbound macadam and 11,000 cu.yd. clay excav.; 4.39 mi. Sylvania-Alexis Rd. from Trilby to Detroit Ave., 16 ft. wide, 1-1½-3 concrete 7 in. thick, 41,700 sq.yd. pavement, 23,500 cu.yd. sand and clay excav. cost $119,025; 1.02 mi. Bury Rd., 16 ft. wide, 2 course waterbound macadam, bottom 7½ in., top 4½ in. loose measurement, 9500 sq.-yd. pavement, 3411 cu.yd. clay excav., $17,752; 1.49 mi. Bennett Rd. from city limits to Sylvania-Alexis Rd., 16 ft. wide, 1-1½-3 concrete, 7 in. thick, 14,500 sq.yd. pavement and 5519 cu.yd. clay excav., $39,700; 1.51 mi. Yondata Rd. from Cordoroy to Jerusalem Rds., 16 ft. wide, 2 course waterbound macadam, 14,300 sq.yd. pavement and 2011 cu.yd. clay excav., $28,655; 1.31 mi. Lyon Rd., 16 ft. wide, 2 course waterbound macadam, 7½ in. bottom, 4½ in. top, loose measurement, 12,500 sq.yd. pavement and 3764 cu.yd. clay excav., $25,566. C. L. Road, co. engr. Noted Dec. 5, 1918.

O., Youngstown—Mahoning Co. plans to pave and grade 1.3 mi. Damascus, Berlin-Pricetown Rd., Milton Twp., 14 ft. wide, macadam. About $12,000.

Mich., Detroit—City soon receives bids paving and grading Lycaste Ave., 26 ft. wide, cost $19,274; Tyler Ave., 24 ft. wide, $15,640; Monterey Ave., 24 ft. wide, $15,226; Buena Vista Ave., 24 ft. wide, $23,414; Leslie Ave., 24 ft. wide, $25,806; Waverly Ave., 24 ft. wide, $15,686; Grand Ave., 24 ft. wide, $15,594, asphaltic concrete on 6 in concrete base, Berea or Medina curbing. C. W. Hubbell, city engr.

Mich., Detroit—City soon receives bids grading, curbing and paving Waterloo Ave. from Connors to Drexel Aves., 26 ft. wide. cost, $15,364; Drexel Ave. from Mack to point 1112 ft. south, 26 ft. wide, $8550; Colby Ave. from Russel St. to Detroit & Bay City R.R., 26 ft. wide, $8550, asphaltic concrete on 6 in. concrete base, Berea or Medina curbing. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract paving and grading with 1 course concrete, alley, No. 967, between Garland, St. Clair, Charlevoix and Goethe Aves., 20 ft. wide, involving 795 cu.yd. excav., 2326 lin.ft. concrete, 2078 lin.ft. 2 x 6 in. retaining plank, 36 lin.ft. retaining stone;

No. 968, "T" alley between 2nd and Cass Aves. and Peterboro and Charlevoix Sts., 20 ft. wide, 679 cu.yd. excav., 1777 sq.yd. concrete, 1139 lin.ft. 2 x 6 in. retaining plank;

No. 969, "H" alley between National Trumbull, Elm and Ash Sts., 18 and 20 ft. wide, 586 cu.yd. excav., 1581 sq.yd. concrete, 1256 lin.ft. 2 x 6 in. retaining plank;

No. 970, "T" alley between Rivard, Russell, and Hancock Sts. and Warren Ave., 20 ft. wide, 319 cu.yd. excav., 1114 sq.yd. concrete, 988 lin.ft. 2 x 6 in. retaining plank;

No. 971, west and parallel to Avery Ave., Hancock St. to Warren Ave., 20 ft. wide, 210 cu.yd. excav., 795 sq.yd. concrete, 612 lin.ft. 2 x 6 in. retaining plank, 20 lin.ft. retaining stone;

No. 972, north and parallel to Hobart St., easterly to north and south alley, 20 ft. wide, 191 cu.yd. excav., 578 sq.yd. concrete, 516 lin.ft. 2 x 6 in. retaining plank, 28 lin.ft. retaining stone;

No. 973, "L" alley between Dunedin and 12th Sts. and Bethune Ave. and La Salle Gardens south, 10 ft. wide, 119 cu.yd. excav., 391 sq.yd. concrete, 601 lin.ft. 2 x 6 in. retaining plank and 24 lin.ft. retaining stone;

No. 974, "east and west" alley between 14th and 12th Sts. and Delaware and Seward Aves., 18 ft. wide, 712 cu.yd. excav., 1725 sq.yd. concrete, 1645 lin.ft. 2 x 6 in. retaining plank, 18 lin.ft. retaining stone;

No. 975, alley between John R. and Brush Sts., Baltimore and Milwaukee Aves., 20 ft. wide, 604 cu.yd. excav., 1492 sq.yd. concrete, 1180 lin.ft. 2 x 6 in. retaining plank;

No. 976, alley between Trumbull, Lincoln, Brainard and Selden Aves., 18 ft. wide, 523 cu.yd. excav., 1198 sq.yd. concrete, 869 lin.ft. 2 x 6 in. retaining plank;

No. 977, alley between Commonwealth Trumbull, Kirby and Hudson Aves., 20 ft. wide, 307 cu.yd. excav., 978 sq.yd. concrete, 820 lin.ft. 2 x 6 in. retaining plank;

No. 978, alley between Riopelle, Orleans, Clinton and Mullet Sts., 20 ft. wide, 375 cu.yd. excav., 889 sq.yd. concrete, 963 lin. ft. 2 x 6 in. retaining plank. C. W. Hubbell, city engr.

Ill., Chicago—Cook Co. receives bids in April building 227,300 ft. Chicago-Milwaukee-Waukegan Rd., 18 ft. wide, involving 45,559 sq.yd. concrete or bituminous concrete on 6 in. concrete base, 12,229 cu.yd. excav. and 234 cu.yd. concrete in culverts and bridges, cost $136,000; also 10,240 ft. north of Niles Village, 18 ft. wide, involving 20,626 sq.yd. concrete or bituminous concrete on 6 in. concrete base, 4635 cu.yd. earth excav., and 154 cu.yd. concrete in culverts and bridges; cost cement concrete, $50,000; bituminous concrete, $65,000. (Alternate bids on different types of pavement.) B. D. Barker, County Bldg., supt. highways. Noted Apr. 18, 1918.

Ill., Rockford—Bd. Supervs., Winnebago Co., plans to pave Charles St. Rd. from here to Boone Co. line. About $125,000.

Wisconsin—Wisconsin Highway Comn., Green Bay, receives bids about Apr. 20, grading and surfacing with concrete 5¼ mi. Oshkosh-Fond du Lac Rd., 16 ft. wide. Work involves 45,000 sq.yd. 8 in. concrete and 15,000 cu.yd. grading. About $110,000. Noted Mar. 13 under "Fond du Lac."

Wis., Green Bay—City soon receives bids paving 37,000 sq.yd. Maple Ave. and Chicago St., 30 ft. wide. Bids will be taken on 5 kinds of pavement. W. Reed, city engr.

Wis., Oshkosh—Comrs. Winnebago Co. receive bids about Apr. 15 grading, draining and surfacing with concrete 1½ mi. Oshkosh Fond du Lac Rd., 16 ft. wide, cost $30,000; ¾ mi. Neenah Appleton Rd., 16 ft. wide, $12,000; 1 mi. Oshkosh Winneconne Rd., 16 ft. wide, $20,000.

Wis., Oshkosh—Comrs. Winnebago Co. receive bids about May 15, grading, draining and surfacing with concrete 1 mi. Oshkosh Ripon Rd., 16 ft. wide, cost, $21,000; 2 mi. Oshkosh Wanpun Rd., 16 ft. wide, $35,000.

Wis., Oshkosh—Comrs. Winnebago Co. receive bids about June 1, grading, draining and surfacing with concrete 5 mi. Oshkosh Neenah Rd., 16 ft. wide. About $100,000.

Wis., Superior—City soon lets contract paving with concrete Weeks Ave. between 18th and 21st Sts., 24 ft. wide. About $10,000. W. J. Patterson, secy.

Ia., Hartley—City receives bids about Apr. 11 grading, curbing and guttering about 83 blocks, sheet asphalt, asphaltic concrete, bitulithic, brick block, or one and two course concrete. H. R. Green, Cedar Rapids, engr. Noted Feb. 27.

Ia., Hendrick—Town receives bids about Apr. 10 grading, curbing and guttering 23 blocks, sheet asphalt, asphaltic concrete, bitulithic, brick block or concrete. H. R. Green, Cedar Rapids, engr.

Ia., Iowa City—City soon lets contract paving 3 mi. River to River Rd., 20-30 ft. wide, monolithic brick, concrete, brick or bluestone. About $100,000. Noted Dec. 19.

Minn., Brainerd—Comrs. Crow Wing Co. plan to improve state road between here and Mille Lacs Co. line. About $75,000.

Kan., Peabody—City plans to pave 3.5 mi. various streets.

Neb., Geneva—City receives bids about Apr. 15 paving 25,000 yd. in Dist. 1, asphaltic concrete or brick. Grant & Fulton, 505 Bankers Life Bldg., Lincoln, engrs.

Neb., Lincoln—City plans to pave 1800 ft. 26th St., Dist. 299, 30 ft. wide; resurface 2000 ft. 17th St., Dist. 71, 40 ft. wide. Work involves 6040 sq.yd. vertical fibre on 5 in. concrete base, 7200 sq.yd. bituminous macadam; 3350 lin.ft. 6 x 20 in. concrete curbing; 100 cu.yd. earth excav. About $31,500. A. Dobson, city engr.

Neb., McCook—City having plans prepared by Archer & Stevens, engrs., 609 New England Bldg., Kansas City, Mo., paving 25,000 yd. with brick or concrete.

N. D., Grand Forks—Grand Forks Co. plans to build 10 mi. concrete road. Cost $15,000 per mile.

Mont., Eureka—City having estimates made for paving lower Dewey Ave., cedar blocks and crushed rock surface. A. L. Jacqueth, Kalispell, engr. About $10,000.

Mont., Great Falls—City having estimates made and plans prepared by L. B. Evenson, city engr., paving 3rd Alley north from 10th to 13th Sts., concrete.

Mont., Whitefish—City plans to build 2 mi. concrete sidewalk, 5 ft. wide. About $10,000. W. K. Trippe, Whitefish, engr.

Ark., Forest City—City soon lets contract paving 7 mi. of various streets, penetration asphalt or concrete. Lund & Hill, 527 Southern Trust Bldg., Little Rock, engrs.

Tex., Hillsboro—Comrs. Hill Co. plan to build Highway No. 1. About $900,000.

Okla., Pauls Valley—City having plans prepared by W. E. Moore, engr., 1006 Oil Exch. Bldg., Oklahoma, for paving various streets. About $80,000.

Streets and Roads (Continued)

Idaho, St. Anthony—City passed ordinance to pave, surface and drain Fremont and Washington Aves., Center, Bridge and Main Sts., 50-68 ft. between curbs, concrete, asphalt or bitulithic. About $152,000. J. L. Nelson, city clk.

Wash., Wenatchee—Chelan Co. considering building road from Chelan to Corvaley Canyon. About $40,000.

Oregon—State Highway Comn., Salem, rejected bids macadamizing 4.9 mi. Pacific Highway, from Wolf to Grave Creek, Josephine Co.; grading and macadamizing 2.7 mi. Yamhill-Nestucca Highway, Grande Ronde Sect., Yamhill Co. H. Nunn, state highway engr. Noted Mar. 6.

Ore., Pendleton—Street Com. plans to extend Alta St. through to Pine St. and pave Garfield St. from Jackson to Martin Sts.

Cal. Fresno—Fresno Co. election May 6, to vote on $4,600,000 bonds to pave various roads. L. Aldrich, engr. Noted Feb. 20.

Cal., San Diego—City having plans prepared by G. Cromwell, city engr., paving several miles of streets and ¼ mi. of viaduct over railway tracks on Tide St.

Cal., San Francisco—Sts. Com. recommended paving Alabama St. between Mariposa and 18th Sts., Mariposa St. between Harrison and Alabama Sts. and between Alabama and Florida Sts., crossing of Mariposa and Alabama Sts., 17th St. between Alabama and Florida Sts., and between Florida and Bryant Sts., Mariposa St. between Hampshire and Bryant Sts. and crossing of Mariposa and York Sts. W. G. Hunt, city engr.

Quebec—Dept. Pub. Wks., Post Office Bldg., Quebec, soon receives bids draining and macadamizing 65 mi. Hull-Maniwaki Provincial Highway in Ottawa Co. About $100,000. L. A. Vallee, c/o Dept. Pub. Wks., engr.

Que., Matane—City having plans prepared for macadamizing 10 mi. road. M. Henry, Ottawa, Ont., engr.

Ont., Windsor—City plans to pave Giles Blvd. About $60,000. M. E. Bryan, Windsor, engr.

BIDS DESIRED

Massachusetts—Until Mar. 25, by State Highway Comn., Boston, grading, draining and surfacing 25,400 ft. state highway in Concord, Acton and Littleton Twps., 22-26 ft. wide; 23,000 ft. in Becket Twp., 24 ft. wide; 17,200 ft. in Dalton and Windsor Twps., 24 ft. wide, gravel. A. W. Dean, 212 State House, Boston, engr.

Mass., Boston—Until Apr. 2, by Comn. Waterways & Pub. Lands paving and draining 5500 ft. Drydock Ave. and Harbor St., South Boston, 40 ft. wide, involving 24,500 sq.yd. 5 in. granite block, on 6 in. gravel base, sanded joints, 5950 lin.ft. granite and 2850 lin.ft. timber curbing, 2900 sq.yd. brick sidewalks on gravel base, 26 catch basins, 6000 lin.ft. tile drain on concrete base. F. W. Hodgdon, 473 State House, engr. Noted Jan. 16.

R. I., Central Falls (Pawtucket P. O.)—Until Mar. 31, by city, paving 2200 sq.yd. Broad St., granite block on concrete base. About $12,000. Noted June 6.

Conn., New Haven—Until Mar. 24, by city paving 3000 sq.yd. West St.; 13,710 sq.yd. Maple St., bituminous macadam; 10,320 sq.yd. Park St., sheet asphalt and national on old macadam base. F. L. Ford, city engr.

New York—Until Apr. 4, by State Highway Dept., 55 Lancaster St., Albany, improving roads in following counties:

Allegany Co., Cuba-Friendship and Wellsville-Andover Rds., involving 810 tons broken stone, 74,500 gal. bituminous material, 73,876 sq.-yd. broken stone for surfacing, cost $28,551.

Cayuga Co., Cato-Meridian-Baldwinsville Rd., Part 4, 1210 cu.-yd. excav., 53,100 gal. bituminous material, 4780 tons broken stone, $44,040.

Fulton and Montgomery Counties, Gloversville-Meco-Phelps Rd., Old Plank Rd., Mayfield-Northville Rd., Part 2, Gloversville-West Perth Rd., Fort Plain-Hessville-Sprout Brook Rd., Fultonville-Glen Rd., Glen-Charleston Rd. and Akin-Johnstown Rd., Part 1, 100 cu.-yd. gravel, 300 tons broken stone, 20,000 gal. bituminous material, $8904.

Livingston Co., Kuders Corners-Springwater Town Line Rd., Livonia-Conesus Town line Rd. and Nunda-Dalton Rd., 400 cu.-yd. gravel, 430 tons broken slag, 32,000 gal. bituminous material, $7666; 1.64 mi. Mt. Morris-Genesee Rd. and Mt. Morris Village Rd., 8 ft. wide, 1500 cu.-yd. embankment, 520 tons broken stone, 270 cu.-yd. bituminous macadam, 2570 cu.-yd. cement concrete, 7500 gal. bituminous material, $48,940.

Livingston and Ontario Counties, Dansville-Mt. Morris Rd., Part 6, Geneva-Halls Corners Rd., Stanley-Geneva Rd., Wayland-Dansville Rd., Part 2, County Line-Dansville Rd., Cohocton-Naples Rd., Part 2 and Craig Colony Rd., 300 tons broken stone, 100 cu.-yd. gravel, 20,000 gal. bituminous material, $8904.

Monroe and Orleans Counties, Five Corners-Kuckville Rd., Part 2, Clarendon-Holley Rd., Part 1, County Line Rd., Holley-Ridge Rd., Monroe-Orleans County Line Rd., 100 cu.-yd. gravel, 300 tons broken stone, 20,000 gal. bituminous material, $9391.

Ontario Co., Victor-Mendon Rd., Part 1, and Canandaigua-Victor Rd., 2180 cu.-yd. broken stone, 2100 cu.-yd. bituminous macadam, 6400 cu.-yd. embankment, 55,600 gal. bituminous material, $53,044.

Otsego Co., Morris-Gilbertsville Rd., Part 2, and Gilbertsville Village Rd., 200 lin.-ft. 12 in. vitr. clay pipe, 1000 lin.-ft. 6 in. vitr. sewer pipe, 49 cu.-yd. concrete, 270 lb. reinforcement, 1910 cu.-yd. cement concrete pavement, $37,063.

Albany Co., Schenectady-Guilderland Rd., 1100 cu.-yd. excav., 1500 tons broken stone, 3320 cu.-yd. cement concrete, $58,000.

Schuyler, Tioga and Tompkins Counties, Ithaca-Dryden Rd., Part 2, Newark Valley-Berkshire Rd., Part 2, New Valley-Berkshire Rd., Part I, Spencer-Candor Rd., Part 2, Enfield Falls-Enfield Center Rd., Montour Falls-Alpine Rd., Part 1, Alpine-Cayuta Rd., Part 1, Mecklenburg-Perry City Rd., Ithaca-Esty Glen Rd., Waverly-Owego Rd., Part 2, Ithaca-Danby Rd., Part 3, Cayuta-Newfield Rd., Perry City-Trumansburg Rd., 878 tons sand, 100,380 gal. bituminous material, $25,330.

Steuben Co., Big Creek Rd., Parts 1 and 2, 2500 cu.-yd. excav., 200 lin.-ft. 6 in. vitr. clay drain, 100 tons broken stone, 100 cu.-yd. field or quarry stone, 2340 cu.-yd. bituminous macadam, 63,200 gal. bituminous material, $46,787; Wayland-Dansville Rd., Part 1, 150 cu.-yd. excav., 300 lin.-ft. 6 in. vitr. clay under drain, 100 tons broken stone, 100 cu.-yd. field or quarry stone, 2340 cu.-yd. bituminous macadam, 63,200 gal. bituminous material, $36,262; Bath-Hammondsport Rd., Part 1, 200 cu.-yd. excav., 600 lin.-ft. 6 in. vitr. tile drains, 200 tons broken stone, 100 cu.-yd. field or quarry stone, 2920 cu.-yd. bituminous macadam, 78,900 gal. bituminous material, $50,189.

Sullivan Co., Jeffersonville-Kenoza Lake-Fosterdale Rd., 300 ft. 6 in. vitr. clay drain, 8 tons c. i. pipe, 15 cu.-yd. concrete, 2590 cu.-yd. bituminous macadam, 69,800 gal. bituminous material, $49,545.

Ulster Co., Kingston-Ellenville Rd., Part 3, 1400 cu.-yd. excav., 1050 cu.-yd. broken stone, 300 cu.-yd. field or quarry stone, 2500 cu.-yd. bituminous macadam, 67,500 gal. bituminous material, $40,771.

New York—Until Apr. 3, by E. Duffy, comr., state highway dept., 55 Lancaster St., Albany, repairing roads in following counties:

Albany Co., River Rd., involving 6100 cu.yd. embankment, 5300 tons broken stone, 2040 cu.yd. bituminous macadam, 55,000 gal. bituminous material, cost, $32,933.

Broome Co., Fenton-Chenango-Loupath Rd., 14,000 cu.yd. excav., 100 lin.ft. 6 in. vitr. clay underdrain, 5 ton c. i. pipe, 125 cu.yd. concrete, 1000 lb. metal reinforcement, 1150 cu.yd. field or quarry stone, 1860 cu.yd. bituminous macadam, 27,700 gal. bituminous material, $44,254.

Delaware Co., Delhi-Middletown Rd., 3000 cu.yd. excav., 1000 lin.ft. 6 in. vitr. clay pipe, 20 cu.yd. concrete, 200 tons iron and steel, 300 cu.yd. broken stone, 2000 cu.yd. field or quarry stone, 337 cu.yd. bituminous macadam, 51,000 gal. bituminous material, $53,545.

Erie Co., Akron-Tonawanda Creek Rd., 1600 cu.yd. excav., 600 ft. 6 in. vitr. tile drain, 200 tons broken stone, 100 cu.yd. field or quarry stone, 2920 cu.yd. bituminous macadam, 78,900 gal. bituminous material, $73,484; Transit Rd., Part 2, 2000 cu.yd. embankment, 18,800 sq.yd. cement concrete, 169,000 sq.ft. metal reinforcement, $53,343.

Genesee Co., East Pembroke-Batavia Rd., 6100 cu.yd. mbankment, 5300 tons broken stone, 2040 cu.yd. bituminous macadam, 55,000 gal. bituminous material, $59,820.

Hamilton Co., Long Lake-Grove Rd., 900 cu.yd. excav., 100 lin.ft. 6 in. vitr. tile drain, 550 cu.yd. broken stone, 100 cu.yd. field or quarry stone, 3000 cu.yd. bituminous macadam, 70,400 gal. bituminous material, $37,947.

Herkimer Co., surface treating Manheim Center-Salisbury Center Rd., Salisbury Center-Burrells Rd., Burrells-Middleville Rd., Little Falls-Fairfield Rd., Richfield Springs-Warren-Springfield Rd., Little Falls-Montgomery Co. line Rd., Ilion-Cedarville Rd., Jordanville-Richfield Springs Rd., Mohawk-Paines Hollow Rd., Paines Hollow-Jordanville Rd., 3135 tons broken stone, 117,950 gal. bituminous material, $34,903.

Monroe Co., Latta Rd., 900 tons broken slag, 40,000 gal. bituminous material, 3080 tons bituminous macadam, $28,573; Clifton Rd., Parts 1 and 2, Chili Rd., Part 2, Honeoye Falls-Rush Rd., West Henrietta-West Rush Rd., Ballantyne Bridge-Genesee Valley Park Rd., 440 tons broken stone, 460 tons broken slag, 35,000 gal. bituminous material, $9398.

Onedia Co., Utica-Bridgewater Rd., 150 cu.yd. excav., 100 ft. 6 in. vitr. tile drain, 60 tons broken stone, 180 cu.yd. field or quarry stone, 240 tons broken stone, 4210 tons bituminous macadam, 63,000 gal. bituminous material, $40,420.

Onondaga Co., Baldwinsville-Cicero Rd., 400 cu.yd. excav., 31,700 gal. bituminous material, 2360 tons broken stone, 200 cu.yd. field or quarry stone, $17,578; Cemetery Rd., 300 cu.yd. excav., 200 sq.yd. concrete gutter, 50 cu.-yd. field or quarry stone, 16,800 gal. bituminous material, 1360 tons broken stone, $9844; Phoenix-Syracuse Rd., 500 cu.yd. excav., 30 cu.yd. concrete, 38,550 sq.-yd. bituminous macadam, 81,000 gal. bituminous material, $20,064; Marietta-Marcellus Rd., 200 cu.yd. excav., 19,540 sq.yd. bituminous macadam, 39,500 gal. bituminous material, 25 cu.yd. concrete, $33,349.

Saratoga Co., Ballston-Ballston Lake Rd., Part 2, 1450 cu.yd. broken stone, 34,880 sq.yd. macadam, 6100 cu.yd. concrete pavement, $82,863; advertised in this issue.

N. Y., Buffalo—Until Mar. 25, by A. G. Hinkley, clk. bd. supervs. Erie Co., building following county aid town roads; part 3 Pontiac-Derby Rd., part 3 Delaware Ave. and part 2 Rapids Rd. Noted Feb. 6.

N. Y., Buffalo—Until Mar. 28, by Dept. Pub. Wks., grading, opening gutters, rounding roadways and surfacing with hard material unpaved streets, etc. A. W. Kreinheder, comr.

N. Y., Buffalo—Until Mar. 25, by A. G. Hinkley, clk. bd. supervs. Erie Co., building Center St. Rd. part 3, county aid town highway.

N. Y., New York—Until Mar. 24, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving granite block pavement on concrete foundation, roadway of Worth, 28th and Dyckman Sts. and 2nd Ave.

N. Y., New York—Until Mar. 28, by F. L. Dowling, pres. Manhattan Boro., regulating, regrading and paving roadway, granite block on concrete foundation, building sewers, inlets and basins, in Park Ave., from 40th to 42nd Sts., East 41st St. from Park Ave. to point east.

New Jersey—Until Apr. 9 by State Highway comn., Broad St. Bank Bldg., Trenton, paving 54,386 sq.yd. State Highway No. 6, Millica Hill-Mantau Sect., Gloucester Co., concrete surface. A. L. Grover, clk. Noted Feb. 6, advertised in this issue.

N. J., Kearney—Until Mar. 25 by Town Council, repairing bitulithic pavement on Kearney Ave. between Erie R.R. and Quincy Ave.

N. J., North Bergen—Until Mar. 25 by Town Council, improving 23rd St. from Hudson Blvd. to New Durham Ave., also River, Jefferson, Lincoln and Ferry Sts. and Liberty Rd., granite and asphalt. About $25,000. Noted Jan. 9.

Pa., Clarksville—Until Apr. 10, by A. M. Custer, boro. clk., laying about 1300 lin.ft. waterbound macadam and one course concrete pavement, 16 ft. wide.

Pa., New Essington (Eddystone P. O.)—Until Mar. 25, by Albright & Mebus, engrs., 907 Land Title Bldg., Phila., building sidewalks, curb and gutter paving, building and connecting storm water inlets and grading and macadamizing roadways in connection with housing operation of Westinghouse Electric & Mfg. Co., here.

Pa., Stony Creek (Johnstown P. O.)—Until Mar. 24, by A. C. Roberts, twp. secy., rebuilding 6000 ft. Solomon Run Rd. with vitr. fire clay brick on concrete foundation. O. P. Thomas, twp. engr.

Md., Baltimore—Until Mar. 26, by Bd. Awards, for Contr. 158, improving Frank and St. Paul Sts., involving 13,590 sq.yd. sheet asphalt, 800 sq.yd. vitr. block, 480 sq. yd. granite block redressed; Contr. 159, Pratt, Fayette, McHenry, Cole, Eagle and Bentalou Sts., involving 47,950 sq.yd. sheet asphalt, 3550 sq.yd. vitr. block, 180 sq.yd. granite block redressed; Contr. 160, Fairmount Ave., Lexington and St. Matthews Sts., involving 19,485 sq.yd. sheet asphalt, 1865 sq.yd. vitr. block and 2405 sq.yd. granite block redressed. S. C. Rowland, chn.; advertised in this issue.

Streets and Roads (Continued)

W. Va., Middlebourne—Until Apr. 10, by Comrs. Tyler Co., grading and surfacing 2.5 mi. road, 16 ft. wide, with bituminous asphalt macadam. About $45,000. P. P. Berkley, engr.

N. C., Durham—Until Apr. 2, by city, grading, curbing and paving 30,000 sq.yd. Main St. from Fuller St. to Allston Ave. H. W. Kueffner, city engr.; advertised in this issue.

N. C., Raleigh—Until Apr. 1, by Comrs. Wake Co., building Raleigh-Cary Highway. About $130,000 available. C. M. Miller, co. engr. Noted Mar. 6.

S. C., Bamberg—Until Apr. 2, by Comrs. Bamberg Co., grading and surfacing with sand clay 12.17 mi. Columbia-Savannah Highway, from New Bridge to Beaufort. Bridge, involving 24,000 cu.yd. common excav., 14,000 cu.yd. clay excav., etc.

Miss, Tunica—Until Apr. 14, by Comrs. Tunica Co., grading, graveling and draining 13 mi. roads in Rd. Dist. No. 3, 9 ft. wide. Bids to be received separately on (1) furnishing 20,000 tons gravel, (2) hauling, surfacing and building roads. L. W. Mashburn, Clarksdale, engr.

Miss., Tylertown—Until Apr. 5, by Comrs. Walthall Co., building 16.23 mi. Federal Aid Rd. No. 20 (State Trunk Rd.) between Natchez and Mobile, Ala. Work involves 96,339 cu.yd. grading, 140 cu.yd. concrete, 19,108 cu.yd. 1 mi. haul, 16,221 cu.yd. 1-2 mi. haul, and 1700 lin.ft. culvert pipe.

Tenn., Johnson City—Until Apr. 14, by Washington Co. Good Roads Comn., building 12.5 mi. macadam road, 14 ft. wide, 24 ft. roadway and 16.5 mi. macadam road, 10 ft. wide, 18 ft. roadway. Work involves rein.-con. drainage structure, 200,000 sq.yd. macadam, 6.5 in. thick after compaction, 100,000 cu.yd. excav., 5500 ft. concrete or corrugated metal pipe ranging from 12-48 in. diam., 2250 cu.yd. concrete and 70,000 lbs. steel. F. W. Webster, co. engr.

Ohio—Until Mar. 28, by State Highway Comn., Capitol, Columbus, building roads in following counties:

Columbiana Co., Sect. "Q-2," Cleveland-East Liverpool Rd., .98 mi., grading, constructing bridges and culverts and paving with concrete, cost, $37,040.

Gallia Co., Sect. "H," Ohio River Rd., .56 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $20,098.

Greene Co., Sect. "K," Columbus-Cincinnati Rd., 3.83 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $61,067.

Guernsey Co., Sect. "S," Steubenville-Cambridge Rd., 1.01 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $30,690.

Hancock Co., Sect. "G," Findlay-Kenton Rd., 2.01 mi. grading, constructing bridges and culverts and paving with asphaltic concrete or rein.-con., $56,984.

Knox Co., Sect. "M," Columbus-Wooster Rd., 4.02 mi., grading, constructing bridges and culverts and paving with rein.-con., $164,512.

Holmes Co., Sect. "B-1," Millersburg-Wooster Rd., 3.59 mi., grading, constructing bridges and culverts and paving with concrete and gravel, $70,960.

Montgomery Co., Sect. "O-2," Cincinnati-Dayton Rd., 1.34 mi., grading, constructing bridges and culverts and paving with either rein.-con., bituminous macadam or Kentucky rock asphalt, $49,756.

Sect. "O-1," Cincinnati-Dayton Rd., 1.92 mi. grading, constructing bridges and culverts and paving with rein.-con., bituminous macadam or Kentucky rock asphalt, $62,670.

Muskingum Co., Sect. "L-2," Zanesville-Cincinnati Rd., .445 mi., grading, constructing bridges and culverts and paving with bituminous macadam, $16,487.

Pike Co., Sect. "L-1," Columbus-Portsmouth Rd., 1 mi. grading, constructing bridges and culverts and paving with concrete, $31,294.

Wayne Co., Sect. "E," Cleveland-Wooster Rd., 5 mi., grading, constructing bridges and culverts and paving with monolithic brick, concrete or bituminous macadam, $144,412.

Sect. "A," Ashland-Wooster Rd., 6.72 mi., grading, constructing bridges and culverts and paving with concrete or monolithic brick, $203,321.

Sect. "M-1," Mansfield-Wooster Rd., 1.23 mi., grading, constructing bridges and culverts and paving with concrete, monolithic brick or bituminous macadam, $34,935.

O., Toledo—Until Mar. 28, by Comrs. Lucas Co., grading and paving with 2 course waterbound macadam, 3.2 mi. Grace Rd., 10 ft. wide, 6 in. bottom, 4½ in. top, involving 19,000 sq.yd. waterbound macadam, 12,000 cu.yd. sand and clay excav. 6900 cu.yd. stone, cost $33,552; 1 mi. Jackman Rd., 16 ft. wide, 9675 sq.yd. concrete, 446 sq.yd. hillside block on 5 in. concrete base, 9340 cu.yd. clay excav., $34,621; 2 mi. Sylvania Ave., 16 ft. wide, 19,500 sq.yd. concrete, 6500 cu.yd. sand excav., $46,313; 1.2 mi. Upton Ave., 16 ft. wide, 12,000 sq.yd. concrete vitr. brick on 4 in. concrete base, 11,000 cu.yd. clay excav., cost, monolithic brick, $47,588, concrete, $35,468; 1.63 mi. Stickney Ave., 14 ft. wide, 13,380 sq.yd. waterbound macadam; 4407 cu.yd. clay excav., 5760 cu.yd. stone, $23,363; 3.56 mi. Dorr St., 18 ft. wide, 39,360 sq.yd. concrete, 7000 cu.yd. clay excav., $97,025; 1500 ft. Central Grove Ave., 27 ft. wide, 4820 sq.yd. concrete or vitr. brick on 6 in. concrete base, 3122 lin.ft. stone curbing, 3706 cu.yd. clay excav., brick, $22,513, concrete, $16,065. C. L. Rood, co. engr.

O. Youngstown—Until Mar. 25, by city paving Hampton Court, East Princeton and Parkview Aves., Parnell and Fruit Sts. About $15,000. F. M. Lillie, city engr.

O., Youngstown—Until Mar. 31, by Comrs. Mahoning Co., grading and paving 4101 ft. Villa Marie Rd. and 2798 ft. Lowellville Hubbard Rd., in Cortsville Twps., 12 ft. wide, waterbound macadam. About $10,000. E. Smith, co. engr.

Indiana—By Bd. Co. Comrs. building roads in following counties:

Apr. 8, Warrick Co., Boonville, building road in Ohio Twp. W. A. Campbell, co. aud.

Howard Co., Kokomo, free gravel roads in Liberty, Center, Howard, Clay and Ervin Twps. W. L. Benson, co. aud.

Porter Co., Valparaiso, gravel roads, in Washington and Westchester Twp. B. H. Kinne, aud.

Clinton Co., Frankfort, concrete road, 10,532 ft. long, Sugar Creek Twp. E. Spray, aud.

Grant Co., Marion, crushed stone road in Van Buren Twp. M. McRae, aud.

Gibson Co., Princeton, gravel roads in Union and White River Twps. J. H. Armstrong, aud.

Apr. 10—Jennings and Decatur Counties, Vernon, crushed stone road on line between Jackson Twp. Decatur Co. and Geneva Twp., Jennings Co. E. Bemish, aud.

Clay Co., Brazil, gravel road on Clay-Putnam Co. line. W. E. Parrish, aud.

Ill., Danville—Until Mar. 27, by J. R. Moore, clk. Vermilion Co., grading, shaping earth shoulders, constructing, etc. concrete and brick roads, 10 ft wide with 3 ft. of macadam or gravel shoulders, concrete, advertised in this issue Noted Jan. 9.

Ill., Wheaton—Until Mar. 28, by Dupage Co., building 9115 ft. 12th St., concrete, 18 ft wide, involving 18,310 sq.yd. concrete, 990 cu.yd. excav., 240 cu.yd. concrete in culverts and bridges. About $40,432. E. L. Gates, Wheaton, co. supt. highways.

Minn., Wheaton—Until Mar. 25, by O. M. Anderson, co. aud., building Rds. No. 1, 2, 3 and 5, involving 4800 cu.yd. gravel and 55,294 cu.yd. earthwork.

South Dakota—Until Apr. 5, by State Highway Comn., at Co. Auditors Office, Belle Fourche, building 11.8 mi. Belle Fourche-Alzada Rd., 36 ft. wide, in Butte Co. Work involves 54,500 cu.yd. earth excav., culverts, etc. About $31,000. Noted Feb. 27.

N. D., Center—Until Apr. 9, by Comrs. Oliver Co. grading and building 9.39 mi. State Aid Project No. 3372, 36 ft. wide. About $11,000. W. H. Robinson, Bismarck, engr.

N. D., Grafton—Until Mar. 24, by city, paving 19,500 sq.yd. various streets. Plans include resetting existing stone curbs, building necessary circular concrete curbing, catch basins and inlet pipes, etc. J. H. Johnson, city aud.

N. D., Jamestown—Until Apr. 11, by Comrs. Stutsman Co. grading and building culverts on 25.9 mi. Federal Aid Project No. 24, 36 ft. wide. About $60,000. W. H. Robinson, Bismarck, engr.

Mont., Billings—Until Apr. 15, by city, paving 16,000 sq.yd. Broadwater Ave., Dist. 167. About $56,000. E. M. Sneckenberger, city engr.

Mont., Billings—Until Apr. 1, by city, paving 9500 sq.yd. North 31st St., Dist. 166. About $38,000. E. M. Sneckenberger, city engr.

Mo., Kansas City—Until Apr. 1, by city grading Chestnut St. between Lexington and Guinotte Aves. for proposed Chestnut Ave. trafficway; also building bridge over north end of old lake in North Terrace Park. R. H. Waddell, acting engr.

Mo., St. Louis—Until Apr. [illegible] by Bd. Pub. Serv., improving 808 ft. [illegible] St., refined asphalt and granite curb., cost $15,000; 810 ft. Slevin St., vitr. brick, $12,450; 1295 ft. Thelka St. asphalt, $23,[illegible]. W. W. Horner, city engr.

Utah—Until Mar. 25, by State Rd. Comn., Capitol, Salt Lake City, building 8500 ft. road from Centerville to Farmington, 18 ft. wide, concrete or bitulithic, cost $30,000; 17,233 ft. road from Sunset to Clearfield, 18 ft. wide, concrete or bitulithic, $70,000; 15,587 ft. road from Kaysville to Layton, 18 ft. wide, concrete or bitulithic, $60,000. All roads in Davis Co. I. R. Browning, engr.

Utah—Until Apr. 1, by State Rd. Comn., Capitol, Salt Lake City, building 15 mi. road from Midvale to Lehi, Salt Lake and Utah Counties, 18 ft. wide, concrete or bitulithic, cost $300,000; 5 mi. road, from east to 33rd South, Salt Lake Co., concrete or bitulithic, $100,000. I. R. Browning, state rd. engr.

Wash., Mt. Vernon—Until Apr. 8, by Comrs. Skagit Co., grading and paving road from Sedro Woolle to Skagit River bridge involving 2992 sq.yd. concrete. R. W. McInstry, co. engr.

Cal., San Jose—Until Apr. 7, by Bd. Supervs., improving Santa Clara and Alviso Rd., Dist. No. 4; White Rd., Dist. 2 and 3, Berryessa and Gish Rds., Dist. 3.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—H. Bruckner, pres. Bronx Boro. received bids Mar. 18, regulating, grading, curbing, building sidewalks, crosswalks, approaches, etc., on Adams St. from Morris Park Ave. to New York, New Haven & Hartford R.R., Benson St. from Frisby to Lane Aves., Tacoma St. from St. Lawrence to Beach Aves., from N. Di Menna, 618 East Fordham Rd., $33,016; repaving with granite block on concrete foundation, roadway of Park Ave., E., from Claremont Pkway. to East Tremont Ave., paving with bituminous, 203rd St. from Webster Ave. to New York and Harlem R.R., granite blocks on sand foundation roadway of Jackson Ave. from Southern Blvd. to East 138th Sts., from Asphalt Constr. Co., 2197 Madison Ave., type B, $94,655; Burnside Contr. Co., 270 Burnside Ave., type A, $87,582. Noted Mar. 13.

N. J., Bedminister—Town received bids macadamizing Gladstone Rd. from W. R. Moore, Bedminister, $28,893; Smith & Speer, Morristown, $34,220; Gray Constr. Co., Morristown, $36,089.

★N. J., Kearney—Town let contract repairing Passaic Ave., to Maher & McNichols, Passaic Ave. About $15,000.

★Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract grading 19,000 sq.yd. Ferry Bar, foot of Light St., to elevation of mean low tide, to distance of 500 ft. from end of old Light St. bridge, to H. O. Firor, 1707 West Pratt St., Baltimore, $0.084 per cu.yd. Total cost, $15,960. Noted Mar. 6.

Ohio—State Highway Comn., Capitol, Columbus, let contract building roads in following counties:

Butler Co., Sect. "A-1," Eaton-Middletown Rd., .625 mi., grading roadway, constructing inlets and paving with brick, to J. Hennessey, Piqua, $35,491.

Carroll Co., Sect. "G," Canton-Steubenville Rd., 2.34 mi., grading roadway, constructing bridges and culverts and paving with waterbound macadam to P. Dieffenbacher & Sons Co., Massillon, $39,998.

Clermont Co., Sect. "K-1," Cincinnati-Chillicothe Rd., 2.04 mi., grading roadway, constructing bridges and culverts and paving with waterbound macadam, to C. L. Wright, Cincinnati, $27,611.

Fayette Co., Sect. "K," Springfield-Washington Rd., grading roadway, constructing bridges and culverts and paving with waterbound macadam, to Brewer & Brewer Sons, Chillicothe, $26,190.

Lake Co., Sect. "B-2," Euclid-Chardon Rd., 2.25 mi., grading roadway, constructing bridges and culverts and paving with concrete, to L. Garrett Constr. Co., Cleveland, $48,010.

Mahoning Co., Sect. "N-1," North Lima-East Palestine Rd., 1.67 mi., grading roadway, constructing bridges and culverts and paving with waterbound macadam to L. T. Fletcher Co., Kent, $37,470.

Marion Co., Sect. "I," Marion-Upper Sandusky Rd., 5.13 mi., grading roadway, constructing bridges and culverts and paving with waterbound macadam, to L. L. Aller, La Rue, $84,652.

Sect. "G," Marion-Galion Rd., 1.5 mi., grading roadway, constructing bridges and culverts and paving with waterbound macadam, to L. L. Aller, La Rue, $24,924.

Streets and Roads (Continued)

Muskingum Co., Sect. "M-2," Zanesville-Dresden Rd., .596 mi., grading roadway, constructing bridges and culverts and paving with concrete, to Dunsweiller Constr. Co., 4 Richards Blk., Zanesville, $16,393.

Vinton Co., Sect. "J-2," Chillicothe-McArthur Rd., 1.4 mi., grading roadway, constructing bridges and culverts and paving with concrete, to W. C. Brown, Linden, $43,740.

Clinton Co., Sect. "A," Wilmington-Xenia Rd., 3.93 mi., resurfacing with 5 in. course waterbound macadam, to Lunsford & Lunsford, Findlay, $27,402. Noted Mar. 6.

★O., Cincinnati—Comrs. Hamilton Co. let contract to R. E. Cash, 110 Lincoln Inn, improving Cleves and Warsaw Pike, cost $23,960; improving Hillside Ave. $8900, to H. Westerman, Mt. Healthy, O., resurfacing Blue Rock Pike from Springdale Pike to Colerain Pike, $13,860. Noted Feb. 20.

O., Cleveland—City received bids improving

(a) Champion Ave., involving 1140 cu.yd. excav., 20,450 sq.ft. 4 in. brick pavement on 6 in. concrete foundation, 1630 ft. 5 in. Berea stone curbing, etc.;

(b) Ignatius Ave., 27,830 sq.ft. 4 in. brick on 6 in. concrete foundation;

(c) Remus Court, 7064 sq. ft. 5 in. brick block pavement and 400 cu.yd. excav.;

(d) Southerly Dist., 53,000 sq.ft. 2½ in., 2500 sq.ft. 4 in. stone flagging;

(e) Northerly Dist., 36,000 sq.ft. cement, 550 sq. ft. 4 in. stone sidewalks;

(f) Northerly Sect. 40,550 sq.ft. 3 in., 250 sq.ft. 2½ in. and 2600 sq.ft. 4 in. stone flagging;

(g) Joan Ave., 25,585 sq.ft. 4 in. brick pavement on 6 in. concrete foundation, 1865 ft. 5 in. Berea stone curbing, etc.;

(h) Southerly Dist., 24,000 sq.ft. 6 in. cement sidewalk, etc.;

(i) Westerly Dist., 33,600 sq.ft. 2½ and 2700 sq.ft. 4 in. stone flagging;

(j) Westerly Dist., 29,000 sq.ft. 6 in. cement and 3200 sq.ft. 2½ in. stone sidewalks;

(k) Seville Ave., 3120 sq.ft. excav., 900 sq.ft. brick and 200 sq.ft. 6 in. wood block pavement;

(l) Trivoli Court, 125 cu.yd. excav. and 17,180 sq.ft. brick pavement;

(m) Hessler Rd., 225 cu.yd. excav., 5166 sq.ft. 6 in. concrete foundation, 574 sq.ft. 4 in. wood block pavement, 590 ft. 5 in. Berea stone curbing, etc.;

(n) Bessemer Ave., 8570 cu.yd. excav., 98,400 sq.ft. 5 in. brick pavement on 6 in. concrete foundation and 5760 ft. stone curbing from

Roehl Bros., Clark and West 25th St., (a) $13,251; (b) $18,353; (c) $3243; (g) $15,992; (n) $72,127;

Baldwin Bros., 506 Rose Bldg., (a) $13,769; (b) $19,051; (c) $3378; (g) $16,587; (k) $1543; (l) $6277; (m) $5401;

Rieley Bros., 348 Arcade, (a) $14,017; (c) $3644; (k) $1509; (m) $5382; (n) $71,329;

McHugh Bros., 527 Society for Savings Bldg., (b) $18,463; (g) $16,257; (n) $68,210;

Ohio Quarries Co., 1306 Citizens Bldg., (d) $15,273; (f) $12,638; (i) $11,208;

Cleveland Stone Co., 1836 Euclid Ave., (d) $16,035; (f) $13,279; (i) $11.950;

P. De Santis, 603 Republic Bldg., (e) $9856;

Schmeller & Franz, (e) $11,284; (h) $6741; (j) $7682;

Masters & Mullen, 602 Electric Bldg., (e) $12,173; (h) $7623;

M. P. Platten, 2013 Columbus Rd., (h) $8320; (j) $9041.

Garland Bros., 603 Republic Bldg., (j) $10981;

A. M. Peppa, (l) $6250;

Enterprise Constr. Co., (l) $6284;

Bently Bros., 403 Electric Bldg., (m) $5292.

★O., Wauseon—Comrs. Fulton Co. let contract paving, grading and draining and building bridges on 3.64 mi. Sect. G, Wauseon-Morenci Rd., and .51 mi. Sect. C.-1, Swanton-Metamora Rd., waterbound macadam, to Thomas & Burns, Stryker, $45,377 and $6346 respectively; 5 mi. Sect. O, Toledo-Wauseon Rd., waterbound macadam, to Zeller & Drum, Swanton, $92,108. Noted Mar. 6.

Mich., Detroit—Dept. Pub. Wks. received bids paving (a) "T" alley between Duboise and Chene Sts., Lyman and Milwaukee Aves.,

(b) All alleys between Linwood and La Mothe Aves., La Salle Blvd. and La Salle Gardens south;

(c) Alley east and west between Beechwood, Grand River, Spokane and Maplewood Aves.;

(d) All alleys between 14th St., Wabash, Kirby and Hudson Aves.;

(e) Alleys north and south, east and west, east of Chene, Grandy, Piquette and Trombley Aves.;

(f) Alleys between Trumbull, Commonwealth and Putnam Aves.;

(g) Alley north and south between Vinewood Ave., West Grand Blvd., East St. and Michigan Ave.;

(h) Alley between Hamilton, Gladstone and Hazelwood Aves. and 3rd St.;

(i) Alley between 15th, 14th, Poplar and Buchanan Sts.;

(j) Alley between Commonwealth, Trumbull, Hudson and Stanley Aves.;

(k) Alley between ~~Cameron and~~ Richmond Aves. from

R. J. Powelson Co., 1577 Iroquois Ave., (a) $7826; (e) $3163; (h) $4726.

Otis Cement Constr. Co., 806 Hammond Bldg., (a) $7497; (b) $5371; (c) $4017; (d) $3754; (e) $3094; (f) $2313; (g) $5824; (h) $4800; (i) $3690; (j) $2873. (k) $2086.

Talbot Co., 400 Penobscot Bldg., (a) $7641; (b) $5371; (c) $4167; (d) $3750; (e) $3136; (f) $2327; (g) $5863; (h) $4977; (i) $3621; (j) $2819; (k) $2202.

Liberty Constr. Co., Penobscot Bldg., (b) $5360; (c) $4076.

Lennane & McIlvenna, Union Trust Bldg., (d) $3656; (f) $2294; (i) $3594; (j) $2780.

R. Porath, 1131 McKinley Ave., (g) $5800. Noted Feb. 20.

Mich., Detroit—Dept. Pub. Wks. let contract paving (a) St. Aubin Ave.; (b) Blaine Ave.; (c) "T" alley between 2nd, Woodward, Bethune and Pallister Aves.; (d) alley between Wilson, Byron, Hazelwood and Taylor Aves.; east and west alley between 12th St., Holden Ave., Ferry Park and West Grant Blvd.; (f) north and south between Forest Ave., Hancock St. and west of Woodward Ave.; (g) alley between Hamilton and Seward Aves. and 3rd St. and Virginia Park; (h) alley between 3rd and 2nd Sts., Glynn Court and Calvert Ave.; (i) alley between Brush St., Owen, Oakland and Josephine Aves.; (j) "L" alley between Byron, Hamilton, Taylor and Clairmont Aves.; (k) alley between 3rd, 2nd, Colburn and Antoinette Sts.; (l) alley between Orleans and Dequindre Sts. and Lafayette and Monroe Aves.; (m) "L" alley between Vinewood, Taft, Scovel and Grand River Aves.; (n) alley between Sheridan, Townsend, Kerchval and Waterloo Aves.; (o) alley between Beechwood, Firwood, Seebaldt and Allendale Aves.; (p) alley between Wabash Ave, Magnolia, Linden and 14th Sts.; (q) alley between Ironwood, Beechwood, Oregon and Vancouver Aves.; (r) alley between Commonwealth, Trumbull, Calumet and Canfield Aves.; (s) Delmar Ave.; (t) Laura St.; (u) Elsa Ave.; (v) Burnet Ave.; (w) David Ave.; (x) Linwood Ave., to

Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $21,638; (s) $9795; (t) $9685; (u) $9130; (v) $7846; (w) $5905.

W. B. Brady Constr. Co., 1972 Grand River Ave., (b) $16,574.

Talbot Co., Penobscot Bldg., (c) $5532; (g) $4697; (n)) $4988.

Oakwood Constr. Co., Penobscot Bldg., (d) $4724; (e) $2999.

Lennane Bros., Union Trust Bldg., (f) $1953.

R. J. Powelson Co., 1577 Iroquois Ave., (h) $4623; (p) $3453; (r) $1679.

Otis Cement Constr. Co., 806 Hammond Bldg., (i) $4449; (j) $3145; (k) $2708; (l) $1968; (m) $5018; (q) $2827.

E. Meredith & Co., 145 Harper Ave., (o) $5491.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (x) $49,364. Noted Mar. 13.

BARGE CANAL WORK—NEW YORK

Contract No. 190

Bids were received by Lewis Nixon supt. pub. wks., Capitol, Albany, for completing improvement of canal from King's Bend to Lehigh Valley R.R. crossing at Rochester, from (A) Empire Eng. Co., 60 Church St., New York City; (B) J. W. Holler, Ft. Edward; (C) Amer. Pipe & Constr. Co., 112 North Broad St., Phila., Pa. The unit bids were as follows:

	A	B	C
1 Coffer-dams, pumping, bailing and draining (lump sum)	$2,500.00	$2,100.00	$2,100.00
61,000 cu.yd. excavation	1.36	1.37	1.60
5 M. Ft. B.M. sheeting and bracing	120.00	90.00	100.00
20,000 cu.yd. forming embankment	.20	.17	.18
620 cu.yd. lining	2.70	2.25	2.25
640 lin.ft. foundation piles	.78	.67	.75
875 cu.yd. second-class concrete	15.00	12.47	13.00
420 lin.ft. 12-in. vitrified pipe, laid	1.00	.87	.85
52,400 cu.yd. wash wall	2.58	2.67	2.45
5 cu.ft. chipping concrete	6.00	5.00	5.00
110 lb. expanded metal	.10	.10	.10
1100 lin. ft. wooden fence	.75	.70	.75
1000 lin. ft. raising, aligning and painting existing wooden fence	.36	.30	.30
Placing and adjusting 3 steel ladders	3.60	3.00	3.00
Resetting steel tracks at guard lock (lump sum)	312.00	260.00	300.00
Furnishing and setting bench mark at guard lock (lump sum)	12.00	12.00	12.00
Clearing out grooves, stop log recesses, guard lock (lump sum)	18.00	15.00	15.00
Repairing block No. 19, south wall, guard lock (lump sum)	90.00	75.00	75.00
Repairing guard lock sill (lump sum)	42.00	35.00	35.00
Removing timber approaches, Clinton Ave. bridge (lump sum)	60.00	60.00	60.00
Maintaining highway traffic (lump sum)	200.00	200.00	200.00
Storehouse (lump sum)	2,250.00	2,250.00	2,500.00
Extended totals	$245,191	$246,550	$250,154

★Wis., River Falls—City let contract paving, grading and curbing 4 blocks Main St., to Johnson & Drake, Minneapolis, Minn., $30,000. Noted Dec. 12.

★Ia., Tama—City let contract paving and grading about 65 blocks, bitulithic, to Ford Paving Co., 208-2nd Ave., Cedar Rapids.

★Minn., Alexandria—Comrs. Douglas Co. let contract building Federal Aid Project No. 27, to S. Groves & Sons, 105 Kasota Bldg., Minneapolis. Noted Feb. 6.

Mo., Kansas City—City received bids building 23rd St. viaduct, (a) wood block; (b) brick; (c) bitulithic; (d) profit fee, from

Arkansas Bridge Co., Genessee and Kirkwood Aves., (a) $679,560; (b) $667,560; (c) $661,560; (d) $60,000.

A. S. Hecker & Co., 403 Electric Bldg., Cleveland, (a) $681,000; (b) $666,000; (c) $666,000; (d) $50,000.

E. B. Garrettson Co., Columbia, S. C., (a) $681,440; (b) $681,440; (c) $681,440; (d) $61,329.

Missouri Valley Bridge & Iron Co., Pennsylvania Ave., Leavenworth, Kan., (a) $686,000; (b) $671,000; (c) $671,000; (d) $67,000.

Mellon, Stuart, Nelson Co., Oliver Bldg., Pittsburgh, (a) $695,000; (b) $676,000; (c) $670,000; (d) $50,000.

Koss Constr. Co., 1st and Court Sts., Des Moines, Ia., (a) $739,000; (b) $721,000; (c) $724,000; (d) $70,000.

Kunkin-Conkey Constr. Co., 321 Cuyahoga Bldg., Cleveland, (a) $756,861; (b) $743,061; (c) $738,260; (d) $40,000.

J. O. Patterson & Son, Kansas City, (a) $795,000; (b) $780,000; (c) $780,000; (d) $78,000.

A. Guthrie & Co., 366 Jackson St., St. Paul, Minn., (a) $813,300; (b) $789,300; (c) $791,700; (d) $60,000.

Fraser, Brace & Co., 1328 Bway., New York City, (a) $925,406; (b) $913,406; (c) $912,806; (d) $80,000.

Fountain Co., Chicago, (a) $986,214; (b) $968,214; (c) $956,114; (d) $60,000. Noted Jan. 23.

Mo., St. Louis—City received bids paving Newstead Ave., from Indiana Quarries Co., Ry. Exch. Bldg., $23,200; 1480 ft. Bingham Ave., brick, from Heman Constr. Co., Title Guaranty Bldg., $29,090; Union Blvd., asphalt, from F. A. Stiers Constr. Co., 4512 Enright St., $69,800; Kossuth Ave., and 1585 ft. Bingham Ave., asphalt, from Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $15,600 and $21,778 respectively. Noted Feb. 13.

★Mo., St. Louis—City let contract grading 96,000 cu.yd. Euclid Ave. to A. Manegold, Title Guaranty Bldg., $.209 per sq.yd. Noted Mar. 6.

★Tex., Abilene—Comrs. Taylor Co. let contract building 11.61 mi. gravel surfaced road, State Highway No. 1, from Tye to Trent, including concrete drainage structures, to Sanders Bros., Miami. About $44,000. Noted Feb. 20.

Ariz., Clifton—Bd. Supervs. Greenlee Co. received lowest bid grading 32½ mi. Sects. 1-6 and part of 7, Clifton-Springerville Rd. including culverts and bridges, from Webster & Kerby, Clifton. Noted Feb. 27.

★Ariz., Douglas—See "Bridges."

Streets and Roads (Continued)

Wash., Seattle—Bd. Pub. Wks. received bids Mar. 7, grading ¼ mi. Holyoke Way, et al, 40 ft. wide, from H. Pederson, Alaska Bldg., $16,583; Johnson Constr. & Logging Co., Seattle, $17,492; G. A. Banderet, Bryn Mawr, $19,330. Noted Feb. 20.

Ore., Portland—City received bids from Alaska Plumbing & Heating Co., 413 East Morrison St., building concrete sidewalks and curbs on Ellis Ave., $2885; excavating building concrete sidewalks, curbs, gutter pipe in Richmond St., $2123; S. Simonsen, Portland, building concrete sidewalks, curbs and driveways in East 8th St. from Madrona to Holland Sts., $1381; Warren Constr. Co., Journal Bldg., gravel bitulithic pavement in road of East 38th St. from East Yamhill to Belmont Sts., $1537; M. Hansen & Co., Portland, concrete curbs, sidewalks, driveways, inlets, laying vitr. pipe, etc., in Oswego St. from York to 29th Sts., $1038; concrete sidewalks, curbs, laying vitr. pipe, etc., in Oswego St. from Smith Ave. to Bank St., $6373.

Cal., San Diego—Bd. Supervs., San Diego Co., received bids Mar. 5, relocating and grading two sections highway near Bernardo, from M. D. Goodbody, Amer. Bldg., $12,849; H. G. Fenton, Owl Drug Bldg., $13,400. Noted Feb. 20.

Congress passed Rivers & Harbors bill appropriating following amounts for improvements at points designated below:

Maine—Completing improvement Tenants Harbor, $18,750.

Massachusetts—Completing improvement of Weymouth Fore River, $183,000; Beverly Harbor, $61,500; Pollock Rip Channel, $200,000.

Rhode Island—Completing improvement of Pawtucket River, R. I., $91,160; of Point Judith harbor of refuge, $52,500.

Connecticut—For improveemnt Connecticut River below Hartford, $75,000; Bridgeport Harbor, $111,300; Norwalk Harbor, $88,000; Stamford Harbor, $183,000; Greenwich Harbor, $35,000.

New York—Continuing improvement East River, $4,000,000; Ambrose Channel, Craven Shoal Channel, and Anchorage Channel, New York Harbor, $300,000; Newtown Creek and tributaries, $205,000; continuing improvement and for maintenance Erie Harbor, Penn., Dunkirk and Buffalo Harbors, Black Rock Channel and Tonawanda Harbor, and Niagara River, $156,000; Buffalo Harbor, $171,400; Oswego Harbor, $50,000; Ogdensburg Harbor, $72,000.

New Jersey—For improvement Newark Bay, $105,600; Raritan River, $250,000; Shrewsbury River, $100,000; Hackensack River, $88,000; Delaware River, Penn., N. J., and Del., $1,000,000; Camden Harbor, $71,080.

Pennsylvania—Continuing improvement Schuykill River, $1,000,000; Raccoon Creek, $39,770; Chester River, $3600; Allegheny River, by construction of locks and dams, $1,000,000.

Delaware—For improvement of Mispillion River, $70,400; for improvement to a depth of 12 ft. at mean low water, Inland waterway from Delaware River to Chesapeake Bay Del., and Maryland, $3,000,000.

Maryland—For improvement of the North Fork of Tred Avon River, $19,600; Wicomico River, $17,100.

Virginia—For improvement of Tangier Channel, $16,434; Mattapon River, $7000; Norfolk Harbor and Channels, $1,000,000; Pagan River, $25,000.

North Carolina—Continuing improvement and for maintenance, waterway from Norfolk, Va., to Beaufort Inlet, N. C., $750,000; Newbegun Creek, $5000; Scuppernong River, $31,800; Beaufort Harbor, $15,900; Channel connecting Thoroughfare Bay and Cedar Bay, $9000; Cape Fear River below Wilmington, $498,625; Cape Fear River above Wilmington, $51,000; Northeast River, $25,375.

South Carolina—Completing improvement waterway between Charleston and Winyah Bay, $28,000.

Georgia—Continuing improvement of Savannah Harbor, $260,000; Generals Cut, Co., $1000; Black River, $5000; Brunswick Harbor, $500,000.

Florida—Continuing improvement of Saint Johns River between Jacksonville and the ocean, $125,000; Oklawaha River, $95,000; for improvement between Jacksonville and Palatka, $9000; channel from Tampa Bay to Boca Ceiga Bay, $10,700; Sarasota Bay, $92,000; for the removal of the water hyacinth from the navigable waters in the State of Florida, in so far as it is or may become an obstruction to navigation, $10,000.

Alabama—Continuing improvement and for maintenance Alabama River ,and Coosa River, Ala., and Ga., including the Alabama and Coosa Rivers between Montgomery and Wetumpka, $50,000; Mobile Harbor and Bar, $200,000; Black Warrior, Warrior, and Tombigbee Rivers, $200,000.

Mississippi—Continuing improvement and for maintenance of channels Pascagoula Harbor, through Horn Island Pass, Mississippi Sound, Pascagoula River and Dog River, $100,000; continuing improvement and for maintenance of anchorage basin at Gulfport, and channel therefrom to the anchorage or roadstead at Ship Island, and for the improvement and maintenance of channel at Ship Island Pass, $100,000; maintenance passes at the mouth of the Mississippi River, $1,250,000.

Louisiana—For improvement of Barataria Bay, $32,000; waterway from Mississippi River to Bayou Teche, $100,000; for the removal of the water hyacinth from the navigable waters in Alabama, Mississippi, Louisiana and Texas, in so far as it is or may become an obstruction to navigation, $30,000.

Texas—Continuing improvement Galveston Harbor, by construction of sea-wall extension to protect Galveston Channel, $758,000; Houston Ship Channel, $950,000; waterway from Galveston to Corpus Christi and channel from Pass Cavallo to Port Lavaca, $5000; Freeport Harbor, $100,000; Brazos Island Harbor, $66,000; Beaumont Harbor, $75,000.

Arkansas—Continuing improvement of Ouachita River, Ark., and La., $300,000; for the removal of snags and wrecks from the Mississippi River below the mouth of the Missouri River, and from Old and Atchafalaya Rivers, $50,000.

Minnesota—Continuing improvement and for maintenance Mississippi River from the mouth of the Missouri River to Minneapolis, $500,000; Mississippi River between Saint Paul and Minneapolis, and between Brainerd and Grand Rapids, Mississippi and Leech Rivers, and reservoirs at headwaters of Mississippi River, $10,000; Minneapolis Harbor, $6000; Baudette Harbor and River, $5000.

Kansas—For maintenance and continuing improvement of Missouri River with a view to securing a permanent 6 ft. channel between Kansas City, from the upper end of Quindaro Bend, and the mouth of the river, $400,000.

Tennessee—For improvement of Cumberland River, Tenn., and Ky., above Nashville, $30,000; continuing improvement of Ohio River and for maintenance by open-channel work, $300,000; by the construction of locks and dams with a view to securing a navigable depth of 9 ft., $3,000,000.

Wisconsin—Completing improvement of Duluth-Superior Harbor, Minn. and Wis., $33,000; Keweenaw Waterway at Princess Point, Mich., $138,000; Sturgeon Bay and Lake Michigan Ship Canal, Wis., $33,000.

Illinois—For improvement of Calumet Harbor, $38,170.

Michigan—Completing improvement of Grosse Pointe Channel, Lake Saint Clair, $94,000; Livingstone Channel, Detroit River, $750,000; Alpena Harbor, $67,500.

Ohio—For improvement of Sandusky Harbor, $181,000; Huron Harbor, $34,500; Lorain Harbor, $20,000; Fairport Harbor, $238,500; Ashtabula Harbor, $83,000.

California—For completing the silt-diversion project, Los Angeles Harbor, $580,000; Suisun Bay Channel, $64,500; San Rafael Creek, $27,300; continuing improvement and for maintenace Sacramento, Feather, San Joaquin, and Mokelumne Rivers, and Stockton and Mormon Channels (diverting canals, $222,000.

Oregon—For maintenance and continuing improvement of channel over the bar at Coos Bay, $121,000; Coquille Bar and Harbor, $64,000; Coos Bay, $130,000; Yaquina Bay and Harbor, $100,000.

Washington—Continuing improvement and for maintenance Columbia and lower Willamette Rivers below Vancouver, Wash., and Portland, Ore., and mouth of Columbia River, $595,000; Skamokawa Creek, $1800; Skagit River, $30,000; Anacortes Harbor, $12,000; Port Gamble Harbor, $12,000.

Hawaii—Continuing improvement and for maintenance Honolulu, Kahului, Hilo, and Nawiliwili Harbors, $135,000; Kahului Harbor, $94,300; Nawiliwili Harbor, $250,000.

OFFICIAL PROPOSALS

Bids: March 25.

Sewer Construction

OFFICE OF THE BOARD OF COMMISSIONERS

Nashville, Tenn., March 11, 1919.

Notice is hereby given that sealed proposals will be received at the office of the secretary until 10 o'clock a.m., Tuesday, March 25, 1919, for constructing a circular brick sewer (being a section of Richland creek intercepting sewer) from a point on the east bank of Richland creek about 1215 feet northwest of county road (near old prison pump-house) through the property of Tennessee State Prison farm and private property southeastwardly to a point about 1400 feet southeast of said county road, as per plans and specifications to be seen in the office of the city engineer. A certified check for $1000 or cash equivalent must accompany each bid. Said check or money will be refunded to unsuccessful bidders upon award of contract and to successful bidders when they have made approved bond for the faithful performance of their contract. The right is reserved to reject any and all bids.

By order of the Board of Commissioners.

WM. GUPTON, Mayor.

Attest: J. W. Dashiell, Secretary.

Bids: March 25.

Sewer Construction

OFFICE OF THE BOARD OF COMMISSIONERS

Nashville, Tenn., March 11, 1919.

Notice is hereby given that sealed proposals will be received at the office of the secretary until 10 o'clock a.m., Tuesday, aMrch 25, 1919, for constructing a circular brick sewer (being a section of Browns creek intercepting sewer) through private property and Stanley street from the Cumberland river to a point south of the Tennessee Central Railroad, as per plans and specifications to be seen in the office of the city engineer. A certified check for $1000 or cash equivalent must accompany each bid. Said check or money will be refunded to unsuccessful bidders upon award of contract and to successful bidders when they have made approved bond for the faithful performance of their contract. The right is reserved to reject any and all bids.

By order of the Board of Commissioners.

WM. GUPTON, Mayor.

Attest: J. W. Dashiell, Secretary.

Bids Close		See Eng. News-Record
Apr. 5	Pass, Weir, etc. — Wheeling, W. Va. Adv. Mar. 13 to 27.	Mar. 20
Apr. 7	Timber Wharf — Spec. 3801 —Chelsea, Mass.	Mar. 20
Apr. 7	Roads — Spec. 3796 — Chelsea, Mass.	Mar. 20
Apr. 7	Electrical equipment—Spec. 3785—Pensacola, Fla.	Mar. 27
Apr. 8	Dredging — New London, Conn. Adv. Mar. 20 and 27.	Mar. 27
Apr. 9	Radial Brick Chimney—Wheeling, W. Va.	Mar. 27
Apr. 14	Cranes — Spec. 3477 — Boston, Mass.	Mar. 27
Apr. 15	Pumps, etc.—Omaha, Neb. Adv. Feb. 27 and Mar. 6	Mar. 6
Apr. 15	Road Work—Washington, D. C.	Mar. 27
Apr. 16	Coal—Jacksonville, Fla. Adv. Mar. 2 0and 27.	Mar. 27
Apr. 16	Removing wreck—Buffalo, N. Y. Adv. Mar. 20 and 27.	Mar. 27
Apr. 17	Valves Jacks—Wheeling, W. Va. Adv. Mar. 20 and 27.	Mar. 27
Apr. 18	Post Office—Mt. Pleasant, Mich.	Mar. 13
Apr. 21	Post Office — Rhinelander, Wis.	Mar. 13
Apr. 23	Post Office—Gilmer, Tex.	Mar. 13
Apr. 23	Earth Work—St. Louis, Mo.	Mar. 27

MISCELLANEOUS

Mar. 27	Rebuilding Crib Bulkhead —New York, N. Y.	Mar. 20
Mar. 31	Boardwalk—Seaside, N. J.	Mar. 13
Mar. 31	Road Roller, Newark N. J.	Mar. 27
Mar. 31	Paving Material—St. Paul, Minn.	Mar. 27
Mar. 31	Road Oil—St. Paul, Minn.	Mar. 27
Apr. 2	Paving Material, Springfield, Ill.	Mar. 27
Apr. 3	Miscellaneous Supplies, Long Island City, N. Y.	Mar. 27
Apr. 3	Miscellaneous Supplies, New York, N. Y.	Mar. 27
Apr. 4	Miscellaneous Supplies, New York, N. Y.	Mar. 27
Apr. 8	Road Materials—Columbus, O. Adv. Mar. 13 and 20.	Mar. 20

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Rochester—City having plans prepared for 36 in. water main under Genessee River, south of Clarissa St. bridge, opposite McLean St. A. C. Poole, city engr.

Pa., Dubois—Water Comrs. approved plans for addition to waterworks system. About $100,000.

Ky., Paducah—City plans to issue $500,000 bonds to build waterworks system. L. A. Washington, city engr.

O., Toledo—Lucas Co. receives bids about May laying 7720 ft. 6 in. c.i. pipe. About $15,000. L. A. Boulay, co. engr.

O., Wauseon—City plans election about May 1, to vote on $170,000 bonds to build pipe lines and 80,000,000 gal. capacity impounding reservoir, also filtration plant, brick, steel and rein.-con. W. J. Sherman, 613 Nasby Bldg., Toledo, engr.

Mich., Bay City—City had revised plans and estimates prepared for improving waterworks system. About $1,000,000 bonds will be voted for project. R. C. Dawson, supt. waterworks. Burns & McDonnell, 400 Interstate Bldg., Kansas City, Mo., engrs.

Ia., Clarinda—City soon receives bids extending and improving waterworks system. About $75,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Jan. 2.

Kan., Lyons—City plans election in April to vote on $30,000 bonds to improve waterworks system. Noted Mar. 6.

Kan., Sharon Springs—See "Industrial Works."

S. D., Mitchell—City soon lets contract for improving waterworks system. About $100,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., consult. engrs. Noted Jan. 2.

N. D., Lakota—City soon lets contract building 2 concrete wells, 2 motor driven pumps, 2 pump houses, 1 electric transmission line, one 50,000 gal. steel tank on 100 ft. tower, 1 heating system for elevated tank, 28 hydrants, two 3 in. motors, also laying 26,201 ft. 6-8 in. c.i. pipe. E. A. Hughes, city aud.

Mont., Roundup—City having plans prepared for 500,000 gal. rein.-con. reservoir. F. Quinnel, city engr.

Tex., Eastland—City voted $100,000 bonds to build waterworks and sewerage systems. Noted Aug. 22.

Tex., Palestine—City plans to expend $10,000 to build waterworks. J. W. Tommons, city engr. Noted Nov. 21.

Okla., Cushing—City rejected bids improving waterworks system. About $150,000. Noted Dec. 5.

Okla., Newkirk—City plans election in May to vote on $80,000 bonds to extend waterworks system. H. G. Olmstead, city engr.

Okla., Wewoka—City rejected bids building extension to water-works system. Noted Mar. 6.

Okla., Woodward—City defeated $30,000 bonds for equipping water and light plant. Noted Feb. 6.

Wash., Bremerton—City receives bids about June building 7.5 mi. 20 in. wood pipe line from Wild Cat Lake to city line; also building equalizing basin, trestles, etc., and dredging portion of lake. About $120,000. Work involves 500 cu.yd. concrete. F. S. Hathaway, city engr.

Cal., Inglewood—City plans election soon to vote on $217,000 bonds to build waterworks system. Plans include wells, pumps, stand pipe, reservoir and distributing system, or purchase of pumping plant and distributing system of Inglewood Water Co. and extensions and improvements to same. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs. Noted Dec. 5.

Cal., Trona—Amer. Trona Corp. applied to State Water Comn. to appropriate water for domestic, mining and milling purposes. Plans include building tanks, reservoirs and pipe line 10½ mi. long. About $14,500.

Cal., Whittier—City plans election to vote on bonds to improve waterworks system. C. O. Trueblood, city clk.

Ont., Port Dalhousie—Village will retain engineer to make surveys and prepare plans for waterworks system.

BIDS DESIRED

N. Y., New York—Until Apr. 1, by N. J. Hayes, comr. water supply, gas and electricity, Municipal Bldg., completing abandoned contract for furnishing, delivering and laying 12 in. water main across East River from 140th St. to North Brother Island, and hauling and laying water mains in East 140th St. and on North Brother Island, Bronx Boro.

Pa., Bakerton (Elmora P. O.) — Until Mar. 31, by Bakerton Water Co., Bakerton, building complete storage water reservoir, with all accessories, consisting of 17,000 cu.yd. embankment and 1200 cu.yd. concrete masonry, 1½ mi. east of here; also 6600 lin.ft. 8 in. c. i. pipe water line from gate house of dam to Reed St., in Bakerton, with specials, gates, hydrants, etc. J. M. Bradley, pres.; advertised in this issue.

O., Akron — Apr. 18, by H. S. Morse, dir. pub serv., Delaware Bldg., constructing 48 in. pipe line between Kent and distributing reservoir here. Work involves (1) furnishing 4400 tons and 170 tons 36 in. c.i. pipe and 230 tons special castings; (2) laying 2.3 mi. 48 in. and 0.1 mi. 36 in. c.i. pipe; (3) 2.3 mi. 48 in. steel pipe and 0.1 mi. 36 in. c.i. pipe; advertised in this issue.

O., Freeport—Until Apr. 15, by Village, rebuilding water system, involving 8510 ft. 4-6 in. c.i. and 1250 ft. 2½ in. w.i. pipe. About $15,000. W. J. Sherman, 613 Nashby Bldg., Toledo, engr.

Neb., Scottsbluff—Until Apr. 1, by city, improving waterworks system, involving 166 lin.ft. 14 in. and 786 lin.ft. 12 in., class "C" c.i. water mains, 4000 lb. c.i. specials, one 14 in. and two 12 in. double gate valves.

Mo., Kansas City—Until Apr. 9, by J. R. Samuel, city purch. agt., building and completing 15,000,000 gal. storage basin at Wabash and St. John Aves. W. C. Goodwin, ch. engr., advertised in this issue.

Okla., Duncan—Until Apr. 1, by city, improving waterworks system. Work involves building power plant and 4 mi. 4-6 in. mains. Former bids rejected. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Dept. Pub. Wks. let contract to C. Russo, Hemlock St., West Roxbury, $4160, laying water mains in Baker, Catherine, Florence, Robin, Swallow and Middleton Sts., Whipple and Glenwood Aves., Bellvista Rd. and Larmartine Ct., Hyde Park Twp., involving 2720 ft. 6-12 in. c.i. pipe, 125 cu.yd. concrete, 150 cu.yd. earth excav., also in Dudley St., Dorchester Twp., involving 2900 ft. 4-16 in. c.i. pipe, 120 cu.yd. earth and 10 cu.yd. rock excav., $1970.

Conn. Hartford—Comrs. Water Bd. received bids building slow sand filtration plant, from Foundation Co., 233 Bway., New York City, $627,508; F. T. Ley & Co., 495 Main St., Springfield, Mass., $632,620; H. E. Fox Constr. Co., Inc., 81 East 125th St., New York City, $668,956. Noted Mar. 6.

★Conn., Waterbury—See "Miscellaneous."

★Mo., Carrollton—Water, Light & Transit Co. let contract building filtration plant to E. L. Harper, Kansas City. Work involves building two 70 x 90 ft. settling basins, 9 ft. deep with 380,000 gal. capacity each, also two 40 x 40 ft. smaller basins with 45,000 gal. capacity each and 2 clear water wells. Noted Feb. 20.

Sewers

PROPOSED WORK

Mass., Fairhaven—Town receives bids about April building sewers in various streets. About $10,000. C. E. Swift, town clk.

N. Y., Utica—J. Kemper, city engr., prepared plans for sewerage system and sewage disposal plant. Project involves 8-12 in. sewers in North Genesee St., Riverside Dr., Trenton, Walker and Herkimer Rds. and Auert Ave.; also 1860 ft., 15-18 in. main sewer from Genessee St. across private right-of-way to disposal plant at north side of barge canal, main tank will be 28 x 42 ft. with sludge tanks at either end.

N. J., Lyndhurst—Town Council plans to build surface-water sewer in Valleybrook Ave. About $20,000.

Fla., Pensacola—City plans to sell $75,000 bonds to install sanitary sewerage system. Total cost, $95,000; about $20,000 now available.

O., Silver Lake (Bellefontaine P. O.)—City receives bids in April building sewage disposal plant. About $26,000. C. W. Courtney, Leader News Bldg., Cleveland, engr. Noted Mar. 6.

O., Toledo—Comrs. Lucas Co. receive bids about May, building Sanitary Sewer No. 34, in Overland Heights involving 6300 ft. 8 in. vitr. pipe. About $15,000. L. A. Boulay, co. engr.

O., Toledo—City receives bids about May 1, building Creek Sewer, 10 mi. long. Work involves 6 mi. 48-72 in. sewer pipe. Bids will be received on all types of construction. H. C. McClure, 229 Valentine Bldg., Toledo, engr.

Mich., Oakwood (Oxford P. O.)—Village election Apr. 1, to vote on $75,000 bonds to build 15 in. vitr. sewers in various streets. H. L. Russell, 505 Moffat Bldg., Detroit, engr.

Kan., Douglas—City having plans prepared building 5280 ft. 12 in., 3000 ft. 10 in. and 26,800 ft. 8 in. sewers in various streets. E. L. Pratt, city clk. F. E. Devlin, engr.

S. D., Aberdeen—City had preliminary plans prepared building storm sewers. Bonds for $350,000 will be voted for work. F. Le Cocq, city engr. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., consult. engrs.

Sewers (Continued)

N. D., Lakota—City soon lets contract building septic tank, 24,990 ft. 8-12 in. sewer pipes and 54 manholes, etc., in Sewer Impvt. Dist. No. 1. E. F. Hughes, aud.

Mont., Billings—City plans to build sanitary sewers to Suburban Homes and Yellowstone additions. E. M. Sneckenberger, city engr.

Mont., Great Falls—City having estimates made and plans prepared by L. B. Evenson, city engr., building sanitary sewer in 4th Alley south, from 16th to 26th Sts.

Mo., St. Joseph—City plans election about May 1, to vote on $700,000 bonds to extend main sewers in various streets. H. Johnson, city engr.

Tex., Denton—City will issue $10,000 bonds to extend sewers in various streets. Noted Feb. 20.

Tex., Eastland—See "Water-Works."

Tex., Ranger—City retained H. E. Elrod Co., engrs., Interurban Bldg., Dallas, to prepare plans for sewers, paving, and other engineering works necessary to improve city. About $750,000.

Ont., Newmarket—City plans to build about 30,000 ft. sewers. Cost $150,000. James, Loudon & Hertzberg, Ltd., Excelsior Life Bldg., Toronto, engrs.

Ont., Strathroy—City plans to build sewers in various streets. About $15,000. James, Loudon & Herzberg, Excelsior Life Bldg., Toronto, engrs. .

BIDS DESIRED

R. I., Pawtucket—Until Apr. 17, by Comr. Pub. Wks., building 1200 ft. segmental block sewer, 33 x 45 ft. diam.; 160 ft. 20 in. brick sewers and 2000 ft. 10-24 in. sewer; also for 1840 ft. 60 in., 913 ft. 50 in. and 620 ft. 44 in. brick sewers, lock joint pipe, segmental block or monolithic concrete in excavations from 13-25 ft. I. Gill, city engr.

N. Y., Albany—See "Streets and Roads."

N. Y., Brooklyn—Until Apr. 2, by E. Riegelmann, boro. pres., building sewer in Remsen Ave. from Ralph Ave. to and across East New York Ave. and Utica Ave. from East New York Ave. to Carroll St.

N. J., Nutley (Newark P. O.)—Until Apr. 1, by S. Blum, town clk., furnishing labor and material building vitr. pipe sanitary sewer in Centre St. from Washington Ave. to Franklin Ave. Work involves 8572 ft. trench, various depths, 8200 ft. 6 in. vitr. pipe and 2 manholes; advertised in this issue.

N. J., Trenton—Until Apr. 4, by city, laying 3000 ft. 8 in. sewer pipe in Commercial Ave. About $10,000. A. C. Gregory, 907 Bellevue Ave., engr.

O., Cleveland—City is receiving bids building vitr. pipe sewers in Gifford Ave. from West 45th to West 53rd St., involving 1890 ft. 12 in. pipe; Hood Ave., from West 21st to West 28th Sts., 1460 ft. 12, 15 and 18 in. pipe; West 47th St. from Clark to Oakley Aves., 810 ft. 12 and 15 in. pipe; West 28th St., from Montclair to Natchez Ave., 790 ft. 12 in. pipe; West 18th St. from Forestdale to Willowdale Aves., 330 ft. 12 in. pipe; Nine Mile Creek from East 152nd St., west, 30 ft. 12 in. pipe, 430 cu.yd. Class "A" concrete, 37,000 lb. reinforcing steel, 460 cu.yd. excav., and 3800 sq.ft. brick paving; Nottingham Rd. from St. Clair Ave. to New York Central and St. Louis Ry., Plan "A," 390 ft. 12, 18 and 20 in. pipe; West 32nd St. from Barber Ave. to west end, 260 ft. 12 and 15 in. pipe; Joy Court from West 30th to West 32nd St., 330 ft. 12 in. pipe; West 21st. St. from Saratoga Ave. to city limits, 420 ft. 12 and 15 in. pipe. R. Hoffman, city engr.

O., Cleveland—Until Apr. 22, by Comr. Purchases and Supplies, 229 City Hall Bldg., building sewage treatment works at the westerly site. Work includes building grit chambers, 2-story settling tanks, outfall conduits, etc., and involves 15,000 lin.ft. wooden piling, 30,000 cu.yd. excav., 15,000 cu.yd. concrete, 850 tons steel reinforcement, 60 tons c. i. piping, etc. E. Shattuck, comr.

Ia., Mason City—Until Apr. 2, by city, building 2800 lin.ft. 10 and 4450 lin.ft. 12 in. sanitary sewers. J. H. McEwen, city clk.

Minn., St. Paul—Until Mar. 31, by H. W. Austin, purchasing agt., City Hall, furnishing labor and material building Portland Ave. outfall sewer from Mississippi River to point 808 ft. east; sewer in Somerville Ave. from Mississippi River to point 1420 ft. northeasterly.

Cal., San Bernardino—Until Apr. 4, by J. H. Osborn, city clk., building 8 in. vitr. pipe sewer, 2 brick manholes, flush tank and 25 connecting sewers in 2nd St. between E and Mt. Vernon Aves. C. E. Johnson, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., received bids Mar. 24, (1) building sewers in Grand St., (2) Ralph St., (3) Tompkins St., (4) 91st St., (5) Atlantic Ave., (6) Syossett St., (7) temporary drain in Genessee St., from A. Paino, 2622 Bath Ave., Brooklyn, (1) $18,562, (3) $3980; C. Petracco, Brooklyn, (1) $190,480, (2) type A, $10,869; type B, $13,298, (4) $34,364; T. Welch, (2) type A, $11,401; type B, $12,626 (3) $2498; Murphy Bros., (4) $29,571, (6) $3178; Ajex Drainage Contg. Co., 60 Herkimer St., Brooklyn, (5) $74,861; Roggi & Locke, (5) $89,521; J. H. Johnson, (6) $3370; Savero & Britton, $94,084; U. S. Drainage & Irrigation Co., $115,850. Noted Mar. 20.

N. J., Trenton — City received bids building sewer in Riverside Heights from Log Basin to Brookville from A. De Ludia, 52 Bayard St., $18,871; G. Boscorelli, Trenton, $19,399; R. F. Reilly, Easton, Pa., $20,754. Work involves 5660 ft. 8 in., 2230 ft. 6 in., 960 ft. 10 in. vitr. pipe, 130 ft. 6 in. c.i. force main, 180 ft. 6 in. wye branch, 2 pumps, house connections and 22 manholes.

★N. C., Durham—City let contract building sanitary sewers in Main St. and Alston Ave., to S. N. Slade, $33,907; Neuse River outfall sewer, to R. G. Lassiter, Oxford, $21,326. Both vitr. pipe. Noted Feb. 27.

★Fla., Jacksonville—City rescinded contract let to Flynn & Co., building sewers, and relet same, to Bryan & Co., Phelps St., $52,394.

★O., Cleveland—City let contracts building sewers in (a) St. Mark Ave., (b) Linndale Ave., (c) Mulberry Ave., (d) Winslow Ave., (e) West 110th St., (f) West 117th St., (g) Washington Ave., (h) Fortune Ave., (i) East 143rd St., (j) East 24th St., (k) Governor Ave., to N. Iafornaro, 3218 Murray Hill Rd., (a) $3183, (h) $3157; Amata Constr. Co., 343 Arcade, (b) $3116; G. Sam, 2418 Central Ave., (c) $1127, (d) $1582; Haddad & Mahl, Schofield Bldg., (e) $18,000; A. Marra, 608 Park Bldg., (f) $14,984; Joseph & Kalihl, 1200 Bolivar Rd., (g) $2208; Gallagher Burke Co., 1339 Irene Ave., (i) $45,890; Gaune Constr. Co., 10510 Euclid Ave., (j) $15,049; H. Hahn, 2973 East 78th St., (h) $2226. Noted Mar. 20.

★Mich., Detroit—Bd. Pub. Wks. let contract building 2859 ft. Erwin Ave. Pub. Sewer in Burns, Peter Hunt and Erwin Aves. from Harper to Edgewood Aves., to R. D. Baker, 1454 Penobscot Bldg., $41,711; 7956 ft. Dexter Blvd. Pub. Sewer from Joy Rd. to Davidson Ave., to W. Porath, 1410 West Grand Blvd., $136,539. Noted Mar. 20.

★Ia., Davenport—City let contract building 8745 ft. sewer in Monroe St. from Spring to Judson Sts., Rose's, Martzahn's and Honersite Additions, to J. Bredow, 822 Gaines St., $12,655.

★Ia., Tama—City let contract to Dearborn Constr. Co., Waterloo Savings Bldg., Waterloo, for 600 ft. 15 in. pipe, at $1.15 per ft.; 10,900 ft. 12 in., $0.97 per ft., and 3185 ft. 10 in., $0.89 per ft.

Bridges

PROPOSED WORK

N. Y., Watertown—City receives bids in May building lower deck of Court St. bridge over Black River between Jail Hill and Leray St. About $150,000. E. W. Sayles, city engr. Noted Jan. 9.

N. J., Newark—See "Streets & Roads."

Ga., Albany—See "Streets and Roads."

Fla., Ft. Pierce—See "Streets and Roads."

Ala., Montgomery — See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Columbus—See "Streets and Roads" under Ohio.

Ia., Des Moines—Comrs. Polk Co. will let contract about Apr. 1 building concrete bridges. About $50,000. C. Coykendall, co. engr.

Kan., Hutchinson—City election Apr. 1 to vote on $50,000 bonds to build several bridges. E. Metz., city clk.

Mo., Jefferson City—Little River Diversion of St. Francis D.D., Cole Co., plans to build 14 bridges. About $500,000. A. Speer, Bollinger, and G. Houck, Cape Girardeau, representatives. Noted Jan. 23.

Tex., Livingston—Comrs. Polk Co. plan election in April to vote on $800,000 bonds to build bridge across Trinity River at Swartout; also build 42 mi. hard surface road, gravel or crushed rock.

Utah, Provo—See "Streets and Roads."

Utah, Salt Lake City—Salt Lake Co. plans to build five 150 ft., rein.-con. bridges over Jordan River. Cost between $10,000 and $15,000 each. G. G. Bywater, Co. surv.

Wash., Walla Walla—Walla Walla Co. election Apr. 8, to vote on $125,000 bonds to build concrete bridge over Snake River between Burbank and Pasco. Total cost, $250,000. Franklin Co. will bear other half of cost.

Ore., The Dalles—City soon lets contract building rein.-con. viaduct 100 ft. long, 20 ft wide, with 3 bents, middle 36 ft., two ends 32 ft. Work involves 2760 cu.yd. embankment in approaches. T. A. Garrow, Northwestern Bank Bldg., Portland, consult. engr.

Cal., Los Angeles—See "Bridges."

Que., North Temiskaming—Dept. Pub. Wks., Ottawa, soon receives bids building superstructure and repairing substructure of bridge here. About $70,000. D. Laphew, c/o Dept. Pub. Wks., engr.

Ont., Bayham—Elgin Co. soon lets contract building 2 rein.-con. highway bridges, 40 ft. and 60 ft. long respectively. About $15,000. J. A. Bell & Sons, St. Thomas, engrs.

Ont., Ottawa—Dept. Pub. Highways, Toronto, receives bids in summer building 4 concrete arch bridges and 8 steel bridges. G. Hogarth, c/o Dept. Pub. Wks., engr.

BIDS DESIRED

O., Toledo—Until Apr. 22, by Comrs. Lucas Co. building 15 bridges, involving 740 cu.yd. rein.-con., 1750 cu.yd concrete, 36 tons steel. About $35,967. Plans include 66 ft. steel truss bridge, cost $9,000, several beam and grinder spans, $2,800, etc. C. L. Rood, co. engr.

Ill., Ottawa—Until Apr. 4, by G. Farnsworth, supt. highways, La Salle Co., building four 55 ft. spans rein.-con girder or arch bridge on Sheridan St., involving 1026 cu.yd concrete for girder and 1099 cu.yd. concrete for arch, 105,930 lbs. steel for girder and 40,260 lbs. steel for arch. About $23,450 and $21,050 respectively.

N. D., Hillsboro—Until Apr. 8, by Comrs. Traill Co., building new bridges and repairing old ones during 1919. G. D. Olson, co. aud.

Mo., Kansas City—Until Apr. 1, by Bd. Park Comrs., building rein.-con. bridge carrying Cliff Drive over Chestnut Ave. Trafficway, involving 100,000 lb. reinforcing metal, 1850 cu.yd. concrete in abutments, 846 cu.yd. concrete in arch, 30 cu. yd. concrete in stairway, 433 lin.ft. handrail, 3700 sq.ft. surface finish, 258 sq.yd. stone veneer. R. W. Waddell, acting city engr.

Reinforced Concrete

PROPOSED WORK

Ga., Albany—See "Streets & Roads."

O., Dayton—See "Buildings."

Ill., Chicago—See "Buildings."

Ia., Davenport—See "Industrial Works."

Wash., Walla Walla—See "Bridges."

Ore., The Dalles—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Falmouth—City plans to rebuild Grand Ave., macadam or similar material. About $40,000. W. H. Hewins, town clk.

Streets and Roads (Continued)

Mass., Mattapoisett—Town plans to expend $15,000 to macadamize roads. W. E. Bowman, chn. selectmen.

Rhode Island — State Bd. Pub. Rds., Providence, plans to build 4 mi. Post Rd. from Westerly to Narragansett Pier, 18 ft. wide, bituminous. About $70,000. J. W. Patterson, state engr.

R. I., North Scituate—Water Supply Bd., Providence, having plans prepared by F. E. Winsor, engr. water supply bd., Providence, building 8000 ft. road from here to Plainfield Pike. About $30,000.

Conn., Milford—City Council plans to expend $250,000 to pave various streets. M. J. Cheney, chn.

N. Y., Auburn—City having plans prepared by T. Bergan, city engr., paving Swift and Fort Sts.; also Orchard St. from James to Division Sts., and Fulton St. from Franklin St. to Standart Ave.; repaving Clark St. from State St. to Lehigh Valley R.R. crossing and State St. from bridge at New York Central crossing to Seymour St.

N. Y., Geneseo—Village plans to appropriate $16,000 to improve roadway of Center St., between Mill and Main Sts., tarvia bound macadam, cement gutters, curbing, etc. M. De Munn, street supt.

N. Y., Schenectady—City having plans prepared by L. B. Sebring, city engr., extending Brandywine Ave. across Cotton Factory Hollow to Michigan Ave.

N. J., East Orange—City plans to curb, gutter and lay Telford pavement on Everett St., also Edgewood and Crescent Rds.

N. J., Newark—Bd. Freeholders Essex Co. soon lets contract resurfacing with 2 in. Warrenite, Watchung Ave. from Upper Mt. Ave., Montclair, through Glen Ridge to East Passaic Ave., Bloomfield. About $85,000. F. A. Reimer, co. engr.

N. J., Newark—Bd. Freeholders Essex Co. plans to pave Laurel Ave. from Eagle Rock Ave., West Orange, to Mt. Pleasant Ave., Livingston. About $80,000. Project includes building 2 bridges.

N. J., North Bergen—Town plans to improve Bway from 27th St. to North Hudson Park. About $40,000. T. A. Harmon, Weehawken, engr.

N. J., North Bergen—Town plans to improve 30th St. from Bergenline Ave. to Hudson Blvd. E. About $30,000. T. A. Harmon, Weehawken, engr.

Pennsylvania — State Highway Comn., Capitol, Harrisburg received no bids Mar. 20, building 8420 ft. Routes 239 and 536, vitr. brick block, Millville Boro., Columbia Co. L. S. Sadler, state highway comr. Noted Mar. 6.

Pa., Dubois—City voted $135,000 bonds to pave various streets and construct municipal building. Noted Feb. 6.

Pa., Pittsburgh — Comrs. Allegheny Co. soon receive bids building 2900 ft. Duncan Ave., 18 ft. wide and 5300 ft. Reuton Rd., Plum Twp., 16 ft. wide, telford macadam. R. V. Warren, co. engr.

Md., Baltimore—See "Miscellaneous."

Md., Baltimore—Comrs. for Opening Sts. plan to improve 225 blocks in Old Annex by grading, constructing armored concrete and redressed granite curb, sheet asphalt pavement over redressed and reset cobbles, sheet asphalt on 6 in. concrete base, and cement concrete, on following streets: 25th, Francis, Whitelock, McCulloh, 30th, 34th, Powers, 21st, 23rd Sts., Druid Hill, Maryland, Willington Aves., Gwynns Falls Pkway.; Dellwood, Morling, Conduit, Sycamore, Union and Mankin Aves., Vineyard Lane, Falls and Hillen Rds., 30th, 32nd and Jenifer Sts.; Independent, Frisby, Homestead and Wilson Sts., Cator, Maplewood, Ellerslie, Taylor and Guilford Aves., 28th, 34th, Lehman, Stafford, Lanvale, Grayson and Dukeland Sts., Garrison Lane, East Lynn, Warwick, Wheeler, Loretta and Lafayette Aves., Bloomingdale Rd.; Grayson, Grantley, Cheston, Laurens, Lynhurst, Allendale, Henderson, Ellamount and Morris Sts., Chelsea, Calvin Aves. J. H. Robinette, chn. About $853,000 available.

Md., Baltimore—Bd. Awards soon lets contract grading and paving, cement concrete, 1½ mi. alleys, 10 and 12 ft. wide, in rear of West Mulberry, West Fayette, East Clement, McElderry, North Carlton, West Franklin, North Lafayette, Greenwillow, Hoffman, Harvey, North Howard, East Fayette, West Lexington, East Preston, West Biddle, Brevard, North Chester, Cathedral, Division, Retreat, Sarah Ann, North Wolfe, Dolphin, Greenwillow, Walnut, East Madison, West Lanvale, Light and Richmond Sts., Druid Hill, North Carrollton, North Lafayette, Park, Woodbrook, Collington and Ashland Aves., also alley from Brexton alley and Park Ave. G. F. Wieghardt, engr.

Md., Baltimore—City Paving Comn. plans to improve about 20 mi. streets, involving grading, concrete armored curbing, paving, sheet asphalt, vitr. block, wood block and granite block redressed, cement concrete, all on 6 in. concrete base, as follows: Ann, Nanticoke, Carroll, Cleveland, Sargeant, Ward, Ostend, Wyeth, Mangold, Washington, Fort Henry, Weber, Gittings, Brickhead and Jackson Sts., Fort Columbia and Glyndon Aves.; Harvey, Byrd, Johnson, Gittings, Barney, William, Boyle, Heath, Cookside, Decatur, Clement, Beason, Woodall, Bloomsberry, Charles, Olive, Clarkson, Randall, Heath, Patapsco and Light Sts., Peach and Butler alleys; Williamson, Clement, Brickhead, Smallwood, Gilmor, Preston, Federal, Biddle, Cumberland, Friendsbury, Fleet, Hughes and Bentalou Sts., Plum alley, Fort Elwood, Luzerne and Milton Aves. R. K. Compton, 214 East Lexington St., ch. engr.

Va., Rocky Mount—City plans to pave 1½ mi. Main St., Floyd, Railroad and Claeborne Aves, macadam.

W. Va., Clarksburg—Comrs. Harrison Co. soon let contract grading and placing wearing surface on 6 sections of Class A roads, 10½ mi. long, 24 ft. wide with 16 ft. surface, involving 50,000 sq.yds. vitr. brick on 5 in. concrete base, 41,000 sq.yds. concrete, 63,000 lin.ft. curbing, and 72,000 cu.yd. earth excav. About $280,000. J. R. Wilson, co. engr.

W. Va., Lewisburg—Greenbrier Co. election Apr. 12, to vote on $126,000 bonds, which will be supplemented with Federal and state aid funds, to pave and grade 18 mi. road, 12 ft. wide, and build bridges in Meadow Bluff Dist. Total cost, $199,375. G. H. Hill, Charleston, engr.

N. C., Kinston—Lenoir Co. election Apr. 15, to vote on $2,000,000 bonds to build roads.

N. C., Rutherfordton—Comrs. Rutherford Co. plan to issue $25,000 bonds to improve Charlotte - Asheville Highway. Federal Government will appropriate like amount.

N. C., Shelby—Cleveland Co. election Apr. 14, to vote on $70,000 bonds to build roads.

S. C., Conway—Comrs. Horry Co. plan election to vote on $200,000 bonds to build roads.

S. C., Georgetown—Comrs. Georgetown Co. plan election to vote on $125,000 bonds to build roads.

Ga., Albany—Dougherty Co. plans election to vote on $350,000 bonds to pave various roads and build concrete bridge across Flint River. If election carries State Highway Comn. will appropriate like amount.

Ga., Dalton—Comrs. Whitfield Co. will receive bids in about 90 days for grading and chert surfacing 11 mi. roads, to include drainage structures and overhead crossings. Cost between $80,000 and $90,000. Johnson & Morgan, 500 Forsyth Bldg., Atlanta, engrs. Noted Mar. 13.

Fla., Ft. Pierce—Comrs. St. Lucie Co. soon receive bids improving highway between Ft. Pierce and Sebastian and building bridge over Sebastian River. Bonds for $50,000 sold for project.

Fla., Quincy—City plans election soon to vote on $40,000 bonds to pave various streets.

Fla., Winter Park—City plans to pave various streets. Cost $60,000; $30,000 of which will be borne by property owners.

Ala., Montgomery—Bd. Revenue, Montgomery Co. voted $50,000 bonds to build roads and bridges. U. S. Government will be asked to appropriate like amount.

Miss., Charleston—Tallahatchie Co. voted $100,000 bonds to build Jefferson Davis Highway, in Beats 1, 2 and 3.

Miss., Natchez—Bd. Superv. Adams Co. plans to issue bonds to complete 3 highways to connect with Franklin, Jefferson and Wilkinson Counties. Federal Government will appropriate $90,000 toward cost.

La., Cameron—Cameron Parish plans election to vote on $230,000 bonds to build hard surfaced roads in Dist. No. 3, $100,000 bonds for roads in Dist. No. 4 and $60,000 bonds for roads in Dist. No. 5. T. H. Mandell, Frank Bldg., Lake Charles, engr.

La., Shreveport—Caddo Parish Police Jury rejected bids for resurfacing 15 mi. gravel highway. About $12,000. Noted Feb. 13.

Ohio—State Highway Commn., Columbus, plans to build roads in following counties:

Knox Co., 4.2 mi. Columbus-Wooster Rd., grading, paving and building culverts, cost $173,000.

Delaware Co., 6.2 mi. Columbus-Sandusky Rd., grading, paving and building culverts, $217,000.

Union Co., 8.3 mi. Columbus-Marysville Rd., grading, paving and building culverts, $296,366.

Crawford Co., 2.8 mi. Galion-Bucyrus Rd., grading, paving and building bridges and culverts, $134,000.

O., Cincinnati—Comrs. Hamilton Co. plan to improve Harrison, Cleves-Warsaw and Glendale-Milford Pikes, also Dugan Gap and Montauk Rds. About $850,000. State will appropriate $350,000 toward cost. W. Boeh, co. surv.

O., Columbus—City plans to pave 2nd alley north of Main St. from Abbott to Stottard Aves.; Hood alley from Sparrow alley to Parsons Ave.; alley west of Morrison Ave. from Bryden Rd. to alley north of Main St. and 20th St. from Bryden Rd. to Rich St. H. Maetzel, city engr.

O., Columbus—Comrs. Franklin Co. soon receive bids grading, draining, paving with brick and building bridges on 4½ mi. road through Linden. About $300,000.

O., Toledo—City receives bids about May 15, grading, dredging, curbing, paving and building sewers and two bridges, on extension of Summit St. across Swan Creek. About $560,000. H. C. McClure, 229 Valentine Bldg., Toledo, engr.

O., Toledo—City receives bids about May 1, grading, curbing and paving 1494 ft. Burnham Ave. from Sylvania to Maple Aves., 24 ft. wide, involving 4300 sq.yd. paving on 6 in. concrete base, 3000 lin.ft. stone curbing and 2345 cu.yd. earth excav., cost, $28,815; 1 mi. Adams St. from Summit St. to Ashland Ave. involving 25,000 sq.yd. pavement on 7 in. concrete base, including tearing up existing 40 ft. stone block on sand foundation, resetting stone curb and paving to width of 40 ft., $130,000. Bids will be received on all types of pavement.

O., Toledo—Lucas Co. plans to drain, grade, curb and pave 1.5 mi. Joffre, Calumet and Carrolton Aves., 24 ft. wide, involving 21,450 sq.yd. vitr. brick on concrete base and 15,400 lin.ft. stone curb; 2.5 mi. Starr Ave., 16 ft. wide, concrete; 1 mi. Wheeling St., 16 ft. wide, concrete; 1½ mi. Suder Ave., 16 ft. wide, concrete; 2.01 mi. Seamen St., 16 ft. wide, 2 course waterbound macadam. C. L. Read, co. engr.

O., Toledo—Lucas Co. having plans prepared grading, draining, curbing and paving 5740 ft. Mt. Vernon Ave., 21 ft. wide; 2470 ft. Richmond Rd., 24 ft. wide; 2558 ft. Potomac Dr. 24 ft. wide; 2500 ft. Shenandoah Rd., 24 ft. wide, bituminous concrete on concrete foundation, concrete curbing and guttering; grading paving and curbing Upton Ave. from city limits to Central Ave., 1 mi. 16 ft. wide and ½ mi. 24 ft. wide, involving 7100 sq.yd. vitr. brick, 9500 sq.yd. concrete, 5500 lin.ft. stone curbing; tearing up existing 16 ft. bituminous bound macadam on 4.86 mi. River Rd. and grading, curbing and paving with either concrete, brick or asphaltic concrete, 27-36 ft. wide. C. H. Rood, Toledo, engr.

Mich., Detroit—City Council authorized Comr. Pub. Wks. to prepare estimates for material as may be determined upon to pave 4500 ft. Holmur Ave. from Grand River Ave. to Joy Rd.; 2000 ft. Radford Ave. from Grand River Ave to Quincy Ave. and Distel Ave. from Fort to Oliver Sts. C. W. Hubbell, city engr.

Streets and Roads (Continued)

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving Huron St. from Ottawa to Bagg Sts., 20 ft. wide, cost $11,970; Alexandarine Ave. from Duboise St. to McDougal Ave., 26 ft. wide, $29,013; Leland St. from St. Aubin Ave. to Chene St., 26 ft. wide, $17,043; Fulton St. from Wabash R.R. to end of street, 26 ft. wide. $16,356; Vancourt Ave. from Warren to Tireman Aves., 26 ft. wide, $40,796; Military Ave. from Plumer to Federal Aves., 26 ft. wide, $8440; Gartner Ave. from Beard St. to Lawndale Ave., 26 ft. wide, $59,220, all asphaltic concrete (natural lake asphalt) on concrete base, Berea or Medina curbing; Gould St. from Crossley to Anderson Ave., 20 ft. wide, brick on concrete base, $3306; Longfellow Ave. from Linwood to Lawton Ave., 26 ft. wide, asphaltic concrete, $18,963. C. W. Hubbell, city engr.

Illinois—State Highway Comn., Springfield, plans to build State Rd. east of Sullivan, Moultrie Co., 10 or 16 ft. wide, Portland cement, cost $11,000; State Rd. north of Pipe City, Ford Co., 10 ft. wide, Portland cement, $17,000. H. E. Bilger, Springfield, rd. engr.

Illinois—State Highway Comn., Capitol, Springfield, soon receives bids building 1783 ft. State-aid Rd., Sect. E., 10 ft. wide, Greenville Twp., Bond Co., involving 2120 sq.yd. vitr. brick on 5 in. concrete base, 3000 cu.yd. excav., 93 cu.yd. concrete in culverts and bridges, cost $10,600; 11,700 ft. Watseka-Gilman Rd., 10 ft. wide, Watseka Twp., Iroquois Co., involving 13,000 sq.yd. concrete, 4747 cu.yd. excav., 82 cu.yd. concrete in culverts and bridges, $37,000. H. E. Bilger, Springfield, rd. engr.

Illinois—State Highway Comn., Springfield, receives bids in April building and improving about 90 mi. Lincoln Highway, 16 and 18 ft. wide, either brick, Portland cement, concrete or bituminous concrete; 50 mi. Dixie Highway, 16 and 18 ft. wide, either brick, concrete or bituminous concrete. Work will be divided into 6-7 mile sections for contract purposes. H. E. Bilger, Springfield, rd. engr. Noted Jan. 9.

Ill., Bellville—Bd. Supervs. St. Clair Co. receives bids in April resurfacing 7300 ft. Shiloh-O'Fallon Rd., Sect. L.15 d., 16 ft. wide, involving 12978 sq.yd. waterbound macadam, 995 cu.yd. earth excav., 3400 tons novaculite macadam. About $13,600. C. O. Thomas, co. engr.

Ill., Havana—Bd. Supervs. Mason Co., plans to sell $55,000 bonds Apr. 1, to build 2.3 mi. Springfield-Peoria Rd., 16 ft. wide, cement, concrete or brick. H. V. Schoonover, co. supt. highways.

Ill., Moline—City soon receives bids paving 15th St. from 3rd to 25th Aves. About $40,000. L. Payton, city engr. preparing plans.

Ill., Springfield—Comrs. Sangamon Co. voted Mar. 13, to sell bonds to build South 6th St. Rd. cost $132,000, Beardstown Rd., $132,000, Peoria Rd. $95,300 and Chatam-St. Louis Rd., $139,700, brick or concrete, 16-18 ft. wide. E. H. White, co. supt. highways.

Wis., Appleton—Comrs. Outagamie Co. soon lets contract grading, draining and surfacing with concrete .84 mi. Appleton Brickyard Rd., 16 ft. wide involving 2400 cu.yd. grading and 7200 sq.yd. 8 in. concrete, cost $17,000; 3.03 mi. Hortonville Appleton Rd., 16 ft. wide, 9540 cu.yd. grading and 28,406 sq.yd. 8 in. concrete, $56,000; 2.5 mi. Black Creek Appleton Rd., 16 ft. wide, 7776 cu.yd. grading and 23,375 sq.yd. 8 in. concrete, $50,000. Wisconsin Highway Comn., Madison, engrs.

Ia., Adair—City receives bids about Apr. 15 for paving 50,000 yd. and curbing and guttering 25,000 ft. T. S. De Lay, Creston, engr.

Ia., Davenport — City instructed R. E. Sawistowsky, city engr. to prepare plans paving alley between Gaines and Brown St from 13th to 14th Sts., alley between 6th and 7th St. from Fillmore to Ainsworth Sts., alley in block 16, McClellan Heights between Mueller and Forest Rd. alley from Ash to Vine Sts. between 6th and 7th Sts., alley between Iowa and LeClair Sts., from Central Park Ave. to Columbia Ave., alley between 14th and 15th Sts., from Arlington to Bridge Aves., Jackson Ave. from Lincoln Ave. to 116 ft. west of Park Court, Lincoln Court from Newbury St. to Hadlai Heights and Telegraph Rd. from Clark to Mary Sts. Noted Jan. 30.

Ia., Des Moines—Comrs. Polk Co. will let contract about Apr. 1, grading 35 mi. road. Cost, $0.48 per yd. C. Coykendall, co. engr.

Kan., Atchison—Atchison Co. plans to spend $2,000,000 for hard surfacing roads.

Neb., Lincoln—City soon lets contract paving 1800 ft. 26th St., 30 ft. wide, Dist. 299, and resurfacing 2000 ft. 17th St., 40 ft. wide, Dist. 71. About $31,500. Noted Mar. 20.

N. D., Williston—Comrs. Williams Co. plan to expend $60,000 to build roads. M. Aaen, co. aud.

Mont., Billings—City plans to pave Custer and Terry Aves., Dist. No. 168, totaling 25,000 sq.yd. About $92,000. E. M. Sneckenberger, city engr.

Mo., Eldorado Springs—Eldorado Springs Special Rd. Dist., Cedar Co., voted to issue $50,000 bonds to build rock road. H. C. Young, Eldorado Springs, engr.

Mo., Kansas City—Jackson Co. having estimates made by O. C. Sheley, co. highway engr., for macadamizing 2 mi. Sugar Creek and Cement City Rd.

Mo., Kansas City—Park Bd. plans to convert Brush Creek Park, which is irregular shape and 36 acres in extent, into parkway and Boulevard. R. H. Waddell, acting engr.

Ark., Jonesboro—Bd. Comrs. Craighead Co. soon lets contract grading, draining and paving with macadam and treating with bituminous surfacing 24.7 mi. Lake City, Nettleton and Bay Rd., Impvt. Dist No. 1, involving 189,750 gal. asphaltic oil, 249,755 sq.yd. bituminous, 167,000 cu.yd. grading, 1149 cu.yd. concrete in culverts and bridge abutments, and 50.8 ton steel for stringer and beam bridges. Klyce & Kackley, 721 4th and 1st Natl. Bank Bldg., Nashville, Tenn., engrs.

Ark., Walnut Ridge — Western Dist., Lawrence Co., soon receives bids building 110 mi. macadam roads. L. H. Kaiser, Smithville, secy. bd. comrs. Pritchett & Hight, Walnut Ridge, highway engrs.

Tex., Boerne—Comrs. Kendall Co., Precinct No. 1, election Apr. 12 to vote on $50,000 bonds to build roads.

Tex., Clarendon—City retained H. E. Elrod Co., engrs., Interurban Bldg., Dallas, to prepare plans for paving various streets. About $60,000.

Tex., Cleburne—Johnson Co. election Apr. 5 to vote on $50,000 bonds to build concrete road in Parker Dist.

Tex., Cuero—Comrs. Dewitt Co. plan to build 12½ mi. road, tarvia top. About $80,000 available.

Tex., Denton—City will issue $100,000 bonds to improve various streets. Noted Feb. 20.

Tex., Denton—Comrs. Denton Co. voted $1,500,000 bonds to build State Highway from Roanoke to Dennison.

Tex., Eldorado—Comrs. Schleicher Co. plan to build 30 mi. 12 in. rock surface road. About $200,000. Election will be held Apr. 5 to vote on $125,000 bonds for project and Federal and State Aid will contribute $85,000.

Tex., Gainesville—Cooke Co. election Apr. 12 to vote on $1,500,000 bonds to build roads.

Tex., Gonzales—Gonzales Co., Dist. No. 2, voted $75,000 bonds to build section of Southern Natl. Highway.

Tex., Groesbeck—Comrs. Limestone Co., Willow Spring Dist. No. 13, plan election Apr. 19 to vote on $30,000 bonds to build roads; Thornton Dist. No. 14, $250,000; Groesbeck Dist. No. 15, $300,000.

Tex., Hillsboro—Comrs. Hill Co., Osceola Dist. No. 4, will vote Mar. 29 on $50,000 bonds to improve roads; Covington Dist. No. 5, April 5, on same amount. Noted Feb. 27.

Tex., Livingston—See "Bridges."

Tex., McKinney—City voted $50,000 to pave streets. C. Schulf, engr.

Tex., Ranger—See "Sewers."

Tex., Sherman—Comrs. Grayson Co. plan to vote on $70,000 bonds to build roads.

Tex., Vernon—Wilbarger Co. election Apr. 19 to vote on $1,500,000 bonds to build 89 mi. road.

Tex., Waxahacnie—City plans to spend $45,000 to pave streets. J. D. Kir[illegible], city engr.

Tex., Weatherford—City having plans prepared by H. F. Elrod Co., engrs., Interurban Bldg., Dallas, for paving various streets. About $180,000.

Okla., Miami—City passed ordinance to pave 33 blocks, concrete. About $175,000.

Colo., Denver—City plans to surface with smelter slag, sand gravel and loam Eastside Surfacing Dist. No. 1. About $43,059. J. A. Hunter, city engr.

Idaho—State Highway Comn., Capitol, Boise, plans to grade and surface 50 mi. highway through Mountain Home and Glenns Ferry Highway Dists. C. H. Allen, state rd. engr.

Idaho—State Highway Comn., Capitol, Boise, receives bids about May 15, grading and surfacing 30.5 mi. Federal aid road on North and South Highway from New Meadow to Whitebird. About $650,000. H. C. Allen, state rd. engr.

Idaho, Boise—City plans to pave 11th and 12th Sts. from Bannock to State Sts., and from Front St. to Citizens right-of-way. About $25,142. C. C. Stevenson, city engr.

Idaho, Idaho Falls—City receives bids about May paving 4 mi. various streets. About $200,000.

Utah, Provo—City plans to pave several blocks. About $55,000. C. R. Swan, city engr.

Utah, Provo—Provo Co. plans to issue $750,000 bonds to build roads and bridges.

Ariz., Clifton—Greenlee Co. Highway Comn. recommended building road between Morenci and Eagle River pumping station, cost, $40,000; building and repairing trails in Morenci, $15,000; highway from Buzzards Roost on Clifton-Duncan Rd. through Blackjack Gap to state line, $125,000. A. L. Terry, clk bd. supervs.

Washington—State plans election November 1920, to vote on $30,000,000 bonds to pave and build about 1400 mi. roads.

Wash., Bremerton—City receives bids in April paving 13,000 ft. 4th St. Park, Washington and Burwell Aves., 26-36 ft. wide, 1 course Portland cement concrete, etc., involving 28,000 cu.yd. grading, 30,000 ft. each of concrete curb and gutter, curb 6 and 8 in. thick, etc. F. S. Hathaway, city engr.

Wash., Montesano—Grays Harbor Co. plans election Apr. 15, to vote on $400,000 bonds to be added to state and Federal funds to build 11 mi. North River Rd., $100,000, 15 mi. Westport Rd. from South Aberdeen to Cohasset, $150,000; 36 mi. Olympic Highway, $900,000; 8 mi. Pacific Beach Rd. from Copalis Crossing to Aloha, $80,000; 27 mi. Quinault Rd. from Lake Quinault to Jefferson Co. line, $350,000; 10 mi. C. D. Hansen Rd., $60,000. Road and Bridge funds available, $250,000, state and Federal aid, $600,000, permanent highway fund, $250,000, 6 county district road funds, $140,000.

Oregon—State Highway Comn., Salem, having plans prepared paving road from Albany to Tangent, Linn Co.; 6 mi. road from Jefferson to Salem, Marion Co., grading road from Scappoose to McBride, Columbia Co.; Smith Hill grade from 8-5 per cent, Josephine Co.; 1 mi. road from Canyonville to Galesville, Douglas Co.; grading and graveling road from Echo to Morrow Co. line, Umatilla Co.; building overhead or underground crossing on Hood River-Mosier Sect., also Coyote Cut-off, Messner, Morrow Co.; paving 4 mi. road between Salem and Brooks, Marion Co., with Federal aid.

Oregon—State Highway Comn., Salem, receives bids about Apr. 1, improving road from South end of Youngs Bay drawbridge to Warrenton. Plans include lowering dike 3 ft. from Miles crossing to bridge. H. Nunn., engr.

Oregon—State Highway Comn., Capitol, Salem, plans to hard surface Wild Horse Rd. through Athena and Adams, Umatilla Co. connecting with Washington Highway.

Ore., Pendleton—Umatilla Co. voted $1,050,000 bonds for following highways; 10 mi. road from Havana to Helix $90,000; 8 mi. road from Pilot Rock to Nye, $20,000; 30 mi. road from Pendleton to Cold Springs, $185,000; 10 mi. road from Sunnyside to Umapine, $30,000; 11 mi. road from Pen-

Streets and Roads (Continued)

dleton to Pilot Rock, $70,000; 11 mi. road from Nye to Morrow Co., $15,000; state aid as follows: 40 mi. road from Pendleton to Morrow Co. line, state $240,000, county $250,000; 7 mi. road from Washington line to foot of Milton Hill, state $80,000, county $50,000; 35 mi. road from Pendleton to Union Co. line, state $60,000, county $100,000; 9 mi. road from Milton Hill to Weston, state, $87,000, county, $80,000; 7.3 mi. road from Athena to Eastland, state $70,000, county $65,000. 3.7 mi. road from Weston to Athena, state $39,000, county $30,000; Federal aid as follows: 45 mi. road from Nye to Grant Co., Federal aid $50,000, county $65,000. Noted Mar. 6.

Ore., The Dalles—City soon lets contract paving Union St from 10th to 14th Sts., 9th St. from Union St. to western city line, West 6th St. from Liberty to Lincoln Sts., West 7th St. from Lincoln to Garrison Sts., bitulithic on rock or concrete base and asphaltic concrete on concrete base. R. A. Garron, city engr. Noted Feb. 20.

Cal., Los Angeles—Bd. Pub. Wks. soon receives bids building 10 mi. Harbor Truck Blvd. to San Pedro Dist., 30 ft. wide, crushed rock foundation, concrete base, oil and screening surface. About $310,000. C. M. Hansen, city engr.

Cal., Los Angeles—Bd. Supervs., Los Angeles Co., will furnish material valued at $50,000 to build 14 mi. roads near Sierra Madre, concrete base, oil and screenings surface, concrete and corrugated iron culverts. Citizens organizing road district to carry out improvement. F. H. Joyner, co. highway engr.

Cal., Los Angeles—C. M. Hansen, city engr., submitted estimate to City Comrs. for grading and paving 4½ mi. scenic boulevard on Mt. Washington with concrete. About $67,000. Work involves concrete and corrugated iron culverts, etc.

Cal., Los Angeles—Bd. Pub. Wks. soon receives bids building 12 mi. highway from Lomita to San Pedro Harbor, Municipal Impvt. Dist. No. 7. About $199,647. Work involves 100,166 cu.yd. grading, $50,082; 477,834 sq.ft. crushed rock and concrete pavement, $106,222; 477,834 sq.ft. oil and screenings surface, $6594; 216,095 sq.ft. grading and oiling shoulders, $9292; culverts and bulkheads, $8426; bridge, $10,000, etc. A. C. Hansen, city engr. Noted Dec. 5.

Cal., Sacramento—City receives bids in April grading and paving 6850 ft. Franklin Blvd., from Y St. to city limits, 20 ft. wide, with 20 ft. strip of 5½ in. concrete, involving 15,300 sq. yd. concrete, 7000 cu.yd. earth excav., 1683 ft. 6 in. vitr. pipe, 411 ft. 8 in. vitr. pipe, 46 gutter drains, etc. F. C. Miller, city engr.

Cal., San Diego—City plans to grade and pave 10,500 ft. India, Pierce, California and Taylor Sts., La Jolla and San Diego Aves., 20 and 30 ft. wide, portland cement concrete base, 5 in. thick with bitulithic wearing surface, cost, $60,000; grading and paving 4800 ft. Jackdaw, Hunter and Hawks Sts., Avalon and Arcadia Drives, 30 ft. wide, 1 course Portland cement concrete base 4 in. thick with asphaltum and rock screenings wearing surface, $32,000. G Cromwell, city engr.

Cal., Selma—City plans to pave 1½ mi. business streets, concrete.

Quebec—Provincial Rd. Dept., Quebec, plans to gravel 22,025 ft. Grand Communication Rd., 20 ft. wide, in Chateauguay Co., St. Antoine Abbe Twp.; cost $27,000; 17,506 ft. Tulloghorum Rd., Chateauguay Co., St. Malachie d' Ormstorm Twp., $16,000; Monte des Boulax Rd., Lapraire Co., in St. Constan Twp., bituminous macadam (penetration method) 3 in. top course and seal coat, $20,000. A. Pardis, c/o Provincial Rd. Dept., engr.

Ont., Ottawa—Dept. Pub. Highways, Toronto, soon lets contract building 54 mi. Ottawa-Prescott Highway, 28 ft. wide, including 192 concrete culverts and 12 bridge abutements. Work involves 17,546 cu.yd. excav., 13,991 cu.yd. concrete, 16,590 lbs. cement and 70 tons steel. About $250,000. G. Hogarth, c/o Dept. Pub. Highways, engr. Noted Feb. 6.

Ont., Strathroy—City having plans prepared by James, Loudon & Hertzberg, engrs., 36 Toronto St., Toronto, laying bituminous pavement. About $50,000.

Ont., Toronto—Toronto & York Rds. Comn. soon lets contract building waterbound macadam road. About $60,000. E. A. James, 57 Adelaide St., engr.

Ont., Wellesley—Town soon receives bids paving Main St. About $15,000. Cost will be borne by town and Waterloo Co.

BIDS DESIRED

New Hampshire—Until Apr. 4, by State Highway Comn., Concord, resurfacing 5095 ft. Merrimack Valley Rd., 18 ft. wide, involving 10,190 sq.yd. bitumious concrete, 2 in. Modified Topeka asphalt on old macadam base. About $12,000. F. H. Colburn, State House, div. engr. Noted Mar. 13.

Rhode Island—Until Apr. 2, by State Bd. Pub. Wks., Providence, building 2.4 mi. state road, 18 ft. wide, in Smithfield and Gloucester Twps., involving 9250 cu.yd. excav., 3500 cu.yd. borrow, 500 cu.yd. ledge, 3450 cu.yd. stone fill, 3350 cu.yd. gravel foundations, 160 cu.yd. concrete masonry, 1500 sq.yd. rip-rap, 1100 sq.yd. cobble gutter, 2750 lin.ft. wooden guard rail, 6000 tons crushed stone, 26,000 sq.yd. Topeka bituminous concrete. J. W. Patterson, Providence, engr.; advertised in this issue.

R. I., Pawtucket—Until Apr. 15, by Comr. Pub. Wks., paving 10,500 sq.yd. Main St. and 7900 sq.yd. Prospect and School Sts., grouted granite blocks on concrete base. I. Gill, city engr.

R. I., Providence—Until Apr. 9, by Water Supply Bd., building 1.8 mi. road in Scituate Twp., Contr. 4, involving 12,000 cu.yd. excav., 2000 cu.yd. rock excav., 5000 cu.yd. borrow, 250 cu.yd. concrete masonry; 3.4 mi. road in Foster Twp., Contr. 7, 20,000 cu.yd. earth excav., 2000 cu.yd. rock excav., 10,000 cu.yd. borrow and 190 cu.yd. concrete masonry. F. E. Winsor, 661 Westminster St., ch. engr.; advertised in this issue.

N. Y., Albany—Until Apr. 7, by Bd. Contr. & Supply, 91 State St., improving Ridgefield St., involving 6000 cu.yd. excav., 1000 lin.ft. granite curb, 5700 sq.ft. concrete sidewalk, 1900 sq.yd. asphalt or vitr. block; Park Ave., 800 lin.ft. concrete curb, 1600 sq.yd. vitr. block pavement; grading Bradford St., 400 sq.yd. excav., 7800 sq.yd. extra fill; improving Catherine St., 1500 sq.yd. asphalt or vitr. block, 900 lin.ft. concrete curbing, 3500 sq.ft. concrete sidewalk; Mapleridge St., 3500 cu.yd. excav., 1750 ft. granite curb, 10,000 sq.ft. concrete walks, 27,000 sq.yd. asphaltic concrete pavement; also sewer in Frisbit Ave., 280 ft. 12 in. vitr. tile sewer. About $62,000. I. Wacksman, secy.

N. Y., Ithaca—Until Apr. 9, by H. L. Stewart, city engr., paving various streets. Work involves 5600 sq.yd. brick pavement with concrete foundation, 20,000 sq.yd. brick pavement over old macadam, 5600 sq.yd. bitulithic surface on bituminous concrete foundation, 5600 sq.yd. bitulithic surface on cement concrete foundation, 20,000 sq.yd. bitulithic surface on old macadam, 10,200 lin.ft. cement concrete curb.

N. Y., Lockport—Until Apr. 14, by J. L. Greenman, city clk., improving 1.13 mi. Gooding and West Jackson Sts., from Grant St. to city line, brick and Hillside brick on all grades over 5% and concrete on grades less than 5%. Work involves 8770 sq.yd. brick and 5454 sq.yd. concrete pavement and 6400 lin.ft. concrete curb. About $60,000. Noted Jan. 9.

N. Y., Long Island City—Until Apr. 2, by M. E. Connolly, pres. Queens Boro., regulating and grading sidewalk and gutter spaces, laying sidewalks, etc., on Barclay Ave. from Parsons Blvd. to 147th St., Delaware Ave. from Parsons Ave. to 147th St., 153rd St. from Northern Blvd. to 34th St., Gates Ave. from Grandview to Forest Aves.; also repairing sheet asphalt pavement in 1st and 2nd Wards.

N. J., Camden—Until Apr. 7, by C. F. Wise, chn. road com., Camden Co., widening and resurfacing portion of Camden, Ellisburg and Marlton Turnpike Rd., bituminous surface, on old Telford and new Telford foundation. Work involves 5640.19 tons bituminous concrete, 9471 tons new stone for foundation. F. W. George, clk.; advertised in this issue.

N. J., Lambertville—Until Apr. 3, by Comrs. Hunterdon Co., resurfacing portion of Ringoes-Woodsville Rd. involving 15,000 tons crushed stone and 15,000 gal. tarvia. G. Davis, co. engr.

N. J., Newark — Until Apr. 1, by T. L. Raymond, dir. dept. sts. & impvts., repaving Clinton Ave. from West Newark Branch of Pennsylvania R.R. to west side Chadwick Ave., involving 5100 sq.yd. granite block on 8 in. concrete base, 170 sq.yd. bluestone flagging, 2600 lin.ft. granite curbing and 4000 ft. cement sidewalk; Wilson Ave. from Hyatt Ave. to Newark Bay, 15,000 sq.yd. granite block, 9000 lin.ft. bluestone curbing, 5000 cu.yd. earth fill; Sussex Ave. from High to Summit Sts., 1150 sq.yd. asphalt, 50 yd. brick gutter; South St. from New Jersey R.R. Ave. to east side of Pacific St., 7000 sq.yd. granite block, on 8 in. concrete base, 90 sq.yd. bluestone flagging, 405 lin.ft. granite curbing and 2000 ft. cement sidewalks, Springfield Ave. from Morris Ave. to city line, 25,600 sq.yd. granite block, on 8 in. concrete base, 890 sq.yd. blue stone flagging, 1800 cu.yd. concrete, 12,000 lin.ft. granite curbing, 18,000 ft. cement sidewalk; South Orange Ave. from Springfield Ave. to west side of South 9th St., 15,200 sq.yd. granite block, on 8 in. concrete base, 1000 sq.yd. bluestone flagging, 11,600 lin.ft. granite curbing, and 18,000 ft. cement sidwalk. M. R. Sherrerc, City Hall, engr. Noted Mar. 3.

Pennsylvania—Until Apr. 3, by State Highway Comn., Capitol, Harrisburg, furnishing and applying bituminous materials as follows: 28,300 gal. Class H, 747,900 gal. Class D (dust allayer), 609,410 gal. Class C, Dist. No. 1; 13,300 gal. Class H, 270,453 gal. Class D (dust allayer), 295,148 gal. Class C, Dist. No. 2; 66,933 gal. Class H, 698,585 gal. Class D (dust allayer) 730,642 gal. Class C, Dist. No. 3; 48,100 gal. Class D (dust allayer), 534,290 gal. Class C, Dist. No. 4; 21,100 gal. Class D (dust allayer), 1,006,904 gal. Class C, Dist. No. 5. L. S. Saddler, comr.

Pennsylvania—Until Apr. 11, by State Highway Comn., Capitol, Harrisburg, rebuilding state roads in following counties: 6915 lin.ft. rein.-con. and 43,391 ft. bituminous surface course on concrete foundation; Bradford Co., 16,362 ft. bituminous surface course on concrete foundation; Franklin Co., 8000 ft. rein.-con.; Fulton Co., 15,020 ft. rein.con.; Jefferson Co., 20,720 ft., bituminous surface on concrete foundation; Lackawanna Co., 37,731 ft. bituminous surface course on concrete foundation; Northumberland Co., 20,366 ft. bituminous surface course on concrete foundation; Pike Co., 29,546 ft. bituminous surface course on concrete foundation; Mckean Co., 9934 ft. vitr. brick; Somerset Co., 6675 ft. rein.-con. and Hillside vitr. brick. Bids will also be received for resurfacing with bituminous mixtures on prepared broken stone base 39,824 ft. in Berks Co. and 74,189 ft. in Lebanon Co. L. S. Sadler, state highway comr.; advertised in this issue.

Pa., Phila.—See "Railways, Pennsylvania."

Pa., Pittsburgh—Until Apr. 8, by J. P. Moore, controller of Allegheny Co., paving with Telford macadam 10,500 ft. New England Rd. from Duquesne and Dravosburg Rd. near Coal Valley Sta., along Pine Run to village of New England in Mifflin Twp., 16 ft. wide. R. V. Warren, Room 303 Court House, engr. Noted Mar. 20.

Pa., Reading—Until Apr. 16, by city, furnishing oil and oiling about 500,000 sq.yd. macadam streets. E. B. Ulrich, city engr.

Maryland—Until Mar. 31, by F. H. Zouck, chn. state rds. comn., 601 Garrett Bldg., Baltimore, grading and building 1.4 mi. State Highway from Green Ridge to west side of Polish Mountains, Allegany Co., Contr. A-13; advertised in this issue.

W. Va., Keyser—Until Apr. 15, by Comrs. Mineral Co. building 12 mi. Class A roads, between Ridgley and Alaska. E. Smith, Piedmont, div. engr.

Ala., Dothan—Until Apr. 7, by city, building about 16,500 sq.ft. Schillinger pavement, 2600 lin.ft. curbs and gutters and 60 cu.yd. excav. A. Black, chn. st. com.

Ky., Frankfort—Until Apr. 1, by Comrs. Pub. Rd., improving 8.11 mi. Canonsburg Rd., 16 ft. wide, 3.89 mi. brick, remainder surface treated slag macadam, involving 34,000 cu.yd. earth and 200 cu.yd. rock excav., 36,000 sq.yd. scarifying and reshaping, 17,000 tons crushed slag, 36,000 sq.yd. brick, 600 cu.yd. 1:4:4 and 300 cu.yd. 1.2½:5 concrete, 39,000 lb. reinforcement, 40,000 sq.yd. bituminous treatment, etc.; also 11.27 mi. Grayson Boyd Co. Rd., 16 ft. wide, 1.12 mi. slag macadam, remainder graded earth involving 2 acres, clearing and grubbing, 112,000 cu.yd. earth and 39,000 cu.yd. rock excav., 1300 cu.yd. 1:2:4 concrete, 74,000 lb. reinforcement, 2900 tons crushed slag, etc. Project includes five 20 ft. span bridges, involving 50,000 lb. reinforcement, 112,000 lb. steel, etc R. Wiley, comr.

Streets and Roads (Continued)

O., Perrysburg—Until Apr. 1, by Village grading, draining and paving 5120 ft., 5th St. from Mulberry to Hickory Sts., 26 ft. wide, involving 16,417 sq.yd. concrete, 11,035 lin.ft. concrete curbing, 10,860 cu.yd. earth excav. About $57,226. G. Champe, 610 Nasby Bldg., Toledo, engr.

Michigan—Until Apr. 2, by State Highway Comn., Lansing, building 5 mi. road, Federal Aid Project No. 28, Branch Co. F. F. Rogers, Lansing, state highway comr.

Mich., Flint—Until Apr. 3, by Comrs. Genessee Co. shaping, draining and building 8.81 mi. gravel road in Clayton and Flushing Twps.

Wisconsin—Until Mar. 31 by Wisconsin Highway Comn., Green Bay, grading and surfacing with concrete 4.46 mi. Oshkosh-Fond du Lac Rd., 16 ft. wide, involving 11,267 cu.yd. grading, 41,557 sq.yd. 8 in. concrete and 1816 ft. 15 in. sewer pipe. About $90,000. Noted Mar. 20.

Wis., Dodgeville—Until Apr. 1, by Comrs. Iowa Co. for Lake to River Rd., Project No. 34. Work involves 11,267 cu.yd. earth excav., 190 cu.yd. excav. borrow, 237 cu.yd. Class A concrete 6.2 cu.yd. concrete in catch basins, 41,557.5 sq.yd. concrete surface and 1816 lin.ft. 15 in. sewer pipe. E. J. Perkins, co. highway comr.

Wis., Elkhorn—Until Mar. 31, by Comrs. Walworth Co. grading and paving Lake Geneva Rd., Project No. 10. Work involves 3762 cu.yd. excav., 18.6 cu.yd. Class A concrete, 17,600 sq.yd. concrete surface. H. J. Peters, co. highway comr.

Wis., Fond du Lac—Until Apr. 2, by Fond du Lac Co. Rd. Com., grading and surfacing with concrete 1.25 mi. Fond du Lac Taycheedah, Rd., 18 ft. wide. About $25,000. Wisconsin Highway Comm., Madison, engrs. Noted Mar. 13.

Wis., Lancaster—Until Apr. 1, by Comrs. Grant Co., grading and paving Platteville Rd., Project No. 41. Work involves 1 acre clearing and grubbing, 10,675 cu.yd. earth excav., 526 cu.yd. rock excav., 528 acres borrow excav., 115 cu.yd. Class A concrete, 2100 lin.ft. guard rail, 1294 sq.yd. concrete surface, 32 lin.ft. vitr. pipe, 175 cu.yd. concrete in bridges, 43.152 lb. structural steel, 640 lin.ft. wooden piles. H. Mink, co. highway comr.

Wis., Port Washington—Until Mar. 31, by Comrs. Ozaukee Co. grading and paving Pt. Washington Rd. Work involves 4229 cu.yd. earth excav., 24 cu.yd. borrow, 73.4 cu.yd Class A concrete, 810 lin.ft. guard rail and 16,394 sq.yd. concrete surface. J. H. E. Mueller, Thiensville, co. highway comr.

Wis., Richland Center—Until Apr. 1, by Comrs. Richland Co. grading and paving Richland Center Rd., Project No. 66. Work involves 5532 cu.yd. excav., 77 cu.yd. borrow, 75.1 cu.yd. Class A concrete, 320 lin.ft. guard rail and 20,044 sq.yd. concrete surface. M. O. Carter, co. highway comr.

Wis., Waukesha—Until Apr. 7, by city, for 1150 sq.yd. paving, 796 lin.ft. curbing and guttering, 370 yd. excav. on Colton St., 1498 yd. paving, 968 lin.ft. curbing and guttering, 417 yd. excav., Woodward Ave., 3907 yd. paving 2300 lin.ft. curbing and guttering, 1462 yd. excav., West Ave., 3217 yd. paving, 1948 lin.ft. curbing and guttering, 1208 yd. excav., College Ave., 4473 yd. paving, 2680 lin.ft. curbing and guttering, 1417 yd. excav., State St. W. Powrie, city engr.

Ia., Mason City—Until Apr. 2 by city, for 53,000 sq.yd. paving and 22,000 lin.ft. cement curbing. J. H. McEwen, city clk.

Ia., Schaller — Until Apr. 4, by city, for 65,000 sq.yd. paving and 40,000 ft. curbing and guttering. Bids will be received on several kinds of pavement. C. H. Currie, Webster City, engr.

Minn., Breckenridge—Until Apr. 7, by city, for all material and labor for building sidewalks, curbs, gutters and crossings during year. R. R. Waite, city clk.

Minn., Ebro—Until Apr. 11, by Comrs. Clearwater Co., Courthouse Bagley, building 6 mi. highway.

Minn., Minneapolis—Until Apr. 14, by Comrs. Hennepin Co., paving, grading and surfacing Osseo-Champlin Rd., 18 and 20 ft. wide. Work involves 62,956 sq.yd. bitulithic brick on 5 and 6 in. concrete base, 59,520 sq.yd. vertical fiber, 62,956 sq.yd. concrete and 24,267 cu.yd. earth excav. E. E. Terrell, co. survey.

Minn., St. Paul—Until Mar. 31, by H. W. Austin, purchasing agent, City Hall, furnishing labor and material for curbing, leveling, filling and improving East 5th St. from Mendota to Forest Sts.; Earl St. from Hastings Ave. to Thorne St., involving 897 bbls. Portland cement, 52 tons asphalt cement, 57 tons limestone dust, 718 cu.yd. crushed rock for concrete base, 431 cu.yd. concrete sand, 138 cu.yd. fine asphalt sand, 104 cu.yd. coarse asphalt sand, 211 cu.yd. trap rock, 1423 ft. B. M. No. 1 rough pine lumber, 3 x 12 in.; Concord St. from Ada to Annapolis Sts.; furnishing material, grading and improving alley in block 9, Merriam Park, 2nd Addition; Avon St. from Laurel to Summit Aves.; Laurel Ave. from west line Syndicate Ave. to Lexington Ave.; Como Ave. west from Snelling to Raymond Ave.

Neb., Columbus—Until Apr. 15, by Platte Co., grading and surfacing 48.1 mi. road from Norfolk to Columbus, 24 ft. wide, Madison and Platte Counties. Work involves 212,000 cu.yd. earth excav., 16,800 cu.yd. sand clay surfacing and 265 cu.yd. concrete in culverts. About $104,000. G. E. Johnson, Lincoln, state engr. Noted Jan. 22.

Neb., Gandy—Until Apr. 19, by Logan Co., grading and surfacing 17.1 mi. road from Stapleton to Ringold, 24 ft. wide, in McPherson and Logan Counties. Work involves 62,564 cu.yd. earth excav., 11,690 cu.yd. sand clay surfacing and 125 cu.yd. concrete in culverts. About $36,000. G. E. Johnson, Lincoln, state engr.

Neb., Lincoln—Until Apr. 14, by Lancaster Co., grading 4 mi. West Emerald Rd., 24 ft. wide, involving 50,000 cu.yd. earth excav. About $19,000. G. E. Johnson, Lincoln, state engr. Noted Jan. 23.

Neb., North Platte—Until Apr. 4, by Lincoln Co., grading 19.2 mi. road from North Platte to Sutherland, 24 ft. wide, involving 102,700 cu.yd. earth excav. and 124 cu.yd. concrete culverts. About $43,000. G. E. Johnson, Lincoln, state engr. Noted Jan. 23.

Neb., Wayne—Until Apr. 16, by Wayne Co., grading 38.2 mi. road from Wayne to Coleridge, 24 ft. wide, in Cedar and Wayne Counties. Work involves 232,000 cu.yd. earth excav. and 318 cu.yd. rein.-con. culverts. About $105,000. G. E. Johnson, Lincoln, state engr. Noted Jan. 23.

N. D., La Moure—Until Apr. 12, by La-Moure Co. building 4.79 mi. gravel road, Federal Aid Project No. 31. About $29,000.

N. D., Wahpeton—Until Apr. 7, by city paving, curbing and guttering 8th St. from north line Dakota Ave. to north line Ohio Ave., Wisconsin, Pembina, Michigan, Delaware and Ohio Aves. from west line 7th St. to east line 8th St. and from west line 8th St. to east of alley running north and south between 8th and 7th Sts.; 6th St. from main line of Northern Pacific, Ry. to south line of Dakota Ave., and from north line Dakota Ave. to north line of blocks 14 and 15 of R. S. Tyler's addition; Wisconsin, Pembina, Michigan, Delaware, Ohio, Montana and Washington Aves. from center of alley runing north and south between 5th and 6th Sts. to east line of 6th St. and from west line of 6th St. to east line of 7th St. Noted Feb. 6.

Mont., Harlowton—Until Apr. 8, by Comrs. Wheatland Co., for miscellaneous road work, involving 40,000 cu.yd. common excav. About $14,000. C. C. Jewell, Harlowton, engr.

Ark., Harrisburg—Until Apr. 2, by Bd. Comrs. Rd. Impvt. Dist. No. 4, Poinsett Co., at office of W. R. Heagler & Sons, Harrisburg, clearing 43.4 acres, grubbing 39 acres, furnishing and placing 797 lin. ft. 12 in. corrugated iron pipe, 7 cu.yd. rein.-con. in abutments, 75 cu.yd. rein.-con. in culverts, 71.5 cu.yd. plain concrete end walls for pipe, 742 lin.ft. wood and pile bridges, 6840 ft. B.M. reflooring old steel bridges, moving one 25 ft. steel span about 25 ft. to line, 97,000 cu.yd. excav. for roadway and ditches, furnish gravel and clay binder, haul, roll and finish hard surface on 16.38 mi. road.

Ark., Jonesboro—Until Apr. 3, by Bd. Comrs. Jonesboro-Nottleton Rd. Impvt. Dist. No. 4, Craighead Co., paving and grading 9 mi. road involving 27,800 cu.yd. grading, average haul not exceeding 500 ft., 78,100 sq.yd. asphaltic paving, 335 lin.ft. vitr. pipe culverts, 18 in. diam., 235 lin.ft. vitr. pipe culverts, 24 in. diam., 553 cu.yd. concrete in culverts and headwalls. V. C. Kays, secy. bd. comrs. Klyce & Kackley, 721 4th and 1st. Natl. Bank Bldg., Nashville, Tenn., engrs.

Okla., Eufaula—Until Mar. 31, by city, paving various streets with concrete. About $135,000. Hughes Eng. Co., Bank of Commerce Bldg., Tulsa, engrs.

Colorado—Until Apr. 7, by State Highway Comn., Denver, building State Highway No. 26, between Apache Creek, via Walsenburg and Trinidad, to Raton Pass; advertised in this issue.

Nevada—Until Apr. 10, by State Highway Dept., Carson City, building 12.46 mi. Route 2, Sect. C-1 of state highway between Robinson Summit and Keystone, White Pine Co. Project involves 33,500 cu.yd. excav., 38,800 sq.yd. 5 in. gravel surface, 27,000 sq.yd. 5 in. crushed rock surface, 58 cu.yd. Class "B" concrete, 1562 lin.ft. 15, 18 and 30 in. corrugated metal pipe, etc.; about $58,042. Also 18.73 mi. Route 1, Sect. A-1 of state highway between Vivian and Elko Co., involving 51,300 cu.yd. excav., 55,060 sq.yd. gravel surface, 54,820 sq.yd. broken shale, 160 cu.yd. Class "A" and 100 cu.yd. Class "B" concrete, 2064 lin.ft. 15, 18, 24 and 30 in. corrugated metal pipe, etc., about $89,151.

Wash., Davenport—Until Apr. 8, by Comrs. Lincoln Co., grading 1⅝ mi. county road near Almira, involving 6409 cu.yd. earth, 1079 cu.yd. solid rock and 4906 cu.yd. loose rock excav. J. L. Thayer, co. engr.

Que., North Hatley—Until Apr. 1, by I. B. LeBaron mayor, repaving with tarvia 1½ mi. main road, 50 ft. wide. Noted Aug. 8.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Dept. Pub. Wks. let contract paving 1076 ft. Bayswater St., 40-50 ft. wide, to J. Doherty, c/o Doherty Bros., Stoneham, $22,720. Work involves 3780 sq.yd. asphalt on 6 in. base, 2019 lin.ft. concrete curbing, 9480 lin.ft. sidewalk, 880 cu.yd. excav. and 2000 cu.yd. fill.

★Mass., West Roxbury (Boston P. O.)—Dept. Pub. Wks. let contract grading, excavating and filling Center St. and Belgrade Ave., to J. Kelly, 280 Columbia Rd., Roxbury. About $20,110. Work involves 2600 cu.yd. earth excav. and 15,000 cu.yd. fill.

Rhode Island — State Bd. Pub. Rds., State House, Providence, received bids rebuilding 1.15 mi. Boston Neck Rd., 18 ft. wide, Narragansett Twp., from B. Perini, Ashland, Mass., $23,902; C. S. Towle, Wakefield, $25,602; J. Bristow, Narragansett Pier, $26,171. Noted Mar. 13.

N. Y., Brooklyn—E. Riegelmann, boro pres., received bids Mar. 19, regulating and repaving, permanent asphalt, etc., roadway of (1) Engert Ave., (2) Grove St., (3) Jerome Ave. (4) Knickerbocker Ave., (5) Ridge Blvd., (6) Saratoga Ave. (7) St. Johns Pl. (8) 23rd St. (9) 85th St. (10) 54th St., from Sicillian Asphalt Paving Co., 41 Park Row, New York City, (1) $3588 (2) $10,440 (4) $2004 (5) $30,154 (6) $3692 (7) $11,171 (8) $6372 (10) $1742; Uvalde Paving Co., Metropolitan Ave., (1) $4130 (2) $11,179 (4) $2002 (5) $29,820 (6) $4111 (7) $12,116 (8) $7102 (10) $7851; Grimm Constr. Co., 460 Herold Ave., Richmond Hill, (3) $1276; Cranford Co., 52-9th St.,, (5) $30,173 (6) $3908 (7) $11,396 (8) $6558 (9) $2375; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (5) $30,242 (8) $6299; (10) $7789; Borough Asphalt Co., 1301 Metropolitan Ave., (9) $2165 (10) $7619. Noted Mar. 13.

★N. Y., Long Island—M. E. Connolly, pres. Queens Boro., let contract regulating, grading, curbing, paving, etc., with bituminous macadam, 87th St. from 80th to 85th Sts. and 87th St. from 78th to 80th Sts., to Peace Bros., 20 Main St., Flushing, $6492 and $1615 respectively; Skillman Ave. from 3rd to 5th Sts., to F. J. Clancy, $3595; Mount St. from Hunterspoint to Thompson Aves., to Welsh Bros., 39 Queens Blvd., $1388; Gamma Pl. from Suburban St. to Myrtle Ave., to C. A. Myers, foot of Stagg St., Brooklyn, $1905; 85th St. from 83rd to 91st Sts., to Savero & Britton, $8401; Sanford Ave., to T. F. Tuohy, 98 Main St., Flushing, $149; Hill side Ave. from Morris to Metropolitan Aves., to T. Welsh, 39 Queens Blvd., $1278 Noted Mar. 13.

Streets and **Roads (Continued)**

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids Mar. 24, regulating and repaving, granite block pavement on concrete foundation, roadway of 2nd Ave., from Asphalt Constr. Co., 2197 Madison Ave., $16,570; P. J. Kerns, New York City, $179,997; Worth St. from W. J. Fitzgerald, 547 West 45th St., $32,231; O'Rourke Contg. Co., 150 Nassau St., $33,186; Cedar St., from Uvalde Asphalt Paving Co., 1 Bway., $3438; Asphalt Constr. Co., 2197 Madison Ave., $3966; 28th St., from O'Rourke Contg. Co., 150 Nassau St., $42,868; P. J. Kelly, $43,343; Dykeman St., from Burnside Contg. Co., 270 Burnside Ave., $10,422; P. J. Kerns, $11,624. Noted Mar. 20.

N. Y., Utica—Bd. Contr. & Supply received bids Mar. 19, (1) resurfacing John St. from Mary to Rutger Sts., (2) 2nd St. from Mary to Rutger Sts., (3) repairing asphalt pavements on various streets, from H. W. Roberts, 610 Lansing St., (1) sheet asphalt $11,086, bitulithic, $11,358, asphaltic concrete, $10,569, (2) sheet asphalt, $11,091, bitulithic, $11,366, asphaltic concrete, $10,568, (3) $13,563. Noted Mar. 20.

★**N. J., Salem**—Bd. Freeholders Salem Co. let contract paving Sects. 4 and 5 of Pennsgrove-Malaga State Rd., concrete, to Sutton & Corson, Ocean City, $163,314. Noted Feb. 27.

Pennsylvania—State Highway Comn., Capitol, Harrisburg, received bids Mar. 20 building roads as follows: (a) Adams Co., (b) Berks Co., (c) Clarion Co., (d) Clinton Co., (e) Delaware Co., (f) Elk Co., (g) Erie Co., Springfield Twp., (h) Harbor Creek and Northeast Twps., (i) Fairview and Girard Twps., (j) Fayette Co., (k) Greene Co., (l) Lancaster Co., (m) Lawrence Co., (n) Lehigh Co., (o) Monroe Co., (p) Tioga Co., (q) Warren Co., from M. Bennett & Sons, Indiana, (a) $182,230 (d) $129,656; Christhilf & Janin, Baltimore, Md., (a) $220,312; Mason & Hanger, Chambersburg, (a) $231,346; Eastern Paving Co., Colonial Trust Bldg., Phila., (b) $53,809, (e) $69,538; Union Paving Co., 30th and Locust Sts., Phila., (b) $66,577, (d) $118,168; McInerney & McNeal, North Natl. Bank Bldg., Easton, (b) $68,984; J. Duncan, George & Boggs, Clarion, (c) $27,238; J. E. Trunk, Clarion, (c) $27,430; Busch & Stewart, Trust Bldg., Williamsport, (d) $113,463; D. E. O'Connell & Sons, Noorwood, (e) $74,415; Gillespie & Co., Oak View, (e) $82,239; Foundation Co., 233 Bway., New York City, (f) $53,685, (o) $141,627, (q) $204,714; L. H. Gipp, Buffalo, N. Y., (f) $55,330; Lynch Constr. Co., Wilmington, Del., (f) $76,878; Natl. Highway Constr. Co., Erie, (g) $54,003, (i) 99,213; Baldwin & Welcomer, Union City, (g) $57,773; Mayer-Blair Constr. Co., Erie, (g) $54,439, (i) $101,649; Griff Constr. Co., Erie, (h) $162,598; Constantine Constr. Co., 240 Dewey Ave., Buffalo, N. Y., (h) $162,871; J. McCormick & Bros., 717 West 11th St., Erie, (h) $167,612; C. H. Frey Contg. Co., Erie, (i) $104,543; Reagan & Lynch, Uniontown, (j) $242,835; Brook & Cornish, Uniontown, (j) $294,400; Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh (j) $299,358; Con. Oil Tank Co., Pittsburgh, (k) $325,490; J. I. Dick, Scottdale, $372,860; Raymond Concrete Pile Co., 90 West St., New York City, (k) $375,378; Sauder Constr. Co., Lancaster, (l) $40,483; J. M. Eshelman, Landisville, (l) $42,507; Juanita Co., Phila., (l) $43,426; Burns Bros., 525 South Mill St., Newcastle, (m) $38,801; Woods & Golder Constr. Co., Mechanic St., New Castle, Constr. Co., Mechanic St., Newcastle, (m) $40,931, P. F. Connolly, Koppel, (m) $45,102; Blaisdell Contg. & Eng. Corp., 238 Spencer St., Brooklyn, N. Y., (n) $240,102; G. H. Hardner, Lentz Bldg., Allentown, $253,770; L. M. Kratz & Son, Allentown, (n) $260,616; O'Brien Bros., Avoca, (o) $155,957; B. G. Coon, Luzerne, (o) $156,865; R. G. De Long, Williamsport, (p) $72,816; G. Serafino & Stento, Binghamton, N. Y., (p) $75,164; Horn & Devling, Main St., Galeton, (p) $84,652; E. T. Beck, Warren, (q) $203, 806; Dale Eng. & Constr. Co., Mann Bldg., Utica, N. Y., (q) $214,729; L. S. Sadler, state highway comr. Noted Mar. 6.

★**Md., Baltimore**—Bd. Awards let contract improving Boone, 21st, 23rd, 20th, Barclay and Oak Sts., Homewood and Guilford Aves., to Amer. Paving & Contg. Co., Montebello Ave. and Jenkins Lane, $136,800; Atlantic, Erdman, Dobler and Lake Aves. and Lake Dr. around Lake Montebello, to Union Co., 3723 Park Heights Ave., $2 per sq.yd., total, $32,143. Noted Mar. 13.

★**Md., Baltimore**—Bd. Awards let contract to P. Flanigan & Sons, Harford Rd. and Baltimore & Ohio R.R., grading, curbing and paving, sheet asphalt, vitr. block and granite block redressed, McElderry, Madison, Jefferson and Orleans Sts., Collington and Lakewood Aves., $143,110; various sections of streets in city's old annex involving 15,000 sq.yd. sheet asphalt paving 20,000 sq.yd. sheet asphalt topping, 3000 sq.yd. vitr. brick gutters, 14,000 lin.ft. stone curbing reset and redressed and 4000 lin.ft. armored concrete curbing, $106,000; to Baltimore Asphalt Block & Tile Co., Monroe and Lorman Sts., grading, paving with sheet asphalt, vitr. block, granite block, redressed, wood block, all on concrete base, Lafayette Ave., Lanvale and Payson Sts., $138,547; Edmondson, Clinton and Argyle Aves., and Brune St., $52,552; Amer. Paving & Contg. Co., Montebello Ave. and Jenkins Lane, grading, curbing and paving, sheet asphalt, on Randall, William, Covington, Clement, Grindall and Poultney Sts., and Battery Ave., $127,053; Barclay, Forrest and Somerset St., Brentwood and Ashland Aves., $71,568; P. Reddington & Sons, 2 East Lexington St., paving with cement concrete, vitr. block and wood block, cement concrete base, on Brexton St., Jordean and Camel Alleys, $19,940. Noted Feb. 27.

★**W. Va., Fayetteville**—Comrs. Fayette Co. let contract building 6.3 mi. concrete road, 9 ft. wide, from Thurmond to Glen Jean, to Charleston Concrete Constr. Co., Charleston, cost $38,328; 6 mi. road, 14 ft. wide, from Montgomery to Falls View, to A. Keathly, Huntington, $96,753; 5 mi. road, 14 ft. wide, from Falls View to Gauley River, to W. T. Jones Co., 212 10th St., Lynchburg, Va., $93,590.

★**W. Va., Ripley**—Comrs. Jackson Co. let contract building 2 mi. concrete road, 14 ft. wide, to Cisler & Morse, Marietta, Ohio. About $57,500. Noted Mar. 13.

★**Ga., Atlanta**—Comrs. Rds. & Revenues, Fulton Co., let contract paving Gordon St. and Cascade Ave., involving 30,000 sq.yd. vibrolithic to F. W. Long & Co., 434 East Bay St., Jacksonville, Fla., $2.98 per sq.yd.; Haperville Rd., involving 26,000 sq.yd. concrete, to Brooks-Colloway Co., 42 South Forsythe St., $2.45 per sq.yd.; Paces Ferry Rd., involving 34,000 sq.yd. bitulithic on old macadam, to Jamison-Hallowell, Atlanta, $2.50 per sq.yd. Noted Feb. 27.

★**Ga., Augusta**—Comrs. Richmond Co. let contract paving 2 mi. road with Texas Standard Oil asphalt, to Ely Constr. Co., Lamar Bldg. About $1.45 per sq.yd. Noted Feb. 20.

★**Ala., Athens**—Town let contract paving various streets, to J. W. Black, Columbia, cost, $152,000; curbing to F. Nicholson, Columbia, $6000.

★**Ala., Selma**—Bd. Revenue Dallas Co. received no bids building and resurfacing with gravel about 15 mi. Benton Rd. between here and Safford. Work will be done by day labor. Noted Feb. 27.

★**Miss., Tunica** — Bd. Supervs. Tunica Co., let contract grading and graveling 12 mi. road in Special Road Dist. No. 1, to Dawson Contg. Co., Tunica. About $65,000. Noted Mar. 6.

★**La., Columbia**—Comrs. Caldwell Parish let contract building 15 mi. graveled highway, to C. A. Reese, Columbia. About $65,000.

★**La., Thibodaux**—Lafourche Parish Police Jury let contract building hard surfaced roads in Dist. Nos. 2 and 3, to Weber & Wild, New Orleans, $86,260 and $50,630 respectively. Noted Mar. 6.

★**Ky., Louisville**—Bd. Pub. Wks. let contract (1) paving 7 blocks Burnett, Hoertz, Brock and 34th Sts., asphalt, (2) grading and paving Breckenridge St. from Barrett to Dupuy, involving 520 sq.yd. vitr. brick, 4120 sq.yd. asphalt, 4640 sq.yd. concrete, 1400 cu.yd. earth excav., (3) Bank St. between 25th and 26th Sts., 260 sq.yd. granite blocks, 1000 cu.yd. grading, 2313 sq.yd. asphalt, 360 sq.yd. brick block, 2930 sq.yd. 6 in. concrete base, (4) Walnut, Ormsby, Zane and 5th Sts., asphalt (5) 13th St. from Market to Jefferson Sts., 1880 sq.yd. granite block, on 6 in. concrete base, 800 cu.yd. grading (6) 15th St. from Main to Jefferson Sts., 3700 sq.yd. granite block on 6 in. concrete base, 1500 cu.yd. grading, to Louisville Asphalt Co., 305 Realty Bldg., (1) $45,119, (2) $14,605, (3) $10,869; H. Bickel Co., 443 Garden St., (4) $41,948, R. W. Burke, 319 West Jefferson St., (5) $578, (6) $11,515.

O. Columbus—Comrs. Franklin Co. received bids resurfacing 237 mi. highway, from Barret Co., Cleveland; and Atlantic Refining Co., 3144 Passyunk St., Phila. About $304,000.

Mich., Detroit—Dept. Pub. Wks. received bids paving (a) Sheridan Ave.; (b) Crane Ave.; (c) Charlevoix Ave.; (d) Beals Ave.; (e) Davison Ave.; (f) Newport Ave.; (g) Canfield Ave.; (h) Linden St.; (i) Barker St.; (j) Roby St. from W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $54,307; (b) $25,111; (c) $27,844; (d) $20,709; (e) $15,623; (f) $13,289; (g) $8249; (h) $7842; (i) $6204; (j) $3990.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $59,290; (b) $25,616; (c) $26,795; (d) $20,813; (e) $15,165; (f) $12,724; (g) $8245; (h) $7851; (i) $6239; (j) $4044.

Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $53,647; (b) $25,473; (c) $26,186; (d) $20,455; (e) $15,549; (f) $12,391; (g) $8170; (h) $7755; (i) $6158; (j) $4128. Noted Mar. 13.

★**Ia., Davenport**—City let contract to McCarthy Impvt. Co., 220½ Main St., for 1577 ft. Hancock Ave., cost $12,467; 1240 ft. Scott St., $11,198; 2385 ft. Taney St., $20,638; 1325 ft. Hayes St., $11,600; 727 ft. Grant and 3rd Sts., $11,528; 1092 ft. Bowditch and Lombard Sts., $10,210; 680 ft. Fair Ave. and Myrtle St., $11,326; 929 ft. Claussen and East 2nd Sts., $10,063; 3903 ft. Telegraph Rd., $33,413; 2314 ft. Union St., $24,386; 2700 ft. Clark St., $30,639; 2810 ft. McKinley Ave., $33,179; 1577 ft. Hancock Ave., $3364; 820 ft. Myrtle St., $2754; 345 ft. Western Ave., $4312; to D. J. Ryan Constr Co., 41 1st Natl. Bank Bldg., for 1821 ft. Grand Court, $26,084; 2178 ft. Grand Ave., $23,293; 1239 ft. High St. and Carey Ave., $12,407; 1082 ft. Le Clair St., $12,018; 2232 ft. Locust St., $23,559; 2219 ft. Eastern Ave., $16,317; 220 ft. 8th St., $2213. Noted Feb. 27.

★**Minn., Tracy**—City let contract for 17,000 sq.yd. paving and 9000 lin.ft. curbing to Hanlon & Okes, 338 Lumber Exch., Minneapolis, $1.78 per sq.yd. for paving.

Mo., St. Louis—Bd. Pub. Serv. received bids paving Clarence and Kossuth Aves from Trinidad Asphalt Paving Co., Title Guaranty Bldg., $10,142 and $11,034 respectively; Kennerly and Ruskin Aves., from Granite Bituminous Paving Co., Ry. Exch. Bldg., $22,541 and $25,246 respectively; Dock St., from J. F. McMahon Constr. Co. Title Guaranty Bldg. $5456; Lucas Ave. and Juniata St. from Eyerman Constr. Co., 1216 South Grand St., $5585 and $6378 respectively; McPherson Ave., from Heman Constr. Co., Title Guaranty Trust Bldg., $5944; Cupples Pl., from Skrainka Constr. Co., Security Bldg., $6759; Allemania St., from J. C. Steffen, 4760 Seibert St., $8324; Lafayette Ave., from A. Fleschner, $7055 Winona Ave., $4260; and 19th St., from J. E. Perkinson, 3237 Carter St., $3277. Noted Feb. 13.

★**Utah, Salt Lake City**—Comrs. Salt Lake Co. will grade and surface 3½ mi. Wasatch-Bonneville Blvd., 24 ft. wide, $15,000; also build 10 mi. west side Wasatch Blvd., 24 ft. wide, $45,000. Work will be done by day labor.

★**Wash., Davenport**—Lincoln Co. let contract grading and graveling 4 mi. North Central Highway between Lamona and Downs, to Genl. Constr. Co., North 1324 Elm St., Spokane, $21,083; graveling 5 mi. Sunset Highway, west of Wilbur, to J. Sengfelder and O. J. Long, Spokane, $11,260.

★**Wash., Ephrata**—Grant Co. let contract grading and graveling 8 mi. Permanent Highway 13, from Burke to Vantage Ferry on Sunset Highway, to Mahr Constr. Co., Waterville, $26,738. Work involves 10,743 cu.yd. gravel, 8500 cu.yd. earth excav. and 80 cu.yd. road excav.

★**Wash., Port Orchard**—Kitsap Co. let contract grading and surfacing 1¾ mi. State Aid Rd. No. 1-C, also building 1000 ft. of sea wall, to Erickson Constr. Co., Downs Bldg., Seattle, $27,800.

Wash., Seattle—Bd. Pub. Wks. received bids Mar. 14 (1) laying concrete sidewalks on Belvidere Ave., et al, involving 11,310 sq.yd. concrete, (2) Orcas St., et al, 11,806 sq.yd. concrete, 720 sq.yd. cross walks,

Streets and Roads (Continued)

2000 cu.yd. earth excav., from D. H. Traphagen, Walker Bldg., (1) $21,395; (2) $31,445; P. H. Johnson, Builders Exch., (1) $21,534; Fiorito Bros., 1630 25th Ave. (1) $22,650; (2) $31 445; Coluccio & Lupis, 1642 Lane St., (2) $34,879.

★**Wash., Seattle**—Bd. Pub. Wks. let contract grading ¼ mi. Holyoke Way, 40 ft. wide, to H. Pederson, Alaska Bldg., $16,920. Noted Mar. 20.

Wash., Seattle—Bd. Pub. Wks. received bids Mar. 14, building 1100 ft. timbered trestle roadway, 23 ft. wide, 5 ft. sidewalks, Northlake Ave. connection to approach to Eastlake bridge, from J. A. McEachern Co., Bell St. Dock, $34,097; Hansen & Hauge, Genl. Delivery, $35,767; R. A. Wood, 4747 Latona Ave., $37,546. Work involves 45,449 ft. truss timber, 3380 lin.ft. creosoted piles, 59,875 ft. creosoted lumber, 358,034 ft. miscellaneous lumber, peeled piling and creosoted piles.

Ore., Portland—Bd. Pub. Wks. received only bids from Warren Constr. Co., Journal Bldg., improving East 16th St., gravel bitulithic pavement, $9567; East Oak St., gravel bitulithic pavement, $1762. Noted Feb. 27.

★**California** — State Highway Comn., Sacramento, will build 1½ mi. road, 15 ft. wide, 4 in. concrete base, through Rocklin Twp. in Placer Co. About $18,000. Work will be done by day labor. Project involves 3200 cu.yd. grading.

★**Cal., Los Angeles**—Los Angeles Co. will pave 17 mi. Ridge Route, northeast of Sangus, 16 ft. wide, concrete. About $300,000. Work will be done by day labor under direction of W. W. Patch, div. engr. and J. C. Beckjord, supt.

★**Cal., San Francisco**—City let contract improving Parker Ave. from St. Roses Ave. to McAllister St., to Blanchard, Crocker & Howell, San Francisco, $31,553.

Cal., Stockton—City received bid paving portion of East St., from C. Moering, Stockton. About $10,532.

★**Que., Chambly** — Town let contract paving 8.3554 mi. road in Chambly Parish, 14 and 22 ft. wide, macadam, to Province Bldg. & Engr. Co., 920 Power Bldg., Montreal. About $200,722.

★**Que., St. Barnabe**—Town let contract graveling 7.255 mi. roads, 16, 18 and 20 ft. wide, to A. Carrier, Valmont. About $41,500.

Railways

PROPOSED WORK

New York—See "Industrial Works, Clayton."

BIDS DESIRED

Pennsylvania—Until Apr. 8, by W. S. Twining, dir. dept. city transit, Mershon Bldg., 1211 Chestnut St., Phila., building first 4 sections of Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, 6 mi. long, Contr. No. 701. Work includes grading, furnishing and laying track and construction of 504 ft. steel viaduct. Project involves 15,900 lin.ft. individual track of girder rail type with granite block paving and about 32,200 lin.ft. indivdual track of "T" rail type with ballast; advertised in this issue.

Excavation and Dredging

PROPOSED WORK

N. Y., Buffalo—Rock Removal, etc.—City plans to remove rock in Niagara River channel, foot of Ohio St. and dredge channel to depth of 23 ft. A. W. Kreinheder, comr. pub. wks.

Miss., Avalon—Canal—Patacowa Creek D. D. plans to build drainage canals involving 461,500 cu.yd. dragline excav. and 6 acres clearing. About $70,000. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs.

Mont., Columbus—Irrigation—Columbus Irrigation Dist., Stillwater Co., being organized to irrigate 1288 acres by diverting water from Yellowstone River.

Ark., Harrisburg—Channel—D. D. No. 7, Poinsett Co., rejected bids building 22 mi. channel, 30-50 ft. base, to intercept flood water from hills on west of district, involving 1,670,000 yd. floating dredgework. Pride & Fairley, Blytheville, engrs. Noted Feb. 27.

Ore., Madras—Irrigation—North Unit Irrigation Dist. voted $5,000,000 bonds to irrigate 100,000 acres land near here.

Ore., Medford—Irrigation—P. A. Cupper, state engr., making surveys in Medford Irrigation Dist. comprising 20,000 acres. Project includes diverting water from Big Butte Creek. Rogue River, Gold Hill and Talent Dists. will also be surveyed. About $1,500,000. Noted Oct. 17.

BIDS DESIRED

N. J., Trenton—Dredging—Until Apr. 15, by Bd. Commerce & Navigation, State House, dredging section of proposed inland waterway connecting Barnegat Bay with Manasquan River. About $25,000. V. Gelineau, dir.; advertised in this issue.

Ky., Frankfort — Excavation — See "Streets and Roads."

Wis., Elkhorn—Excavation—See "Streets and Roads."

Wis., Port Washington—Excavation—See "Streets and Roads.'

Wis., Richland Center—Excavation—See "Streets and Roads."

Nevada—Excavation—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

★Indicates award of contract

★**N. Y., Rochester**—Barge Canal Works—L. Nixon, supt. pub. wks., let contract completing canal from Kings Bend to Lehigh Valley R.R. crossing here, Contr. 190, to Empire Eng. Co., Inc., 60 Church St., New York City, $245,191. Noted Mar. 13.

★**Ga., Marietta**—Canal—Powder Springs Creek Dist. No. 2, Cobb Co., let contract building 10½ mi. drainage canal 8 ft. deep, involving 279,851 cu.yd. excav., to Morris Constr. Co., Marietta. About $0.11 per cu.yd.

Ia., Dakota City—Ditch—City received lowest bid furnishing material and labor building D. D. No. 6, involving 615,000 cu. yd. earth excav. and 49,282 ft. 12-42 in. tile from E. L. Hatton, Britt, at $11.45 per yd.

Industrial Works

PROPOSED WORK

N. H., Lakeport—Scott & Williams, 366 Bway., New York City, having plans prepared by Lockwood, Greene & Co., archts., 60 Federal St., Boston, building 5 story, 60 x 200 ft. steel and rein.-con. factory, rein.-con. flooring and concrete foundation, here.

Mass., Charlestown (Boston P. O.) — Blackall, Clapp & Whittemore, archts., 20 Beacon St., receive bids about Apr. 1, building 8 story, 63 x 83 ft. brick and concrete storehouse, rein.-con. flooring and concrete foundation, on Rutherford Ave. for Boston Post, Boston.

Mass., New Bedford—W. C. Jones Co., Nash Rd., having plans prepared by T. M. James, archt., 185 Devonshire St., Boston, building 1 story, 101 x 200 ft. brick warehouse, concrete flooring. About $50,000.

R. I., Providence—B. S. D. Martin, archt., 86 Weybosset St., soon receives bids building 2 story, 70 x 90 ft. mill construction garage, rein.-con. flooring and concrete foundation on Smith and Orms Sts. for F. A. Becker Co., 390 Smith St. About $30,000.

Conn., New Haven—Ryders Printing House, 78 Center St., receives bids in April building 3 story, 40 x 105 ft. brick addition to printing plant, concrete foundation, on Chapel and James Sts. About $35,000. F. E. Brown, 11 Autumn St., archt.

Conn., Stamford—H. and H. Fdry., 770 Pacific St., rejected bids building 1 story, 60 x 200 ft. brick foundry, rein.-con. flooring and concrete foundation, on Pacific St. About $30,000. Project indefinitely postponed. N. E. Emmons, Washington Bldg., archt. Noted Mar. 6.

Conn., Stratford (Bridgeport P. O.)—Raybestos Co., Bostwick Ave., Bridgeport, plans to build 1 story, 160 x 170 ft. brick, steel and concrete addition to factory, rein.-con. flooring, concrete foundation on East Main St. here. About $100,000.

N. Y., Brooklyn—L. W. Boynton, 1183 Fulton St., soon receives bids building 1 story, 85 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 32-38 Schnectady Ave. About $30,000. S. Millman & Son, 26 Court St., archts.

N. Y., Clayton—St. Lawrence River Motor & Mchy. Co. purchased site on river front and having plans prepared for machine shop, garage and marine railway.

N. Y., New York—New York Central R.R., Grand Central Terminal, soon receives bids building 1-story, 35 x 180 ft. brick and steel garage and warehouse, rein.-con. flooring and concrete foundation, on Webster Ave., near Claremont Pkway., Bronx. About $75,000. Ewing & Allen, 101 Park Ave., archts. Central Fdry. Co., 90 West St., lessee.

N. Y., New York—Wendell Estate, 175 Bway., soon receives bids building 3 story, 90 x 100 ft., brick and rein.-con. garage, rein.-con. flooring, concrete foundation, at 142-148 West 39th St. About $30,000. J. B. Snooks Sons, 261 Bway., archts.

N. Y., Niagara Falls—Willys-Overland Co., 1294 Main St., Buffalo, purchased 26 acre site on Sugar and Lockport Sts., here, and plans to build tractor plow factory.

N. Y., Westfield—J. Kling, Maysville, plans to build 1 story, 64 x 540 ft., brick and timber factory here. About $43,000.

Md., Baltimore—City Baking Co., 500 Equitable Bldg., rejected all bids received Mar. 5, building 4 story, 58 x 143 ft., rein.-con., steel and brick addition to bakery, rein.-con. flooring, concrete and rock foundation on North Gay St. About $50,000 new bids in April. J. Freund, Jr., archt., 16 East Biddle St., revising plans. Noted Feb. 20.

Fla., Jacksonville—J. C. Helsema Co., 9th St., soon lets contract rebuilding 1-story, 100 x 200 ft. frame mill on 8th and 9th Sts. Cost between $75,000 and $100,000.

Ia., Davenport—Ewert & Richter Express & Storage Co., 320 East 4th St., soon receives bids building 8 story, 128 x 150 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation on 5th and Iowa Sts. About $200,000. Clausen & Kruse, 316 Central Office Bldg., archts.

Ia., Marshalltown—City election Mar. 31, to vote on $400,000 bonds to build electric light plant.

Minn., East Grand Forks—Farmers Potato & Grain Assn., Grand Forks., N. D., having plans prepared for potato warehouse here. About $50,000.

Kan., Sharon Springs—City plans election to vote on $40,000 bonds to improve electric light and water-works systems. Plans include new power house and installation of one 150 hp. and one 100 hp. engines, 75 gal. standpipe, etc.

Kan., Topeka—State had plans prepared for 25 x 150 ft. addition to State Printing plant on 10th and Jackson Sts., here. About $40,000. R. L. Gamble, Topeka, state archt. Noted Feb. 6.

Neb., Omaha—See "Buildings."

Neb., Omaha—E. L. Means, Orleans, having plans prepared by J. Latenser & Sons, archts., 632 Bee Bldg., for 6-story, 99 x 120 ft. rein.-con. warehouse, on 11th and Dodge Sts., here. About $100,000.

Neb., Omaha—Skinner Packing Co., 904 1st Natl. Bank Bldg., plans to build 8 story, 99 x 132 ft. cold storage plant, on 12th and Douglas Sts. About $500,000. H. C. Christianson, 7258 Union Ave., Chicago, Ill., engr.

S. D., Madison—City plans election to vote on $125,000 bonds to build electric light plant.

Mont., Wibaux—Eastern Montana Light & Power Co. plans to improve and build additions to plant to supply Wibaux and Glendive also Beach, N. D. H. Zopf, mgr.

Mo., Columbia—See "Buildings."

Mo., Fulton—Westminster College soon receives bids building heating plant on campus. About $25,000. E. E. Reed, pres.

Mo., St. Joseph—City plans election about May 1, to vote on $500,000 bonds to build extension to electric light plant. H. Johnson, city engr.

Mo., St. Louis—University of Missouri plans to build addition to machine shop on campus. About $25,000. A. R. Hill, pres.

Okla., Tahlequah—City plans to build light and power plant. About $65,000.

Utah, Salt Lake—Gen. Reduction & Chemical Co., 23 West 2nd St. S., plans to build acid plant. About $250,000

Industrial Works (Continued)

Ore., Salem—Crown Willamette Paper Co., West Linn St., Oregon City, and members of C. K. Logging Co., plan to build plant on Trade and Front Sts. here, to consist of various buildings, main structure 80 x 150 ft. About $400,000.

Cal., Atwater—Sunlit Fruit Co. plans to build 1 story, 120 x 175 ft., brick and concrete addition to cannery and packing plant, concrete foundation. About $100,000. Address F. F. Laney, Atwater.

Cal., Colusa—Rosenburg & Bros., 334 California St., San Francisco, having plans prepared by H. Brawnton, archt., 334 California St., for rice mill and warehouse here. About $250,000.

Cal., San Francisco—San Francisco Commercial Co. having plans prepared by McDonald & Kahn, engrs., Rialto Bldg., for 2 story addition to concrete warehouse on Mission St. near 10th St. About $60,000. Goodyear Tire & Rubber Co., lessee.

Cal., Snelling—Bd. Supervs. considering building rock crushing plant near here to supply materials for 125 mi. roads. A. E. Cowell, highway engr.

Ont., Toronto—Willard Chocolate Co., 143 Wellington St., having plans prepared by H. B. Chown, archt., 20 Wayland Ave., building 4 story, 60 x 110 ft. warehouse on Wellington St. About $80,000.

BIDS DESIRED

Conn., Hartford—Until Apr. 7, by Bd. Water Comrs., building 2 story, 29 x 153 ft. brick and concrete garage and office on Union St. Former bids rejected. C. M. Saville, 1026 Main St., ch. engr. Noted Oct. 10, 1918.

N. Y., Brooklyn—Until Apr. 7 (change of date) by Magid Katzman & Strober, 58 Boerum Pl., building 1-story, 100 x 165 ft. steel and brick warehouse, garage and workshop, rein.-con. flooring, concrete foundation, on Jefferson St., Wykoff and Flushing Aves. About $50,000. H. J. Nurick, 957 Bway, archt. Noted Feb. 20.

N. Y., Brooklyn—Until Apr. 14 (change of date) by H. J. Nurick, archt., 957 Bway., building 2-story, 120 x 160 ft. brick and steel garage, warehouse and work shop, rein.-con. flooring, concrete foundation, on Varick Ave. and Meserole St., for J. H. Werbelovsky, 83 Meserole St. About $50,000. Noted Feb. 20.

Va., Richmond—Until Apr. 5, by H. T. Barnham, archt., 509 Chamber of Commerce Bldg., for 2 story, 60 x 262 ft., brick, steel and rein.-con. garage, for H. T. Nelson & Co., 302 Mutual Bldg. About $80,000.

Ont., Toronto—Until Mar. 29, by Hynes & Watson, archts., 105 Bond St., building 5 story, rein.-con. factory, rein.-con. flooring, concrete foundation, on Richmond St., for Gelber Bros., 217 Richmond St. About $150,000.

Fla., Jacksonville—Virginia Chemical Co., 11 South 12th St., Richmond, Va., is receiving bids for fertilizer plant on Talleyrand Ave., here. About $200,000.

Man., Winnipeg—Until Apr. 16, by Dept. Pub. Wks., Ottawa, Ont., building 1 story, 110 x 122 ft., brick and timber extension to power house and laundry at Military Hospital, Tuxedo, rein.-con. flooring, concrete foundation. About $75,000. R. C. Wright, c/o Dept. Pub. Wks., archt.

B. C., Vancouver—Until Apr. 10, by Gardiner & Mercer, archts., 827 Birks Bldg., building 1 story, 200 x 208 ft. timber factory, including 52 x 56 ft. cleaning room, 24 x 76 ft. warehouse and 1 story office building, concrete foundation, on Industrial Island, for Morrison Steel & Wire Co. About $50,000. Noted Jan. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Bristol**—New Departure Mfg. Co., 269 North Main St., let contract building 1-story, 103 x 283 ft. brick, steel and rein.-con. factory, rein.-con. flooring, concrete foundation, to include 2 story, 30 x 103 ft. concrete fuel tanks, office and laboratory, to Torrington Bldg Co., 197 Water St., Torrington. About $250,000.

★**Conn., Hartford**—Indian Refining Co., 596 Windsor St., will build 1-story, 75 x 90 ft. concrete and timber oil storage plant rein.-con. flooring and concrete foundation, on North Front St. About $35,000. Work will be done by day labor.

★**N. Y., Brooklyn**—Circle Garage Co., 250 Coney Island Ave., will build 1-story, 50 x 200 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Coney Island Ave. and Prospect Pl. W. About $45,000. Work will be done by day labor. Noted Mar. 13.

★**N. Y., Brooklyn**—V. Guardino, 39 Central Ave., will build 1-story, 90 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Central and Forest Aves. About $30,000. Work will be done by day labor.

★**N. Y., Brooklyn**—Slatwell Realty Co., 1404 Pitkin Ave., will build 1 story, 100 x 120 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on 18th Ave. and 86th St. About $25,000. Work will be done by day labor.

★**N. Y., Brooklyn**—Smith & Son, 132 East 43rd St., New York City, will build 1 story, 80 x 180 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 373 Park Ave., here. About $35,000. Work will be done by day labor.

★**N. Y., Brooklyn**—M. Szczetkowsky, 147 North 6th St., let contract building 1-story, 30 x 100 ft., brick and steel packing plant, rein.-con. flooring, concrete foundation, at 149 North 8th St., to Lustbader Constr. Co., 103 Park Ave., New York City. About $55,000.

★**N. Y., Long Island City** — Factory Constr. Co., 44 Court St., Brooklyn, will build 4 story, 100 x 200 ft., brick and concrete garage, rein.,-con flooring, concrete foundation, on North Ave. and the Boulevard. About $350,000. Work will be done by day labor.

★**N. Y., Long Island City**—See "Buildings."

★**N. Y., New York**—Greenwich Development Co., 44 Court St., Brooklyn, will build 1 story, 85 x 140 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 537-549 Broome St. About $125,000. P. Deckman, pres. Work will be done by day labor.

★**N. Y., New York**—Haffen Realty Co., 2804-3rd Ave., will build 1-story, 30 x 130 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Lafayette and Garrison Aves., Bronx. About $30,000. Work will be done by day labor.

★**N. Y., New York**—Newat Building Co., 200 Bway., will build 1 story, brick and concrete bakery and garage, rein.-con. flooring concrete foundation on Boston Rd. and 177th St., Bronx Boro. About $45,000. Work will be done by day labor.

★**Pa., Phila.**—J. J. Felin Co., Inc., 4148 Germantown Ave., let contract building 2-story, 39 x 87 ft. rein.-con., brick and steel packing plant, cement and tile floors, metal ceiling, etc., to H. E. Baton & Co., 1713 Sansom St. About $90,000.

★**Pa., Phila.**—Miller North Broad Storage Co., 2715 North Broad St., let contract building 6-story, 52 x 108 ft. storage warehouse at 5301-03 Germantown Ave., to J. N. Gill & Co., Otis Bldg. About $75,000. Noted Feb. 13.

★**Ia., Davenport**—Tri-City Plate Ice & Cold Storage Co., 1433 West 2nd St., let contract building 1-story, 35 x 55 ft., brick ice plant, concrete foundation, to Vilter Mfg. Co., 872 Clinton St., Milwaukee, Wis. About $50,000.

★**O., Cleveland**—Accurate Machine Co., 1011 Power Bldg., let contract building 2 story, 40 x 160 x 180 ft. brick, steel and rein.-con. factory and office, rein.-con. flooring and concrete foundation on East 134th St. and Court Rd., to Hunkin Conkey Co., 601 Century Bldg. About $250,000.

★**O., Cleveland**—Cleveland Automobile Co., Hollenden Hotel, let contract building 4 story, 82 x 601 ft. brick, steel and rein.-con. factory, rein.-con. flooring and concrete foundation, on Euclid Ave. and London Rd., to Crowell-Lindoff Little Co., 5716 Euclid Ave. About $1,000,000.

★**O., Cleveland**—G. A. Rutherford Co., 1922 East 18th St., will build 2 story 80 x 80 ft. brick and steel warehouse and store, rein.-con. flooring and concrete foundation, at 2729 Prospect Ave. About $75,000. Work will be done by day labor.

★**Ill., Chicago**—Victor Mfg. & Gasket Co., 1956 South Troy St., let contract building two 1-story, 190 x 460 ft. and 25 x 198 ft. and one 2-story, 48 x 125 ft., brick and timber factories, rein.-con. flooring, concrete foundation, with 25 x 25 ft. tower, 60 ft. high, on 12th St. and 58th Ave., to R. F. Nelson & Co., 154 West Randolph St. About $275,000. Noted Dec. 19.

Minn., Mankato—Eckman Bros. received bids building 2-story, 30 x 50 ft. garage, 17 x 40 ft. office, 10 x 15 ft. stockroom and 50 x 88 ft. workshop, rein.-con and brick, from E. Schumacher, $28,971; O. Neitge, $29,017; J. B. Nelson, $30,567. All contractors of Mankato. Noted Mar. 13.

★**Neb., Omaha**—Skinner Packing Co., 904 1st Natl. Bank Bldg., let contract building 6-story, 65 x 65 ft., rein.-con. fertilizer plant, on south side, to Collins Bros., Omaha. About $50,000.

★**Okla., Oklahoma**—Acme Milling Co., 19 West Washington St., let contract rebuilding 3 story, 65 x 160 ft. brick warehouse, to Campbell & Price, 610 Majestic Bldg. About $35,000.

★**Cal., Los Angeles**—Pan Amer. Petroleum Co., Security Bldg., will build brick and concrete oil refinery on 12 acre site in Vernon Industrial Dist. Work will be done by day labor under supervision of T. D. Boyce, engr., Security Bldg. About $250,000. Noted Mar. 20.

Buildings

PROPOSED WORK

R. I., Providence—School—Marshak & Hickey, archts., 310 Strand Bldg., receive bids about Apr. 1, building 3-story, 42 x 60 ft. brick and steel, concrete foundation on Orms St., for Sons of Zion Society, 89 Orms St. About $60,000.

Conn., Bridgeport — Church — Swedish Baptist congregation, plans to build brick church, concrete foundation, on Colorado Ave. About $50,000. A. O. Lawrentes, Colorado Ave., pastor. E. E. Benedict, 51 Leavenworth St., archt.

Conn., Hartford—School—Bd. Educ. having plans prepared by I. A. Allen, archt., 904 Main St., for school on Market St., 1st School Dist. About $250,000. Address H. J. Dillon, 315 Pearl St.

Conn., Middletown—Memorial—City plans to issue $150,000 bonds to construct memorial building. Address Chamber Commerce, 303 Main St.

Conn., New Haven—Hotel—A. L. and I. Adelman, 10 Garden St., receive bids in May building 5 story brick and steel, rein.-con., flooring and concrete foundation on Whaley Ave. About $165,000. J. Weinstein, 6 Church St., archt.

Conn., Norwalk—Business—S. Roodner, Ann St., South Norwalk, receives bids about April for 2 story, 100 x 135 ft. brick, concrete foundation, on Wall St. here. About $75,000.

Conn., Norwich—Hospital—W. W. Backus Hospital, 326 Washington St., plans to construct new building. The late W. A. Slayter donated $100,000 for this project.

Conn., Norwich—School—Norwich Free Academy plans to build school. The late W. A. Slayter donated $100,000 for this project.

Conn., Stamford—Theater and Office—A. Spelke, 443 Atlantic St., purchased site on Main St. and plans to build 2 story, 56 x 175 ft. About $125,000.

Conn., Stratford (Bridgeport P. O.)—Theater, Store and Office—O. Christensen, 920 Main St., Bridgeport, having plans prepared by F. H. Beckwith, archt., Post Office Arcade, Bridgeport, for 2 story brick, concrete flooring and foundation on Main St. here. About $50,000.

Conn., Torrington—Theater—H. Quittner, c/o W. E. Hunt, archt., 182 South Main St., having plans prepared for brick and concrete theater, rein.-con. flooring and concrete foundation, on East Main St. About $90,000.

N. Y., Brooklyn—Theater—Miller-Weissman Amusement Co., c/o Shampan & Shampan, archts., 772 Bway., soon receives bids building 1 story, 75 x 100 ft., brick and steel, concrete foundation on Manhattan Ave. and Eagle St. About $80,000.

N. Y., Brooklyn—Theater—St. Marks Amusement Co., 285 Flatbush Ave., soon receives bids building 1 story, brick and terra cotta, concrete foundation. About $150,000. Careon & Wiseman, 220 Henry St., archts.

N. Y., Buffalo—Jewelry Establishment—T. and E. Dickinson & Co., 472 Main St., plans to build 15 story 48 x 115 ft., store and jewelry establishment at 618 Main St. About $170,000.

N. Y., Buffalo—Stadium—City Council approved petition for building memorial stadium with 35,000 seating capacity.

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Buildings (Continued)

N. Y., Carthage—School—Bd. Educ. considering erection of central high school and memorial community center.

N. Y., Long Island City—School—Bd. Educ., 500 Park Ave., New York City, soon receives bids building P. S. No. 3, 3 story, 105 x 108 ft., brick and steel, concrete foundation, on Colonial Ave., between Livingston and Meteor Sts., here. About $200,000. C. B. J. Snyder, Municipal Bldg., New York City, archt. Noted Jan. 16.

N. Y., New York—Office—60 Wall St. Corp. soon receives bids building 15-story addition. About $100,000. Clinton & Russell, 32 Liberty St., archts.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon receives bids building addition to P. S. 43, 3-story, 59 x 100 ft., brick and steel, concrete foundation, on Brown Pl., Bronx. About $93,250. C. B. J. Snyder, Municipal Bldg., archt. Noted Dec. 5.

N. Y., New York—Store and Loft—Musher & Cox, 140 Liberty St., having revised plans prepared by S. B. Eisendrath, archt., 18 East 41st St., for 12 story, 49 x 100 ft., brick and limestone, concrete foundation, at 255-257 5th Ave. About $190,000. Noted Mar. 13.

N. Y., Watertown—Hotel—United Hotel Co., Buffalo, retained G. B. Post & Son, archts., 101 Park Ave., New York City, to prepare plans for new hotel on Washington St. About $500,000. Noted Feb. 13.

Del., Wilmington—School—Tower Hill School Assn. having plans prepared by Brown & Whiteside, archts., Du Pont Bldg., for 2 story, on 17th St. and Tower Hill Rd. About $250,000.

Va., Richmond — Theater — Vincent & Wells Co. plans to build 1 story, 94 x 123 ft., on Broad and 8th Sts. About $150,000. Carneal & Johnson, 707 Chamber of Commerce Bldg., archts.

N. C., Oxford—Schools—Bd. Educ. plans election Apr. 8 to vote on $50,000 bonds to build high school and other schools in Oxford Graded Dist.

Fla., Miami—Church—Roman Catholic congregation plans to build church. Cost between $100,000 and $150,000. About $40,000 now available and amount to be increased at rate of $300 per week.

Fla., Tampa—Theater—Strand Amusement Co. soon receives bids for theater on Tampa and Lack Sts. About $150,000.

O., Barberton—Theater—Park Theater Co., 156 Columbus St., soon lets contract building 2-story, 48 x 100 ft. brick and concrete, on Tuscarawas St. About $50,000. Swirsky & Miller, 701 Peoples Savings & Trust Bldg., Akron, archts.

O., Dayton—Club—City plans to build 10-story, 100 x 137 ft. rein.-con., rein.-con. flooring, on 1st and Main Sts. About $1,000,000.

O., Lorraine—School—Bd. Educ. receives bids about May building 1 story, 125 x 200 ft. brick and timber, concrete foundation. About $125,000. Perkins, Fellows & Hamilton, 814 Tower Ct., Chicago, archts.

O., Oxford—Dormitory—Miami University having plans prepared by L. G. Dettoe, archt., Cincinnati building 3 story, brick and rein-con., rein-con. flooring, concrete foundation. About $300,000.

Ind., Michigan City—Bank and Office—Vitzthum & Teich, archts., 21 East Van Buren St., Chicago, receive bids about Apr. 5, for 2 story, 50 x 110 ft. brick and timber, concrete foundation, for 1st Natl. Bank. About $65,000.

Mich., Detroit—Restaurant and Stores—Walker Bros. Catering Co., 29 Farmer St., having plans prepared by J. J. Walsh, archt., 1327-29 Chamber Commerce Bldg., building 2 story, 62 x 145 ft. brick, and rein.-con., rein.-con. flooring and concrete foundation at 535 Woodward Ave. About $75,000.

Mich., Pontiac—Grade School—Bd. Educ. receives bids in summer building 1 story, 110 x 200 ft. brick and timber, concrete foundation. About $100,000. Perkins, Fellows & Hamilton, 814 Tower Ct., Chicago, archts.

Ill., Chicago—Bank and Office—H. L. Newhouse, archt., 4630 Prairie Ave., receives bids about Apr. 1, for 3 story, 65 x 120 ft., brick and timber, concrete foundation, on 12th St. and Kedzie Ave. for Independence State Bank, 1215 South Kedzie Ave. About $125,000. Noted Feb. 13.

Ill., Chicago—Hotel—Edgewater Beach Hotel Co., 5349 Sheridan Rd., soon receives bids for 10 story, 150 x 150 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, at 5400 Sheridan Rd. About $1,000,000. Marshall & Fox, 721 North Michigan Ave., archts.

Ill., Chicago—Hotel—Whitestone Co., c/o Marshall & Fox, archts., 721 North Michigan Ave., having plans prepared for 12 or 14 story, 216 x 400 ft. rein.-con., rein.-con. flooring and concrete foundation on Lincoln Parkway at Oak St., to be known as Drake Hotel. About $3,500,000.

Ill., Chicago—Police Station—Dept. Pub. Wks., 406 City Hall, having plans prepared by C. W. Kallal, archt, 1012 City Hall, for 2-story brick and timber. About $85,000.

Ill., Chicago—Store and Office—Holabird & Roche, archts., 104 South Michigan Ave., receive bids in April, for 7 story, 28 x 148 ft. brick and steel building, rein.-con. flooring, concrete foundation, at 127-129 South State St., for L. E. Waterman & Co., 191 Bway., New York City. About $225,000. Noted Feb. 20.

Ill., Chicago—Theater, etc.—A. E. Whitbeck, c/o W. W. Ahlschlager, archt., 111 West Washington St., having plans prepared building 3 story, 135 x 150 ft. brick, rein.-con. and steel theater and stores, rein.-con. flooring and concrete foundation, on West 63rd St. and Union Ave. About $700,000.

Ill., East Moline—School—City election Apr. 17, to vote on $80,000 bonds to build 8-story, 88 x 162 ft. brick, rein.-con. flooring on 17th Ave. and 9th St. Whitsitt & Schulzke, archts., 610 People's Bank Bldg., Moline, preparing plans.

Wis., Green Bay—High School—City Council plans to build high school. About $250,000. W. L. Kerr, city clk.

Wis., Superior—Auditorium—City election Apr. 1 to vote on $75,000 bonds to build auditorium. M. G. Beckley, city clk.

Ia., Akron—School—City election Apr. 7 to vote on $65,000 bonds to build school. T. Thorson, Forest City, archt.

Ia., Burlington—School—Bd. Educ. had plans prepared for 3 story, 38 x 62 x 64 ft., brick. W. A. Dunlevy, co. supt.

Ia., Creston—Hotel—Creston Hotel Co., c/o J. W. Reynolds, plans to build 6 story. About $200,000.

Ia., Le Mas—Administration—Western Union College plans to construct administration building. About $85,000. C. A. Mock, pres.

Ia., Ottumwa—Church—Swedish Lutheran congregation plans to build brick and stone church. About $50,000.

Ia., Sioux City — Hospital — Samaritan Hospital, 17th and Pierce Sts., having plans prepared by Beuttler & Arnold, archts., 610 Security Bldg., building 4 story, brick addition, rein.-con. flooring, concrete foundation on Douglas and Pierce Sts. About $250,000.

Ia., Sioux City—Schools—School Bd. having plans prepared by Geuttler & Arnold, archts., 610 Security Bldg., for fireproof additions to present schools and building 1 junior high school. About $325,000.

Ia., Sioux City—Y. W. C. A., 515 Nebraska St., having plans prepared by Beuttler & Arnold, archts., 610 Security Bldg., for 4 story, brick building, rein.-con. flooring, concrete foundation on 6th and Nebraska Sts. About $150,000.

Minn., Greenbush—School—City plans to issue $50,000 bonds to build school.

Minn., Minneapolis—Hospital—Salvation Army, 632 Boston Blk., plans to build 3 story, brick addition, brick foundation on Como Ave. About $52,000.

Minn., St. Paul—Hospital—Northern Pacific Mutual Beneficial Assn., 203 R. R. Bldg., receives bids late in spring building 4 story, 120 x 280 ft., brick and stone. About $450,000. L. Bassindale, 421 Capital Bank Bldg., archts.

Kan., Abilene—Church—Methodist congregation plans to build church. About $50,000.

Kan., Baxter Springs—Memorial—City having plans prepared by C. H. Johnson, archt., building 5-story, 110 x 142 ft. brick and rein.-con., rein.-con. foundation on 10th and Military Sts. Plans include offices, theater and club. About $200,000.

Kan., Manhattan—Church—First Methodist Episcopal congregation plans to build church. About $150,000.

Kan., Ottawa—Auditorium—City election Apr. 1, to vote on $75,000 to purchase site and build auditorium. E. M. Cusick, city clk.

Kan., Wichita—Office—Sinclair Refining Co. purchased 5 lots on Walnut St. and plans to build 3-story, 50 x 140 ft. brick and rein.-con. About $50,000.

Neb., Gering—Court House and Jail—Scottsbluff Co. election Apr. 15 to vote on $250,000 bonds to build court house and jail.

Neb., Omaha—Salesroom, etc.—Western Motor Car Co., 2047 Farnum St., plans to build 6 story, 132 x 136 ft., rein.-con. salesroom and warehouse, on Farnum St., between 30th and 31st Sts. About $350,000. G. L. Fisher, 1429 City Natl. Bank Bldg., archt.

N. D., Valley City—High School—Bd. Educ. plans to issue $91,000 bonds for new high school.

Wyo., Greybull — School — School Bd. Dist. 41 plans election to vote on $60,030 bonds to build 2 story school. A. Dietrich, Billings, Mont., archt.

Mo., Columbia—Gymnasium, etc.—University of Missouri plans to build women's dormitory, astrological observatory, home economics building, brick and concrete, rein.-con. flooring and concrete foundation, on campus, cost $190,000; also build cattle barn, alter power house, etc., $60,000. A. R. Hill, pres. Noted Jan. 16.

Mo., Joplin—Smith, Rea & Lovitt, archts., Finance Bldg., Kansas City, receive bids about Apr. 1, for 4 story, 103 x 129 ft. brick and rein.-con. building, concrete foundation, here, for Y. M. C. A. Calumet Bldg., St. Louis. About $250,000. Noted Jan. 9.

Mo., Kirksville—Gymnasium, etc.—Kirksville State Normal School plans to rebuild gymnasium and dormitory recently destroyed by fire. About $100,000.

Mo., St. Louis—Hospital—Jewish Hospital, 5415 Delmar Blvd., plans to build hospital. About $1,000,000. A. Waldheim, pres.

Tex., Dallas — Synagogue — Shaareth Israel congregation soon lets contract building white brick and terra cotta on Eakins and Park Ave. About $100,000.

Tex., San Angelo—Hotel—C. C. McBurnett having plans prepared by H. A. Overback, archt., Juanita Bldg., Dallas, for 3 story addition to St. Angelus Hotel here. About $60,000.

Idaho, Boise—Y. M. C. A. Assn. plans to purchase site and construct building. Total cost $165,000.

Idaho, Twin Falls—High School—Bd. Educ. plans to build junior high school. About $65,000. B. E. Morse, Twin Falls, archt.

Utah, Provo—Court House—Utah Co. plans to issue $250,000 bonds to build court house.

Utah, Provo—Hospital—State Legislature, Salt Lake City, appropriated $75,000 to build addition to hospital here.

Utah, Salt Lake City—Assembly Hall—State Legislature appropriated $75,000 to build at State University, here. J. A. Wiltsoe, pres.

Ariz., Jerome—Fire Station, Jail, etc.—City plans election in April to vote on $100,000 bonds to build combined fire station and jail, also for fire mains, fire fighting equipment, culverts, etc. Bonds previously voted were invalid. Noted Sept. 26.

Ariz., Phoenix—Hotel and Bungalows—Salt River Valley Hotel Co., c/o E. F. Parker, pres. Southwest Cotton Co., Tolleson St., plans to build hotel and bungalows on 160 acre site. About $500,000.

Wash., Seattle—Clubhouse—Seattle Yacht Club, Georgia and Railroad Sts., plans to build 3 story, timber, in Montlake Park. About $50,000. J. Graham, Mfrs. Exch. Bldg., archt.

Buildings (Continued)

Cal., Covina—Schools—Covina Grammar School Dist. plans election to vote on $150,000 bonds to build 2 or 3 one story brick, hollow tile or concrete schools.

Cal., Long Beach—Church—First Christian congregation having plans prepared by R. H. Orr, archt., 1301 Van Nuys Bldg., Los Angeles, for frame church, concrete foundation, on 5th St. and Locust Ave. About $125,000.

Cal., Los Angeles—School—Bd. Educ. soon receives bids building 1 and 2 story, 132 x 220 ft., brick, concrete foundation, on 7th St. About $90,000. Allison & Allison, 1405 Hibernian Bldg., archts. Noted Jan. 16.

Cal., Orange—Auditorium, etc.—School Trustees plan election Apr. 5, to vote on $150,000 bonds to build auditorium and other buildings at Orange Union High School Dist. site.

Cal., San Francisco—School—Bd. Educ. soon receives bids building 3 story, brick and concrete, on 18th and Balboa Sts. About $125,000. J. Reid, 1st Nat. Bank Bldg., archt.

N. S., Halifax — Hospital — Salvation Army, 20 Albert St., Toronto, Ont., plans campaign to raise $150,000 to build hospital here.

Que., Montreal—Custom House—Dept. Pub. Wks., Ottawa, Ont., soon lets contract building extension to custom house here. About $900,000. R. C. Wright, c/o Dept. Pub. Wks., engr.

Que., Montreal—Memorial Hall—Bishop Carmichael Memorial congregation, St. Albans Anglican Parish, plans campaign to raise $50,000 to build Memorial Hall. H. E. Horsey, 1729 Deha Roche St., minister.

Ont., London—Theater, Store, etc.—J. & J. J. Allen having plans prepared by C. H. Crane & E. G. Kiehler, archts., 2325 Dime Bank Bldg., Detroit, Mich., building 2 story, 85 x 132 ft. with 27 x 132 ft. lobby, rein.-con., brick and steel, rein.-con. flooring, concrete foundation on Dundas St. About $200,000. Noted Feb. 27.

Ont., Mimico—School—Town soon lets contract building school. About $50,000. J. Kay, secy. Noted Mar. 13.

Ont., Toronto—Store—Adams Furniture Co., 26 Queen St., W., plans to build 7 story, 60 x 200 ft., rein.-con. and brick, on Yonge St. About $200,000. W. Steele & Sons, Ryrie Bldg., archt.

BIDS DESIRED

N. Y., Albany—School—Until Apr. 21, by Bd. Contr. & Supply, building P. S. 19, 3-story, 41 x 160 ft., brick and rein.-con., concrete foundation, on New Scotland Ave. About $50,000. Fuller & Robinson Co., 95 State St., archts.

N. Y., Brooklyn—Schools—Until Apr. 4, by Bd. Educ., 500 Park Ave., New York City, building P. S. 100, 4 story, 100 x 144 ft., brick and steel, concrete foundation, on West 1st St., cost. $299,500; P. S. 80, 4 story, 100 x 144 ft., brick and steel, concrete foundation, on West 19th St., $310,230. B. J. Snyder, Municipal Bldg., New York City, archt. Noted Dec. 5.

N. Y., Rome—School—Until Apr. 10, by Bd. Educ., building 2 story, 103 x 132 ft., brick, concrete foundation, on Linden St. About $150,000. W. T. Towner, 366-5th Ave., New York City, archt. Noted Mar. 6.

N. Y., Wards Island—Dining Room—Until Apr. 9, by State Hospital Comn., Capitol, Albany, building 3 story, 22 x 144 ft., brick, steel and concrete, rein.-con. flooring, concrete foundation, at Manhattan State Hospital, here. Former bids rejected.

Ky., Scottsville — Hotel — Until Apr. 10 by T. B. Dixon, building 3 story, brick hotel. R. E. Turbeville, Scottsville, archt.

O., Bellaire — Temple — Until Apr. 16. by United Mine Workers of Sub. Dist., No. 5, Bridgeport, building 3 story, 82 x 129 ft. brick, on Central Ave. and Belmont St. About $125,000. F. F. Faris, Schmulback Bldg., Wheeling, W. Va., archt. Noted Jan. 30.

Ill., Chicago — Exchange — Holabird & Roche, archts., 104 South Michigan Ave., receiving bids building 3-story, 42 x 66 ft. brick and timber addition, rein.-con. flooring and concrete foundation, at 25 South Seeley Ave., for Chicago Telephone Co., 212 West Washington St. About $100,000.

Ill., Chicago—School—Until Apr. 2, by Bd. Educ., building 3 story, 105 x 160 ft., brick and steel addition to Nash School, rein.-con. flooring, concrete foundation, on Erie St. and Lamon Ave. About $250,000. A. F. Hussander, 6 South Dearborn St., archt. Noted Sept. 12.

Wis., Superior—School—Until Apr. 14 by Bd. Educ. building 2 story, 80 x 200 ft. with 1 story, 56 x 70 ft. wing on 21st St. between Lamborn and Weeks Sts. About $200,000. F. E. Johnson, Wisconsin Blk., archt. Noted Feb. 20.

Ia., Jefferson—School—Until Apr. 9, by Bd. Educ., building 2 story, 79 x 152 ft., rein.-con. and brick. About $140,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts. Noted Sept. 12.

Ia., Menlo—School—Until Mar. 31 by Bd. Educ., building 3-story, 61 x 104 ft., rein.-con. and stone. About $75,000. Keffer & Jones, 610 Youngerman Bldg., Des Moines, archts. Noted Feb. 20.

Minn., Brainerd—Courthouse—Until May 1, by Alden & Harris, archts., 1011 New York Life Bldg., St. Paul, building 3 story, rein.-con. and brick, rein.-con flooring, concrete and rock foundation for Crow Wing Co. About $250,000.

Minn., Buhl—High School—Until Apr. 15, by St. Louis Co. Dist. No 35, building 3 story rein.-con. and brick addition, rein.-con. flooring, concrete and rock foundation on Chestnut St. About $275,000. A. W. Kerr & Co., 524 Metropolitan Bank Bldg., Minneapolis, archts.

Minn., Chisholm—Auditorium—Until Apr. 15, by A. Puck, archt., Tarrey Bldg., Duluth, building 2 story, 85 x 125 ft., rein.-con. and brick, on Main St., for city. About $100,000.

Minn., Virginia—Hall—Until May 1, by A. C. Bickford, city clk., building 3 story, rein.-con and brick, rein.-con. flooring, concrete and rock foundation on Main St. About $200,000. A. W. Kerr & Co., 524 Metropolitan Bank Bldg., Minneapolis, archts. Noted Feb. 13.

Cal., Compton—School—Until Apr. 4, by Compton Union High School Dist., building 1 story, 56 x 146 ft., manual arts school, concrete foundation. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts.

B. C., Vancouver — See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Rectory, etc.—St. Phillips congregation, Harrison Ave., let contract building 3-story, 40 x 60 ft. brick and concrete rectory and chapel, concrete foundation, to Archdeacon & Sullivan, 5 East Concord St. About $50,000.

Conn., Fairfield—School—St. Thomas congregation received only bid building 2 story, 62 x 96 ft. brick, concrete and steel, rein.-con. flooring and concrete foundation, on Boston Post Rd., from Casey & Hurley, 120 Pequock St., Bridgeport. About $65,000. Noted Mar. 13.

★Conn., Hartford—School—Bd. Educ., north East School Dist., let contract building 3-story, 80 x 150 ft. brick and concrete addition to school, concrete foundation, on Westland St., to Wise & Upson, Inc., 36 Pearl St. About $225,000. Noted Feb. 6.

★Conn., New Haven (Hamden)—Church—Hamden Plains Methodist Episcopal Society, Hamden, let contract building 57 x 115 ft. brick on Dixwell Ave. and Church St., to J. E. Todd, 255 Kimberley Ave. Noted Feb. 13.

★N. Y., Long Island City—Studio and Laboratory—Famous Players-Lasky Corp., 485 5th Ave., New York City, let contract building 4 story, 100 x 200 ft., studio and 3 story, 90 x 120 ft. laboratory, both rein.-con. and brick, rein.-con. flooring, concrete foundation, on Pierce, Graham, 5th and 7th Aves., to Fleischmann Constr. Co., 531 7th Ave., New York City. About $2,000,000; cost plus percentage.

★N. Y., New York—Theater—City Real Estate Co., 176 Bway, will build 2 story, 189 x 213 ft. brick and steel, concrete foundation, at 4827 Bway. About $100,000. Work will be done by day labor. B. Cleveland, pres. Noted Mar. 13.

★Pa., Palmerton—School—Bd. Educ. let contract building grade school to C. W. Strayer, Lemoyne. About $72,500. Noted Mar. 6.

Pa., Phila.—Drill Shed—Armory Bd. of State of Pa., Capitol, Harrisburg, received bids Mar. 21, building 1 story, 154 x 282 ft. rein.-con., steel and brick, rein-con. flooring, concrete foundation, on Lancaster Ave. from 32nd to 33rd St., from G. F. Pawling Co., 1432 South Penn Sq., $215,000; Standard Constr. Co., 1713 Sansom St., $239,860. Noted Mar. 6.

★Pa., Phila.—Theater—Advanced Amusement Co., c/o Palace Theater, 1214 Market St., let contract for remodeling theater, to D. I. Henon, 5324 Cedar Ave. About $50,000.

★O., Cleveland—See "Industrial Works."

★Wis., Marshfield—School—Bd. Educ., School Dist. No. 1, let general contract building high and vocational school, to Krasin Bros., Marshfield, $52,200.

★Minn., Bloomington—(Minneapolis P. O.)—Club—Minneapolis Auto Club, Bank Bldg., let contract building 2 story, brick and tile, to J. Leck Co., 316 South 7th St. About $75,000.

★Mo., St. Louis—Hotel—A. D. Gates Constr. Co., Chemical Bldg., will build 5 story, 38 x 109 ft. and 31 x 48 ft. brick and rein.-con., concrete flooring and foundation, at 5540 Pershing Ave. About $100,000. Work will be done by day labor.

★Utah, Salt Lake—Office—V. Clift, 10 West Bway., let contract building 8-story, 80 x 165 ft., rein.-con. on 3rd S. and Main Sts., to Larsen-Sampson Co., Crocker Bldg., San Francisco, $550,000.

★Wash., Bremerton—Clubhouse—Y. M. C. A. let contract building 5 story, concrete, with brick and concrete foundation, to Rounds Clist Constr. Co., Walker Bldg., Seattle. About $60,000.

★Wash., Bremerton—Dance Hall, etc.—M. E. Giles let contract building 60 x 103 ft., hollow tile building to contain dance hall, etc., to C. Oleson, Bremerton. About $56,000.

Federal Government Work

PROPOSED WORK

N. Y., Stapleton—Hospital—Congress appropriated $190,000 to build addition to hospital here.

D. C., Wash.—Hospital—Congress appropriated $550,000 to build complete hospital here.

D. C., Wash.—Hospital—Congress appropriated $750,000 to remodel and enlarge hospitals as follows: Camp Cody, N. M.; Camp Hancock, Ga.; Camp Joseph E. Johnston, Fla.; Camp Beauregard, La.; Camp Logan, Tex.; Camp Fremont, Cal.; also $1,500,000 has been appropriated for sanitorium at Dawson Springs, Ky.

Va., Norfolk—Hospital—Congress appropriated $900,000 to build complete hospital here.

Idaho, Bonners Ferry—Roads—U. S. Bureau Pub. Rds., Portland, Ore., plans to grade 4 mi. Pend Odeille Natl. Forest Rd. from Addie to Copeland. About $10,000. L. I. Hewes, Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

Idaho, Grangeville—Roads—U. S. Bureau Pub. Rds., Portland, Ore., plans to grade 23 mi. Kooskia-Lowell Rd., Idaho Co. About $100,000. L. I. Hewes, Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

Idaho, Sandpoint—Roads—U. S. Bureau Pub. Rds., Portland, Ore., plans to grade 8 mi. Kootenai Cabinet Rd. between Hope and Pack River, Bonner Co. About $25,000. L. I. Hewes, Bway.-Yamhill Bldg., Portland, Ore., dist. engr.

BIDS DESIRED

R. I., Block Island—Rip Rap—Until Apr. 4, by Lighthouse Supt., Tompkinsville, N. Y., furnishing and placing 6000 tons rip rap on west side of outer end of Great Salt Pond Breakwater here.

R. I., Coddington Point—Wall and Dock—Until Mar. 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3726. About $225,000. Noted Dec. 19.

Federal Government Work (Continued)

Mass., Boston—Electric Bridge Cranes—Until Apr. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 6 electric bridge cranes in machine shop addition; Spec. 3477. About $175,000; $10 deposit required for plans and spec. Noted Sept. 26.

Conn., New London—Dredging—Until Apr. 8, by U. S. Eng. Office, New London, for annual maintenance dredging in Connecticut River below Hartford; advertised in this issue.

N. Y., Buffalo—Removing Wreck—Until Apr. 10, by U. S. Eng. Office, 540 Federal Bldg., removing wreck of Steamer Tempest from Erie Harbor, Pa.; advertised in this issue.

D. C., Wash.—Road Work—Until Apr. 15, by Zone Supply Officer, 17th and F Sts., N. W., grading, paving, draining, etc., in southern portion of Arlington Cemetery.

W. Va., Wheeling—Radial Brick Chimney—Until Apr. 9, by U. S. Eng. Office, Wheeling, furnishing, delivering and erecting radial brick chimneys at Dams 21, 23, 25 and 27, Ohio River.

W. Va., Wheeling—Valve Jacks—Until Apr. 17, by U. S. Eng. Office, Wheeling, furnishing and delivering river wall valve jacks for Dams 23, 25 and 27, Ohio River; advertised in this issue.

Fla., Jacksonville—Coal—Until Apr. 16, by U. S. Eng. Office, Jacksonville, furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters; advertised in this issue.

Fla., Pensacola—Electrical Equipment—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3785. About $30,000; $10 deposit required for plans and spec. Noted Feb. 6.

Mo., St. Louis—Earthwork—Until Apr. 23, by Secy. Mississippi River Comn., International Life Bldg., for 290,000 cu.yd. earthwork in Lima Lake D. D., near Quincy, Ill.; 110,000 cu.yd. earthwork in Hunt D. D., Hancock Co., Ill.; 200,000 cu.yd. earthwork levee enlargement, Muscatine, Ia.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Easton—Hoistway, Lift, etc.—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract installing hoistway, hydraulic lift, pump, etc., in post office here, to Otis Elevator Co., Metropolitan Bank Bldg., Wash., D. C., $10,870. Noted Feb. 27.

★Pa., Phila.—Steel Storage Racks, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building substructure for steel storage racks, laying track, grading, etc., to Curtis Bros., Longshore and Tulip Sts., Tacony, $84,902 (110 days). Noted Jan. 30.

★Va., Yorktown—Wooden Pier and Approach—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., $156,207 (120 days). Noted Mar. 20.

★Fla., Pensacola—Concrete Road—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to J. Jerken, Brent Bldg., $11,749 (50 days). Noted Jan. 16.

Ala., Decatur—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids: (1) original bids, (2) supplemented bids, amount to be deducted from (1) S. Plate, Marion, Ind., (1) $55,370; (2) deduct $10,878; A. Blair, 11 South Lawrence St., Montgomery, $55,370, (2) deduct $9000; R. P. Farnsworth & Co., Owensboro, Ky., (1) $60,573, (2) deduct $15,323. Noted Dec. 5.

★Mo., St. Louis—Enlarging Levee—Secy. Mississippi River Comn., 1311 International Life Bldg., let contract filling 354,000 cu.yd. old borrow pits and rebuilding or enlarging 96,000 cu.yd. levee, to Northern Dredge & Dock Co., Providence Bldg., Duluth, Minn., $121,050. Noted Feb. 20.

★Tex., El Paso—Valves, etc.—U. S. Recl. Serv., El Paso, let contract furnishing balanced valves, in connection with Elephant Butte Dam, Rio Grande Irrigation Project, New Mexico, Texas, to Rosedale Fdry. & Machine Co., Columbus and Preble Sts., Pittsburgh, $11,080; auxiliary control seat rings and throat pieces to Stearns-Rogers Mfg. Co., 1720 California St., Denver, Colo., $6352.

Tex., North Ft. Worth—Argon Production Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 17.

(1) net price and time for work complete in accordance with drawings and specifications, basing proposal on coal tar pitch built up roofing and excluding all excavating back filling and concrete work on cooling pond;

(2) amount to be deducted from (1) if all work under heading "Erection of Machinery" is excluded;

(3) amount to be deducted from (1) if all work under heading "Removal of Gas Holder" is excluded;

(4) amount to be deducted from (1) if all work under heading "Piping for Machinery" is excluded. Work on this heading includes all piping for machinery above ground and floors;

(5) amount to be deducted from (1) if all work under heading "Transmission Line" is excluded;

(6) amount to be deducted from (1) if all work under heading "Electrical Distribution System" is excluded;

(7) amount to be deducted from (1) if all work under heading "Railroad" is excluded;

(8) amount to be deducted from (1) if all work under heading "Roads and Walks" is excluded;

(9) net price and time for all work under heading "Erection of Machinery" complete and in accordance with drawings and specifications;

(10) net price and time for all work under heading of "Removal of Gas Holders" complete and in accordance with drawings and specifications;

(11) net price and time for all work under heading "Piping for Machinery" complete and in accordance with drawings and specifications. Work under the heading includes all piping for machinery above ground and floors;

(12) net price and time for all work under heading "Transmission Line" complete and in accordance with drawings and specifications;

(13) net price and time for all work under heading "Electrical Distribution System" complete and in accordance with drawings and specifications;

(14) net price and time for all work under heading "Railroad" complete and in accordance with plans and specifications;

(15) net price and time for all work under heading "Road and Walks" complete and in accordance with drawings and specifications;

(16) amount to be added to or deducted from (1) if asphalt built up roofing is substituted for coal tar pitch;

(17) unit price per cubic yard for excavating and back-filling required in construction of the "Cooling Pond";

(18) unit price per running foot for all concrete work installed in construction of "Cooling Pond" including cutting rock at bottom and waterproofing, from

Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., (1) $543,000, (time as specified); (2) $12,000; (3) $3000; (4) $112,000; (5) $4600; (6) $27,500; (7) $6500; (8) $11,194; (9) $12,000; (10) $3000; (11) $112,000; (12) $4600; (13) $27,500; (14) $6500; (15) $11,194; (17) $3.50; (18) $25.

Central Contg. Co., Beattie Building, Houston, (1) $553,000, (220 days); (2) $20,000; (3) $5000; (4) $105,000; (5) $3000; (6) $27,000; (7) $4500; (8) $8000; (16) add $600; (17) $1.00; (18) $4.00.

Carroll Electric Co., 714 12th St., N. W., Wash., D. C., (1) $596,768, (180 days); (2) deduct $16,000; (3) deduct $14,000; (4) deduct $58,000; (5) deduct $5600; (6) deduct $36,000; (7) deduct $5700; (8) deduct $14,000; (9) $20,600, (60 days); (10) $18,200, (30 days); (11) $71,600, (60 days); (12) $7600, (30 days); (13) $44,500, (60 days); (14) $9000, (30 days); (15) $19,700, (60 days); (17) $3.00; (18) $10.00. Noted Mar. 13.

★Cal., San Diego—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 7 barrack buildings to Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C. (3, 7, 8 and 9b), $949,500. Noted Mar. 13.

Miscellaneous

PROPOSED WORK

Roller Coaster — West Haven (New Haven, P. O.) **Conn.**—S. A. de Waltoff, 67 California St., plans to build roller coaster, 2500 ft. track, 9000 ft. bank iron, 500 ft. link belt and 50 hp. electric motor. About $18,000.

Receiving Vault—Watertown, N. Y.—City having plans prepared by E. W. Sayles, city engr., for concrete receiving vault. About $16,500.

Removing Tracks, Parking, etc.—Baltimore, Md.—Bd. Estimates considering removal of parking from center of North Ave. between Charles and Oak St., 16,500 ft. long, 20 ft. wide; removal of United Rys. Co. tracks to center of streets and paving between tracks, sheet asphalt on Belgian blocks. Cost between $20,000 and $25,000. G. F. Wieghardt, city engr.

Fill—Jacksonville, Fla.—City plans to fill 1 mi. strip along water front from Lancaster Terrace, south, 250 ft. wide, involving 33⅓ acres averaging 3 yd. deep, to cost $17.50 per lin.yd., $924 per acre and $0.07 per cu.yd. Total cost, $30,800.

Bulkhead—Kissimmee, Fla.—City soon receives bids building bulkhead at Lake Tohopekaliga. Bonds for $100,000 voted for this and other civic improvements.

Telephone Lines—Boone, Ia.—Boone Co. Telephone Co. plans to expend $25,000 for improvements to its lines.

Road Oil—Davenport, Ia.—Comrs. Scott Co. soon receives bids supplying 120,000 gal. road oil. A. A. Ryan, Davenport, co. engr.

Tractors, Drags, etc.—Williston, N. D.—Comrs. William Co. plan to purchase tractors, drags and other road equipment. M. Aaen, co. aud.

Levee—Malta Bend, Mo.—Saline-Lafayette Levee Dist. receives bids about Apr. 1 for 150,000 cu.yd. levee work. About $35,000. C. S. Swift, Lexington, engr.

Extending Electric Distribution System, etc.—Brigham, Utah—City voted $15,000 bonds to extend and overhaul electric distribution system, including new street lighting equipment.

Rock Breakwater—Redondo Beach, Cal. City retained Leeds & Barnard, engrs., Central Bldg., Los Angeles, to prepare estimate of cost of building 1800 ft. rock breakwater and concrete pontoons filled with sand. About $300,000 available. Address J. V. McCullen, city industrial mgr.

Road Graders, etc.—St. John, N. B.—City plans to purchase 4 road graders and one 1½ ton motor truck. G. F. Fisher, comr. wks.

Monument—Hull, Que.—City plans to build monument. About $20,000. R. E. Boucher, engr.

Culverts—Ottawa, Ont.—See "Streets and Roads."

Culverts—Toronto, Ont.—Toronto & York Good Roads Comn. soon lets contract building 7 rein.-con. culverts. About $14,000. E. A. James, engr.

BIDS DESIRED

Miscellaneous Supplies — Long Island City, N. Y.—Until Apr. 3, by M. E. Connolly, pres. Queens Boro., furnishing and delivering 6500 cu.yd. sand, 2500 cu.yd. sand grit or broken stone chips at various points in borough, 2 automobile pressure distributors for bituminous distribution, including chassis pump tank and fittings.

Miscellaneous Supplies—New York, N. Y.—Until Apr. 3, by Dept. of Parks, furnishing and delivering grits, 80,000 gal. tar road oil, etc., Bronx Boro.

Miscellaneous Supplies—New York, N. Y.—Until Apr. 3, by J. H. Delaney, comr. plant and structures, Municipal Bldg., furnishing and delivering 200,000 wood paving blocks, 3 x 3 x 8 in., and 200,000 wood paving blocks, 2 x 6 2½ in.

Miscellaneous Supplies—New York, N. Y.—Until Apr. 4, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 20,000 new granite paving blocks.

Road Roller—Newark, N. J.—Until Mar. 31, by G. C. Bergen, purch. agt. Essex Co., furnishing one 12-ton single cylinder gasoline road roller.

Paving Material—Springfield, Ill.—Until Apr. 2, by Dept. Pub. Wks., furnishing about 2,000,000 bbls. Portland cement for state and Federal-aid road and bridge work.

Paving Material—St. Paul, Minn.—Until Mar. 31, by H. W. Austin, purchasing agt., City Hall, furnishing paving material, including crushed rock, cement, wood blocks, asphalt filler, asphalt cement, etc.

Miscellaneous (Continued)

Road Oil—St. Paul, Minn.—Until Mar. 31, by H. W. Austin, purchasing agt., City Hall, furnishing 70 cars more or less road oil for Dept. Pub. Wks., 60,000 gal. more or less for Dept. Parks, Playgrounds & Pub. Bldgs., required during year.

Fill and Bulkhead—Astoria, Ore.—Until Apr. 16, by Sanitary and Recl. Comn., building bulkhead, fill and rock work, in Recl. Impvt. Dist. No. 3. Work involves 779 brace piles and pile shoes, 2350 straight lumber piles, 35-40 ft. long, 697,620 ft. Wakefield sheeting, 53,325 ft. platform decking, 187,669 ft. lagging, 76,582 ft. walling, 24,147 ft. miscellaneous; hardware, 1348 lb. 1 x 22 in. 18,750 lb. 1 x 24 in., 2746 lb. ¾ x 24 in., 3462 lb. ⅞ x 30 in. bolts, 166 lb. 8 in. boat spikes, 5060 lb. 12 in. boat spikes, 80 lb. 8 in. galvanized spikes, 3636 cu.yd. rock rip-rap, quarry refuse and screenings, 4901 cu.yd. one man rock, 1,285,201 cu.yd. fill. About $400,000. Noted Feb. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Driving Piles—Providence, R. I.—Marine Eng. & Drydock Co., Allens Ave., let contract driving 1300 concrete piles, 70-80 ft. long, for new marine railway, to Aberthaw Constr. Co., 27 School St., Boston.

★Retaining Wall, etc.—Waterbury, Conn.—Amer. Brass Co., Grand and Meadow Sts., let contract building rein.-con. retaining wall and 10 x 15 ft. rein.-con. pump house, to Torrington Bldg Co., 197 Water St., Torrington. About $10,000.

Miscellaneous Supplies—Albany, N. Y.—State Highway Comn., 55 Lancaster St., received bids Mar. 16, furnishing and delivering bituminous material (1) cold patch asphaltic emulsion, Div. 1, 2, 3, 4 and 5, (2) cold patch asphaltic emulsion, Div. 6, 7, 8 and 9, (3) asphalt cut back, all divisions, (4) material "A" binder, all divisions, (5) light cold oil, all divisions, (6) light hot oil, all divisions, (7) material "T" cold patch, all divisions, (8) material "T" cold applications, all divisions, from Atlantic Refining Co., Inc., 3144 Passayunk Ave., Philadelphia, Pa., (1) $73,397, (2) $59,625, (3) $83,046, (4) $92,175; (5 and 6) $31,143;

Warner Quinlan Co., 79 Wall St., New York City, (1) $75,712, (2) $61,288, (3) $93,009, (4) $96,427, (5 and 6) $36,274;

Capitol City Supply & Contg. Corp., Albany, (1) $90,161, (2) $74,980, (3) $121,293;

Headley Good Roads Co., 30th and Spruce Sts., Philadelphia, Pa., (1) $91,052, (2) $74,165, (3) $82,695;

Standard Oil Co., of New York, 26 Bway., New York City, (3) $80,175, (4) $97,555, (5 and 6) $35,674;

U. S. Asphalt Refining Co., 90 West St., New York City, (4) $87,331, (5 and 6) $34,343;

Texas Co., 17 Battery Pl., New York City, (4) $95,757; (5 and 6) $50,595;

Prudential Oil Co., 17 Battery Pl., New York City, (5 and 6) $39,316;

Barrett Co., 17 Battery Pl., New York City, (7) $112,065, (8) $125,611;

United Gas Impvt. Co., Broad and Arch Sts., Phila., Pa., (7) $121,667. Noted Mar. 6.

Miscellaneous Supplies—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., received bids Mar. 19, furnishing and delivering (1) 600 tons asphaltic paving cement, (2) 70,000 gal. fuel oil (3), 40,000 granite paving blocks, (4) 200,000 sewer bricks, (5) 6000 cu.yd. paving sand, (6) 3000 cu.yd. paving grits, from Standard Oil Co., 26 Bway., (1) $12,510 (2) $5950; Atlantic Refinery Co., 3140 Passayunk St., Phila., Pa., (1) $15,330; Warner-Quinlan, 26 Bway., (1) $17,366; Booth Bros., 206 Bway., (3) $5000; J. Leopold, Woolworth Bldg., (3) $5080; Rockport Granite Co., 13 Park Row, (3) $5100; J. A. McCarthy, 149th St. and Exterior Ave., (4) $3570; Manhattan Sand Co., 418 East 49th St., (5) $8880 (6) $4440; Lenox Sand Gravel Co., Hudson River and 157th St., (5) $9135, (6) $4680; E. H. Lougee, 222 4th Ave., (5) $9650, (6) $4950. Noted Mar. 13.

Paving Blocks—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., received bids Mar. 19, furnishing and delivering 630,000 granite paving blocks, from W. J. Fitzgerald, 547 West 45th St., $13,860; J. Leopold & Co., Woolworth Bldg., $15,687; Rockport Granite Co., 13 Park Row, $17,010. Noted Mar. 13.

HIGHWAY-OSWEGO, KAN.

Section "A"

Bids were received by Commissioners of Labette Co. for constructing highway from Oswego to Chetopa, Federal Aid Project No. 2, from (A) W. C. Jucksch, Sapulpa, Okla., (awarded contract); (B) Elliott & Vance, Parsons; (C) Maley & Kelly, Kansas City, Mo.; (D) Cameron-Joyce Co., Keokuk, Ia., $91,653. The unit bids of the lowest 3 bidders were as follows:

Section A	A	B	C
25,547 cu.yd. earth excavation	$0.36	$0.45	$0.40
24,455 cu.yd. earth borrow	.35	.45	.37
134.5 cu.yd. Class "A" concrete	19.00	20.00	20.00
405.5 cu.yd. Class "C" concrete	17.50	16.00	18.00
6,900 lb. reinforcing steel	.07	.07	.80
42,900 sq.yd. earth shoulders	.04	.05	.04
86,164 sq.yd. gravel roadway	.58	.58	.66
384 ft. drain tile	.25	.20	.15
2 section markers	25.00	20.00	25.00
Hauling and installing concrete culvert pipe			
584 ft. 15-in. pipe	.85	.65	.80
322 ft. 18-in. pipe	1.10	.85	1.05
306 ft. 24-in. pipe	1.50	1.00	1.45
16 ft. 30-in. pipe	2.50	1.25	1.90
Extended totals	$81,078	$85,378	$89,779

Section "B"

Bids were received by Commissioners of Labette Co. for constructing highway from Parsons to Altamont, from (A) Elliott & Vance, Parsons, (awarded contract); (B) W. C. Jucksch, Sapulpa, Okla. The unit bids were as follows:

Section B	A	B
28,775 cu.yd. earth excavation	$0.45	$0.36
12,530 cu.yd. earth borrow	.45	.36
41.1 cu.yd. Class "A" concrete	20.00	20.00
346.5 cu.yd. Class "B" concrete	16.00	19.00
8238 lb. reinforcing steel	.07	.07
47,479 sq.yd. earth shoulders	.05	.05
95,360 sq.yd. gravel roadway	.87	1.10
2 section markers	20.00	25.00
Hauling and installing concrete culvert pipe		
1208 ft. 15-in. pipe	.65	.65
248 ft. 18-in. pipe	.85	.52
192 ft. 24-in. pipe	1.00	1.00
32 ft. 30-in. pipe	1.25	1.25
Extended totals	$112,135	$131,840

STATE HIGHWAY—CALIFORNIA

Bids were received by State Highway Comn., Forum Bldg., Sacramento, for constructing state highway in San Luis Obispo Co., Div. 5, Sect. 3, Route 33, from (A) C. H. Hudson, Marsh-Strong Bldg., Los Angeles; (B) Isbell Constr. Co., Fresno; (C) John P. Holland, San Francisco; (D) G. S. Benson & Sons, Stimson Bldg., Los Angeles, $85,267; (E) F. Rolandi, 550 Montgomery St., San Fracnisco, $104,674; (F) Plamer & McBryde, Hooker & Lent Bldg., San Francisco, $105,873; (G) W. J. Schmidt, Berkeley, $132,440; (H) B. J. Crowley, San Francisco, $158,527. The uint bids of the lowest 3 bidders were as follows:

	A	B	C
Excavation			
78,200 cu.yd. without classification	$0.69	$0.70	$0.85
1600 lin.ft. 12-in. corrugated metal pipe	1.30	1.00	.70
385 lin.ft. 18-in. corrugated metal pipe	1.60	1.00	1.10
295 lin.ft. 24-in. corrugated metal pipe	1.90	1.00	1.40
85 lin.ft. 30-in. corrugated metal pipe	2.00	1.25	2.00
345 lin.ft. 36-in. corrugated metal pipe	2.50	1.60	2.50
Portland cement concrete			
465 cu.yd. Class "A" (culverts-monorails)	22.00	25.00	20.00
Surfacing			
3500 cu.yd. (shale and gravel)	1.20	1.80	1.40
1000 lin.ft. guard rail	1.00	1.00	.60
130 Monuments	1.50	1.00	1.00
Extended totals	$73,872	$76,733	$84,389

★Rebuilding Ferry Racks—New York, N. Y.—J. A. Delaney, comr. plant and structures, rejected all bids received Feb. 26, rebuilding ferry racks at Manhattan Terminal of Staten Island ferry. About $75,000. Work will be done by day labor. Noted Mar. 6.

★Oiling Roads—Baltimore, Md.—State Rds. Comn., 601 Garrett Bldg., let contract to United Gas Impvt. Co., Broad and Arch Sts., oiling 37.95 mi. roads in Div. 2, Dorchester, Somerset, Wicomico and Worcester Counties, involving 69,103 gal. oil, cost, $8258; Div. 2, 81.61 mi. roads in Cecil, Kent, Queen Annes, Talbot and Caroline Counties, 165,796 gal. oil, $19,547; Div. 3, 53.3 mi. in Montgomery, Howard, Prince Georges and Charles Counties, 109,188 gal. oil, $13,179; Div. 4, 147.33 mi. roads, in Baltimore, Harford and Anne Arundel Counties, 299,376 gal. oil, $36,374; to Atlantic Refining Co., 3144 Passavunk Ave., Div. 5, 147.89 mi. roads, Carroll, Frederick, Howard, Montgomery and Baltimore Counties, 300,939 gal. oil, $35,962; to Barrett Co., 36th St. and Grays Ferry Rd., 161.55 mi. roads in Garrett, Allegany, Washington and Frederick Counties, 362,262 gal. oil, $46,329. All contractors of Phila., Pa. Noted Feb. 13.

★Gas Tank—Chicago, Ill.—Peoples Gas, Light & Coke Co., 122 South Michigan Ave., let contract building 10,000,000 gal. gas tank on Crawford Ave. and 36th St., to Bartlett Hayward Co., 122 South Michigan Ave. About $600,000. This is first item of construction in connection with plant to cost $15,000,000.

★Dock—Cedar Rapids, Ia.—Swift & Co., 116 B Ave., let contract building 24 x 100 ft addition to dock with 50 x 60 ft. wing, to T. Stark & Co., 118 South 11th St., $20,000.

★Tunnel—Los Angeles, Cal.—Bd. Pub. Wks. let contract building 2nd St. tunnel, to J. Hayes, 1176 West 30th St. About $995,773. Tunnel will be single bore, from Hill to Flower Sts., 1602 ft. long, 28 ft. high, masonry lined with tile. Work includes stairway, cost, $946,496, grading at portals, $25,846; 37,694 sq.ft. grading for repaving, $0.11 per ft., 47,347 sq.ft. asphalt repaving, $0.095 per sq.ft., 102 sq.ft. granite block repavement, $41 per sq.ft., 836 sq.ft. grading and asphalt resurfacing, $0.109 per sq.ft., 3198 lin.ft. cement curb, $0.36 per lin.ft., 148 lin.ft. granite curb, $1.575 per sq.ft., 26,306 sq.ft. cement sidewalks, $0.114 per sq.ft., 3341 sq.ft. granite block gutters, $0.417 per sq.ft., storm sewers catch basins, etc., $746, sanitary sewers, $7997. Noted Nov. 21.

★Dam and Tunnel—Olinda, Cal.—Shasta Co. let contract building Messelbeck dam and digging Hoover tunnel for Happy Valley Irrigation Dist., to W. A. Kraner, Balboa Bldg., San Francisco. About $325,000; cost plus percentage.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 3 and 4.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Thursday, the 3rd day of April, 1919, for the repair of highways in the following counties:

Albany: One contract, reconstruction.
Broome: One contract, resurfacing.
Delaware: One contract, resurfacing.
Erie: two contracts, resurfacing and reconstruction.
Genesee: One contract, reconstruction.
Hamilton: One contract, resurfacing.
Herkimer: One contract, surface treatment.
Monroe: Two contracts, resurfacing and surface treatment.
Oneida: One contract, resurfacing.
Onondaga: Four contracts, resurfacing.
Saratoga: One contract, reconstruction.

Sealed proposals will also be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Friday, the 4th day of April, 1919, for the repair of highways in the following counties:

Allegany: One contract, surface treatment.
Cayuga: One contract, resurfacing.
Fulton: One contract, surface treatment.
Livingston: Three contracts, surface treatment and reconstruction.
Monroe: One contract, surface treatment.
Montgomery: One contract, surface treatment.
Ontario: Two contracts, reconstruction and surface treatment.
Orleans: One contract, surface treatment.
Otsego: One contract, reconstruction.
Schenectady: One contract, reconstruction.
Schuyler: One contract, surface treatment.
Steuben: Three contracts, resurfacing.
Sullivan: One contract, resurfacing.
Tioga: One contract, surface treatment.
Tompkins: One contract, surface treatment.
Ulster: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I J. MORRIS,
Secretary.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek. N. J. Further information on application.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: March 31.

Water-Works Improvement

Philadelphia, Pa., March 18, 1919.

Notice is hereby given that sealed proposals will be received by the Bakerton Water Company, at their office in Bakerton (Elmora P. O.), Cambria County, Penn., until 12 o'clock noon, on Monday, March 31st, 1919, for the construction complete of a

(1) STORAGE WATER RESERVOIR

One and one-fourth miles east of Bakerton, Cambria County, Penn., with all its accessories, in which the Embankment Item is about Seventeen Thousand Cubic Yards, and the Concrete Masonry Item about Twelve Hundred Cubic Yards; and

(2) EIGHT INCH CAST IRON PIPE WATER LINE

From the Gate House of the Dam to Reed Street, in Bakerton, about 6600 lineal feet, with Specials, Gates, Hydrants, etc.

Proposals will be required to conform to Plans and Specifications on file at the Office of the Bakerton Water Company, 421 Chestnut St., Philadelphia; at the Office of the Sterling Coal Company, in Bakerton (Elmora P. O.), Cambria County, Penn.; or at the Office of E. W. Hess, Engineer, in Clearfield, Penn., and must be made on the Bidding Sheet that will be furnished to bidders on request.

Each bidder must deposit with each of his bids, Cash or a certified check, made payable to the Bakerton Water Company" in the amount of Five Hundred Dollars ($500.00) a said guarantee of good faith that he will, if a contract is awarded to him, within ten (10) days thereafter, execute a written contract for the performance of the same. The deposits of other bidders will be returned them.

A bond satisfactory to the Bakerton Water Company, in an amount equal to the amount of the bid, for the faithful performance of the contract, will be required of the bidder to whom either contract is awarded.

Bids must be sealed, and addressed to the "Bakerton Water Company" and marked plainly on the outside of the envelope enclosing them, "Proposal for Water Works Improvements."

The right is reserved to accept any or reject any or all of the bids.

BAKERTON WATER COMPANY.
JOHN M. BRADLEY, Pres.

OFFICIAL PROPOSALS

Bids: April 9.

Road Work

CITY OF PROVIDENCE WATER SUPPLY BOARD

Providence, R. I.

Sealed proposals for building two sections of Earth Road, one (Contract 4) about 1.8 miles in length in the Town of Scituate, R. I., and one (Contract 7) about 3.4 miles in length in the Town of Foster, R. I., as parts of the Road Relocation in connection with the proposed Scituate Reservoir, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M. on Wednesday, April 9, 1919, at which time and place they will be publicly opened and read.

The quantities, in cubic yards, of the main items of work are as follows:

	Contract No. 4	Contract No. 7
Earth excavation	12,000	20,000
Rock excavation	2,000	2,000
Borrow	5,000	10,000
Concrete masonry	250	190

Contracts 4 and 7 are located, respectively, about 9 miles and 16 miles westerly from the City of Providence.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman,
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

PRELIMINARY NOTICE

Plans and specifications for the construction of other earth roads in connection with the proposed Scituate Reservoir, and for the construction during 1919 of portions of the main dam of the Scituate Reservoir are in preparation, and contracts for this work will probably be advertised during April.

Plans and specifications for the main dam and dike of the Scituate Reservoir are also in preparation and this work will, it is expected, be advertised during the late summer or early fall, if conditions then warrant. The main dam and dike will be built mainly of earth and will involve the handling of about 2,500,000 cu.yd.; the work will include gate chambers, masonry spillway, spillway channel, a reinforced concrete bridge, and other appurtenant structures.

Preliminary information may be obtained by interested contractors at the office of the Chief Engineer, 661 Westminster St., Providence, R. I.

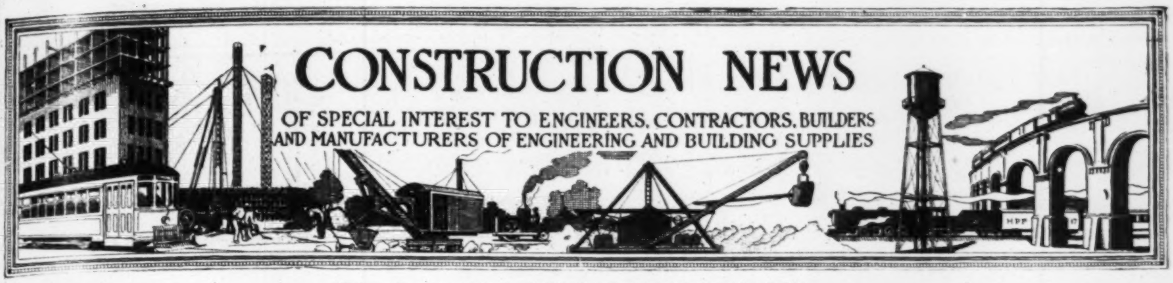
Bids: April 1.

Concrete Bridge

Fort Dodge, Iowa.

Sealed bids will be received until 9:30 A.M., April 1, 1919, at the office of the City Clerk, for the construction of a reinforced concrete bridge across Des Moines River, in the City of Fort Dodge, Iowa. Estimated quantities, 2100 cu.yd. concrete, 60 tons reinforcing steel. Plans and specifications may be received from the City Engineer upon a deposit of $25, which will be refunded upon return of plans within 30 days in good condition. Certified check, 10 per cent.

C. H. REYNOLDS, City Engineer.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type;** declines by *italics*.

PIG IRON—

	Current	One Month Ago
CINCINNATI		
No. 2 Southern	*$30.35*	$37.60
Northern Basic	*27.55*	31.80
Southern Ohio No. 2	*28.55*	32.80
NEW YORK, Tidewater delivery		
2X Virginia (silicon 2.25 to 2.75	*32.40*	36.15
Southern No. 2 (Silicon 2.25 to 2.75)	*34.70*	39.95
BIRMINGHAM		
No. 2 Foundry	*25.75*	31.00
PHILADELPHIA		
Eastern Pa. 2X (silicon 2.25 to 2.75)	*31.90**	36.15*
Virginia No. 2	*33.25†*	38.10†
Basic	*29.65**	33.90*
Grey Forge	*29.65**	33.90*
CHICAGO		
No. 2 Foundry Local	*26.75*	31.00
No. 2 Foundry Southern	*33.00*	37.25
PITTSBURGH, including freight charge from the Valley		
No. 2 Foundry Valley	*26.25*	31.00
Basic	*25.75*	30.00
Bessemer	*29.35*	33.60

* F.o.b. furnace. † Delivered

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Current	One Year Ago	Current	One Year Ago
Standard bessemer rails	*$45.00*	$55.00	*$45.00*	$65.00
Standard openhearth rails	*47.00*	57.00	*47.00*	67.00
Light rails, 8 to 10 lb	*2.58½**	3.13½*	*2.83½**	3.13½*
Light rails, 12 to 14 lb	*2.54**	3.09*	*2.79**	3.09*
Light rails, 25 to 45 lb	*2.45**	3.00*	*2.70**	3.00*

* Per 100 lb.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots together with the warehouse prices at the places named:

	Pittsburgh				
	Current	One Year Ago	Chicago	St. Louis	San Francisco
Standard spikes, 9/16-in. and larger	*$3.25*	$3.90	*$4.27*	$5.04	$6.15
Track bolts	4.90	4.90	*5.17*	Premium	*7.20*
Standard section angle bars	3.00	3.25	*4.22*	Premium	*4.95*

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

		7 In. x 9 In. by 8 Ft. 6 In.	6 In. x 8 In. by 8 Ft.
Chicago	Plain	$1.48	$1.33
San Francisco	Douglas Fir—Green	1.35	.96
San Francisco	Douglas Fir—Creosoted	2.70	1.92

Prices per tie at Missouri mills; St. Louis prices about 25c. higher:

Untreated A Grade White Oak 6x8x8		Untreated A Grade Red Oak 6x8x8	
No. 1	$0.70	No. 1	$0.55
No. 2	.80	No. 2	.65
No. 3	.90	No. 3	.75
No. 4	.98		
7x9x8 white oak			1.05
7x9x8 red oak (No. 4)	$0.80	No. 5	.87

Note:—Add 36c. each for treatment.

PIPE

STEEL—From warhouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	*47%*	*46½%*	*45%*
2½ to 6 in. lap welded	*42%*	*42½%*	*41½%*
	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	*31%*	*31%*	*30½%*
2½ to 6 in. lap welded	*27%*	*27½%*	*27½%*

Malleable fittings, Class B and C, from New York stock sell at +15% list prices. Cast iron, standard sizes, 10% off.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Current	One Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	*$60.70*	$65.70	$58.35	*$59.80*	$53.00	$82.55	*$65.00*
6 in. and over	*57.70*	62.70	55.35	*56.80*	50.00	79.55	*62.00*

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin. ft.:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$35.00	$22.50	$30.00	......	33.44
4	51.00	51.00	27.00	40.00	$45.00	50.16
5	65.00	65.00	45.00	50.00	65.00	62.70
6	90.00	90.00	55.00	60.00	90.00	83.60
8	130.00	130.00	100.00	80.80	150.00	143.76

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	*$0.09*	$0.096	......	$0.125	$0.09	$0.132
4	*.09*	.096	......	.125	.15	.132
5	*.135*	.144	......	.175	.1875	.207
6	*.135*	.144	$0.16	.175	.225	.207
8	*.21*	.224	*.21*	.25	.3475	.2875
10	*.315*	.336	*.29*	.375	.45	.4025
12	*.405*	.432	*.37*	.475	.60	.5175
15	*.54*	.576	*.56*	.63	.9375	.7475
18	*.75*	.80	*.91*	1.00	1.275	.9775
20	*.90*	.96	1.14	1.20	1.71	1.15
22	*1.20*	1.28	1.46	1.60	......	1.495
24	*1.485*	1.44	*1.56*	1.80	2.125	1.725
27	*2.145*	2.145	*1.90*	2.75	......	2.5875
30	*2.376*	2.376	*2.57*	3.45	......	3.1625
33	*3.15*	3.15	*3.09*	4.00	......	4.025
36	*3.5875*	3.588	*3.37*	4.35	......	4.60

	3	5	8	12	24	36
Boston	*$0.093*	*$0.1395*	*$0.217*	*$0.4186*	*$1.395*	*$4.6125*
St. Paul	.12	.18	.28	.45	2.00	4.75
Denver	.10½*	*.16*	.25	*.42½*	*1.57½*	......
Seattle	.15	.....	.33½	.64	2.00	......
Kansas City	.12	.18	.25	.50	1.80	4.60
New Orleans			*52* per cent	off list		
Los Angeles	*.047*	*.076*	*.136*	*.25*	*.90*	......
Atlanta			*52* per cent	off list		

* 4-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices per gallon in tank cars 8000 gal. minimum f.o.b. place named:

	Current	One Month Ago
New York, 45–65% asphalt	*$0.05½*	$0.06½
New York, liquid asphalt	*.07*	.07½
New York, binder	.07½	.07½
New York, flux	*.05½*	.06½
St. Louis, 40–50% asphalt	.06	..
Chicago, 15–20% asphalt	.10	.10
Chicago, 100% dust layer	.11	.11
Dallas, 40-50% asphalt	.09	.09
Dallas, 60-70% asphalt	.10	.10
Dallas, 75-90% asphalt	.11	.11
San Francisco, 75-95% asphalt, per bbl	2.10	2.10

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	*$22.00*	*$20.00*
Chicago	Mexican	35.50	33.50
San Francisco	California	17.00	13.75
Dallas	Texaco and Mexican	32.00	30.00
Seattle	D grade	23.10	......
Denver	Trinidad	45.00	......
Denver	California	38.00	......
St. Paul	Stanolind	...	26.00
Kansas City	Trinidad	32.50	.....
Kansas City	Mexican or Magnolia	25.00	22.00
Los Angeles	D grade	...	13.50
St. Louis	Stanolind	*26.40*	*19.90*

PAVING STONE—

Chicago	About 4x8x4 dressed	2.70 sq.yd.
	About 4x8x4 common	2.35 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	*2.75* sq.yd.
Boston	5-in. granite	**109.00** per M
St. Paul	Sandstone	1.75 sq.yd.
Atlanta	Sta. No. 1 granite, quarry	55.00 per M
Salisbury, N. C	Std. granite, quarry	62.50 per M

FLAGGING—

New York	Bronx	$0.20 sq.ft.
	Manhattan	.21 sq.ft.
	Queens, 5 ft. square	.20 sq.ft.
	5x20-in. cross-walk	.70 lin.ft.
Chicago	18 in. wide	.80 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$3.25
New York	4	16	3.50
Chicago	4	16	3.10
Chicago	3½	16	2.95
Chicago	City specifications		3.10
St. Louis	3½	16	*2.19*
St. Louis	4	16	*2.50*
St. Louis, Minneapolis spec.	3½	..	*1.94*
St. Louis, Minneapolis spec.	4	..	*2.25*
Seattle	4	16	2.55
Kansas City	4	16	3.00
St. Paul	Minneapolis specifications		*2.20*
Dallas	3½	18	3.17
Dallas	4	18	3.56

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00		$2.00		$1.25	
Denver	1.60	$1.50	1.60	$1.50	1.10	$1.05
Chicago	2.00	1.50		1.25	1.10	....
Kansas City	2.50	2.15	3.00	2.60	1.00†	.90
St. Louis*	1.76	1.21	1.82	1.21	1.68	1.21
Seattle	1.25	.80	1.25	.80	1.25	.80
Dallas	2.25	2.00	2.25	2.00	1.35	1.40
St. Paul	1.25	1.00	1.35	1.40	.60	.50
San Francisco	1.15	1.00	1.15	1.00	1.15	1.00
Boston	1.70‡	1.90	1.70‡	2.00	.95‡	1.00
New Orleans	2.75	1.30	2.75	1.95	1.60	1.95
Atlanta	2.40	....	2.40	....	1.12	....
Los Angeles	1.02	....	1.02	....	.70	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.65–1.75	$1.60	$1.75–1.85	$1.75
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.35	1.35	1.35	1.35
Dallas	2.25	1.51	2.25	1.55
San Francisco	1.15	1.00	1.15	1.00
Boston	3.00*	1.90	3.00*	2.00
St. Paul	1.15	1.00	1.25	1.10
Denver		1.50	1.60	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle		1.10	1.50	1.10
Atlanta	2.60	1.85	2.85	2.10
Los Angeles	1.12	....	1.12	....

*Per ton at crusher.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	22.80		2.35*	2.20*
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	18.00	....	1.75*
Boston	22.50	18.25	3.65	3.30
Dallas	2.25*	1.25*	....	
San Francisco	19.00	.....	....	2.00†
St. Paul	25.00	19.50	1.97†	1.93†
New Orleans	.....	1.90*	.....	
Atlanta	.....	.....	19.00‡	2.50*
Denver	.....	.....	26.25‡	2.50*
Los Angeles		3.05†	.....	2.80†

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton.

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., exclusive of bags:

St. Paul (Austin)	$1.63
Kansas City (Ft. Scott)	1.30
New Orleans	2.52

PORTLAND CEMENT—These prices are for barrels in carload lots, without bags, to contractors:

	Current	One Month Ago Without Bags	One Year Ago With Bags
New York	$2.45	$2.45	$2.55
Jersey City	2.62	2.62	2.50
Boston	2.57	2.57	2.87
Chicago	2.05	2.05	2.36
Pittsburgh	2.15	2.15	2.71
Cleveland	2.32	2.32	2.84
Detroit	2.28	2.28	2.80
Indianapolis	2.22	2.22	2.78
Toledo	2.22	2.22	2.80
Milwaukee	2.16	2.16	2.73
Duluth	2.20	2.20	2.91
Peoria	2.16	2.16	2.73
Cedar Rapids	2.28	2.28	2.88
Davenport	2.24	2.24	2.80
St. Louis	2.30	2.30	2.45
San Francisco	3.00	3.00	2.80
New Orleans	2.70	2.77	3.10
St. Paul	2.40	2.40	2.58
Denver	2.67	2.67	3.20
Kansas City	2.30	2.30	2.74
Seattle	2.13	2.13	3.25
Dallas	2.03	2.53	2.60
Atlanta	2.60	2.75	2.60
Cincinnati	No quotations	2.44	5.80
Los Angeles	2.68	....	....

NOTE — Bag charge is generally 25c. each

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.92	$1.09	$0.98	$1.03	$1.13	$1.36
049	0.049	1.18	1.40	1.26	1.32	1.43	1.72
068	0.068	1.44	1.73	1.53	1.64	1.79	3.15
093	0.093	1.85	2.23	1.97	2.11	2.41	2.77
126	0.126	2.28	2.82	2.43	2.67	2.92	3.50
153	0.153	2.72	3.38	2.90	3.19	3.48	4.18
180	0.180	3.12	3.85	3.33	3.66	3.99	.....
245	0.245	4.12	5.10	4.40	4.83	5.27	.....
287	0.287	4.76	5.90	5.08	5.58	6.10	7.31
336	0.336	5.52	6.83	5.89	6.47	7.06	.....
395	0.395	6.40	7.89	6.85	7.50	8.19	.....
PAVING							
036P	0.036	$0.71	$0.84	$0.76	$0.80	$0.80	.....
053P	0.053	1.00	1.25	1.06	1.12	1.12	.....
072P	0.072	1.26	1.58	1.34	1.46	1.46	.....
097P	0.097	1.62	1.98	1.73	1.88	1.88	.....
049R	0.049	1.00	1.25	1.06	1.12	1.12	.....
067R	0.067	1.26	1.53	1.34	1.46	1.46	.....
089R	0.089	1.62	1.98	1.73	1.88	1.88	.....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

NOTE—New York Warehouse price is about 15% lower than given above, owing to mill decrease.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$30.97	$31.00	$34.00	$38.00	$34.75
26	250	35.23	32.03	32.00	35.00	40.00	36.25
25	300	36.51	33.19	33.25		42.50	38.15
24	340	37.73	34.30	34.50	37.00	......	40.10
22	450	40.48	36.80	......	......	......	43.10

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse Dallas	Warehouse San Francisco
¾ and larger	$2.35	$3.37	$4.12	$3.37	$3.44	$4.75	$4.60
⅝	2.40	3.42	4.18	3.42	3.49	4.80	4.65
½	2.45	3.47	4.23	3.47	3.54	4.90	4.70
⅜	2.60	3.62	4.38	3.62	3.69	5.00	4.85
¼	2.85	3.87	4.62	4.87	3.94	5.25	5.10

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas
¾ in. and larger	$2.45	$2.45	$4.75
⅝	2.50	2.50	4.80
½	2.55	2.55	4.90
⅜	$2.70	$2.70	$5.00
¼	2.95		5.25

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$15.00	$10.25	No Quotations	
Chicago	12.00	12.00	8.00	.....	...
St. Louis, selected	18.00	18.00	13.00	$26.00	...
St. Louis, salmon	10.00*	12.00	9.00		
Denver	12.00†	12.00	8.50	.....	...
Dallas	16.07	16.07	11.00	26.50	...
San Francisco	12.50	12.50	10.00	.....	...
Boston ......(on job)	18.00	18.00	13.50	30.00	45.50
New Orleans	18.00	15.98	12.00*	19.00	
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	14.00	11.00	36.00	...
Seattle	15.00	15.00	10.00	36.00	
Atlanta	15.00	16.00	10.50	.....	35.00
Los Angeles	12.50				

* Hard brick, $16. † Salmon is $10.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$0.11925*	$0.09	$0.08	$0.08	$0.1125	$0.1072	...
6x12x12	.159*	.12	.112	.105	.15	.1474	$0.1512
8x12x12	....	.16	.144	.15	....	.2010	.1944
10x12x12	....	.....	.168	.173	....	.2546	.2263
12x12x12	....	.....	.208	.208	....	.3082	.2916

*Additional charge for trucking.

	4x12x12	8x12x12	12x12x12
Boston	$0.11	$0.21	$0.30
St. Paul	.056	.11	.162
Kansas City	.0786	.15	.205
Denver	.12½	.18	.25
Seattle	.09	.175	.30
Atlanta	.10	.13½	.21
Los Angeles	.082	.154	.236
New Orleans	.17	.23	.34

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	$2.45	$3.47	$4.195	$3.39	$3.47	$4.70	$5.25
Channels, 3 to 15 in	2.45	3.47	4.195	3.39	3.47	4.70	5.25
Angles, 3 to 6 in., ¼ in. thick	2.45	3.47	4.195	3.39	3.47	4.70	5.25
Tees, 3 in. and larger	2.45	3.52	4.195	3.39	3.47	4.70	5.25
Plates	2.66	3.67	4.445	3.39	3.67	4.90	5.45

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$4.20	$5.05	$6.095	$4.87	$4.94	$6.70	$6.75
CONE HEAD BOILER							
¾ in. and larger	4.30	5.15	6.195	4.97	5.04	6.80	6.75
⅝ and 11/16	4.45	5.30	6.345	5.12	5.19	6.95	6.90
½ and 9/16	4.70	5.55	6.695	6.47	5.44	7.30	7.15

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $2.10 per roll in carload lots and $2.35 for smaller quantities.

Shingles, red and green slate finish, cost $5.50 per suare in carloads.. 5.75 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots N. Y.	Carload Lots Chicago	Less Than Carload Lots N. Y.	Less Than Carload Lots Chicago
Tar felt (14 lb. per square of 100 sq. ft.)	$52.00	$52.50	$53.00	$53.50
Tar pitch (in 400-lb. bbl.)	19.00	16.00	20.00	17.00
Asphalt pitch (in barrels)	36.00	36.00	41.50	41.50
Asphalt felt	67.50	67.50	72.00	72.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York Current	New York One Yr. Ago
Blue Annealed						
No. 10	3.55	4.29	4.57	5.80	4.57	5.45
No. 12	3.60	4.34	4.62	5.85	4.62	5.50
No. 14	3.65	4.39	4.67	5.90	4.67	5.55
Black						
Nos. 18 and 20	4.15	5.04	5.17	6.75	5.42	6.25
Nos. 22 and 24	4.20	5.14	5.22	6.80	5.47	6.30
No. 26	4.25	5.19	5.27	6.95	5.52	6.40
No. 28	4.35	5.29	5.37	7.05	5.62	6.45
Galvanised						
No. 10	4.70	5.64	5.72	....	5.97	6.70
No. 12	4.80	5.64	5.82	7.30	6.02	6.80
No. 14	4.80	5.64	5.82	7.30	6.07	6.80
Nos. 18 and 20	5.10	5.84	6.12	7.60	6.37	7.10
Nos. 22 and 24	5.25	5.99	6.25	7.75	6.52	7.25
No. 26	5.40	5.69	6.42	7.90	6.67	7.40
No. 28	5.70	6.44	6.72	8.20	6.97	7.70

LINSEED OIL—These prices are per gallon:

	New York Current	New York One Year Ago	Cleveland Current	Cleveland One Year Ago	Chicago Current	Chicago One Year Ago
Raw in barrel	$1.55	$1.55	$1.68	$1.65	$1.66	$1.65
5-gal. cans	1.70	1.65	1.85	1.80	1.86	1.75

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Current Dry	Red Current In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Current Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.00	14.50	11.25	11.00	13.00	10.50
25 and 50-lb. kegs	13.25	14.75	11.50	11.25	13.25	10.75
12½-lb. keg	13.50	15.00	11.75	11.50	13.50	11.00
5-lb. cans	15.00	16.50	13.25	13.00	15.00	13.00
1-lb. cans	16.00	17.50	13.25	13.00	16.00	13.00

500 lb. lots less 10% discount; 2000 lb. lots less 10–2½% disconnt.

LUMBER

San Francisco—Prices of rough Douglas fir, No. 1 common, in more than carload lots:

Lumber Prices in Yards at San Francisco

	6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	22 and 24 Ft.	25 to 32 Ft.
3x3 and 4	$26.00	$26.50	$27.50	$29.50
3x6 and 8	27.00	27.50	28.50	30.50
4x4-6 and 8	28.50	29.50	30.50	32.50
3x10 and 12	27.50	28.50	29.50	31.50
3x14	28.00	29.00	30.00	32.00
4x10 and 12	28.50	29.50	30.50	32.50
4x14	29.50	30.50	31.50	33.50

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	$28.50	$30.50	$31.50
6x14	30.00	32.00	33.00
8x10	31.50	33.50	34.50
8x14	33.00	35.00	36.00

New York, Chicago and St. Louis	Southern Pine New York* 20-24 Ft.	Southern Pine New York* 34 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	$39.00	$40.00	$38.50	$39.50	$35.00	$37.00
3x10 to 10x10	43.00	44.00	40.50	41.50	38.50	40.00
3x12 to 12x12	45.00	46.00	43.50	44.50	40.00	41.50
3x14 to 14x14	50.00	51.00	47.50	48.50	45.00	47.00
3x16 to 16x16	54.00	55.00	51.00	52.00	48.00	50.00
3x18 to 18x18	59.00	60.00	55.00	56.00	52.00	53.50
4x20 to 20x20	62.00	63.00	61.00	62.00	.....	.....

* From Lumbermen's Bureau.

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities

	8 x 8-In. x 20-Ft. and Under P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under P.	Fir
Boston	$46.50	$45.00	$45.00	$46.00	$52.00	$46.00
Cincinnati	37.00	.....	36.00	.....	41.00	.....
Kansas City	40.50	41.50	41.50	39.50	45.50	43.50
Seattle	17.50	17.50	17.50	17.50	17.50	17.50
New Orleans	31.50	.....	.....	.....	36.50	.....
St. Paul	46.00	50.00	46.00	46.00	.....	53.00
Denver	44.00	34.50	34.50	.....	49.00	39.00
Atlanta	35.50	.....	.....	.....	43.00	.....

	1-In. Rough, 10 In. x 16 Ft. and Under P.	Fir	Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. P.	Fir
Boston	$50.00	$45.00	$40.00	$45.00	$48.50
St. Paul	50.50	40.00	40.00	48.50	44.50
Kansas City	50.00	55.75	55.75	53.50	61.00
Seattle	17.50	17.50	17.50	17.50	17.50
New Orleans	34.00	.....	.....	31.50	.....
Cincinnati	43.00	39.00	39.00	42.00	38.00
Denver	45.00	33.50	33.50	38.00	30.00
Atlanta	32.50	.....	.....	32.50	.....
Los Angeles	.....	29.00	28.00	.....	.....

Dallas—Yellow Pine:

2x4 to 2x12—12, 14 and 16	$38.80
2x4 to 2x12—10, 18 and 20	40.90
2x4 to 2x12—22 and 24	43.20
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
8x10, 10x10 and 3x10	52.00
12x12 and 3x12	54.25

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.25	$4.00	$4.37	$5.00	$4.75
Cut	3.45	6.50	6.50	5.75	.....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl.	$.003	None
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.02	0.05
Soda ash, in 400-lb. bbl.	.03	.03
Liquid chlorine in 100-lb. cylinders Lime is quoted separately	.10–.12	12

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$2.55	$3.50	$3.10

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	17½%
Galvanized cast steel rigging	2½%
Bright plow steel	30%
Bright cast steel	17%
Bright iron and iron tiller	List

San Francisco: Galvanized, +5%; bright, 20% off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ½-in., 8 ft., ⅝-in., 6; ¾-in., 4½; 1-in., 3½; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.26	Atlanta	$0.3
New York	.29	Denver	.29
Cincinnati	.29	Kansas City	.28½
Chicago	.26½	New Orleans	.27½
St. Paul	.30	Seattle	.27
San Francisco	.26	Los Angeles	.34

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	80%	Black Powder
New York	....	$0.27½	$0.30	....	$2.40
Boston	$0.22½	.24½	.26½	$0.31	2.40
Cincinnati	.19½	.21½	.23½	.....	2.35
Kansas City	.20½	.25½	.30½	.38½	2.45
New Orleans	....	.24½	.28½	....	....
Seattle	....	.18½	.21	....	
Chicago	.18½	.21½	.25½	.29½	2.35
St. Paul	.19	.25½	.30½	....	2.45
St. Louis	.19	.23½	.25½	.30	2.35
Denver	.17½	.24	.29	.35	2.60
Dallas	.21	.27½	.32	.38	.....
Los Angeles	.23	.30	.37	.....	2.95

POLES—Price of Western red cedar poles is as follows:

	New York Current	New York One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft.	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft.	7.65	7.45	6.85	6. .0	6.85
7-in. x 35-ft.	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft.	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft.	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft.	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft.	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$9.00
12-in. butts, 6-in. tops, length 30-40 ft.	11.50
12-in. butts, 6-in. tops, length 41-50 ft.	12.50
14-in. butts, 6-in. tops, length 51-60 ft.	21.00
14-in. butts, 6-in. tops, length 61-71 ft.	23.50

	Dallas
6-in. x 20-ft.	$3.00
6-in. x 30-ft.	5.00
8-in. x 30-ft.	7.50
8-in. x 35-ft.	7.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	Chicago	St. Louis
No. 1 railroad wrought	$18.50	$15.00	$15.50
Stove plate	16.00	15.00	15.50
No. 1 machinery cast	22.50	20.00	19.50
Machine shop turnings	8.50	6.00	7.00
Cast borings	10.00	7.00	7.50
Railroad malleable cast	13.50	15.50	14.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	San Francisco Black	Seattle Black
½	$10.50	$8.50	$8.55
⅝	9.85	7.85	8.25
¾	9.70	7.70	8.30

Pittsburgh base, $4.75 per 100 lb.

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATER-WORKS

Bids Close		See Eng. News-Record
Apr. 7	Pauls Valley, Okla.	Apr. 3
Apr. 8	High Point, N. C.	Apr. 3
Apr. 9	Kansas City, Mo.	Mar. 27
	Adv. Mar. 20 to Apri. 3.	
Apr. 9	Atlanta, Ga.	Apr. 3
Apr. 9	Wards Island, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 10	Brighton, Mass.	Apr. 3
Apr. 10	Nashville, Ark.	Apr. 3
Apr. 11	Jacksonville, Ill.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 11	Spencer, Pa.	Apr. 3
Apr. 14	Salem, N. J.	Apr. 3
Apr. 15	Duluth, Minn.	Mar. 13
Apr. 15	Freeport, O.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 18	Akron, O.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 23	Kansas City, Mo.	Apr. 3
	Adv. Apr. 3.	
Apr. 25	Akron, O.	Apr. 3
	Adv. Apr. 3.	

SEWERS

Apr. 7	Providence, R. I.	Apr. 3
Apr. 8	Hagerstown, Md.	Mar. 20
	Adv. Mar. 20 to Apr. 3.	
Apr. 9	Maplewood, Mo.	Apr. 3
Apr. 15	Roanoke, Va.	Apr. 3
Apr. 17	Pawtucket, R. I.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 22	Cleveland, O.	Mar. 27
May 1	Duluth, Minn.	Apr. 3
May 6	Newark, N. J.	Apr. 3

BRIDGES

Apr. 7	Rawlins, Va.	Mar. 20
Apr. 7	Stella, Va.	Mar. 20
Apr. 8	Lewisburg, W. Va.	Mar. 20
	Adv. Mar. 13 to Apr. 3.	
Apr. 8	Hillsboro, N. D.	Mar. 27
Apr. 8	College Hill, Pa.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Eldora, Ia.	Apr. 3
Apr. 10	Clarksville, Pa.	Mar. 20
Apr. 10	New Haven, Conn.	Apr. 3
Apr. 11	Holyoke, Mass.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 15	Copper Valley, Va.	Mar. 20
Apr. 15	Plainfield, N. J.	Apr. 3
Apr. 15	Rahway, N. J.	Apr. 3
Apr. 15	Elizabeth, N. J.	Apr. 3
Apr. 16	Ottawa, Ont.	Feb. 20
Apr. 19	Marshall, Ill.	Apr. 3
Apr. 22	Kingston, N. Y.	Mar. 20
	Adv. Mar. 20.	
Apr. 22	Toledo, O.	Mar. 27

STREETS AND ROADS

Bids Close		See Eng. News-Record
Apr. 4	New York	Mar. 20
Apr. 4	New Hampshire	Mar. 27
Apr. 7	Moulton, Ala.	Feb. 20
Apr. 7	Salem, N. J.	Mar. 13
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	San Jose, Cal.	Mar. 20
Apr. 7	Waukesha, Wis.	Mar. 27
Apr. 7	Camden, N. J.	Mar. 27
Apr. 7	Albany, N. Y.	Mar. 27
Apr. 7	Dothan, Ala.	Mar. 27
Apr. 7	Breckenridge, Minn.	Mar. 27
Apr. 7	Wahpeton, N. D.	Mar. 27
Apr. 7	Colorado	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	Selma, Ala.	Apr. 3
Apr. 7	Atlanta, Ga.	Apr. 3
Apr. 7	Longueuil, Que.	Apr. 3
Apr. 7	Portland, Ore.	Apr. 3
Apr. 7	Irvington, N. J.	Apr. 3
Apr. 7	Sandborn, Ia.	Apr. 3
Apr. 8	Mt. Vernon, Wash.	Mar. 20
Apr. 8	Indiana	Mar. 20
Apr. 8	Davenport, Wash.	Mar. 27
Apr. 8	Harlowton, Mont.	Mar. 27
Apr. 8	Pittsburgh, Pa.	Mar. 27
Apr. 8	Hagerstown, Md.	Apr. 3
Apr. 8	New Iberia, La.	Apr. 3
Apr. 8	Winnsboro, La.	Apr. 3
Apr. 8	Aberdeen, Miss.	Apr. 3
Apr. 8	Maryland	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Michigan	Apr. 3
Apr. 8	Logan, Ia.	Apr. 3
Apr. 8	Newark, N. J.	Apr. 8
Apr. 8	Henderson, Minn.	Apr. 3
Apr. 8	Waterville, Wash.	Apr. 3
Apr. 8	Stillwater, Minn.	Apr. 3
Apr. 8	Massachusetts	Apr. 3
Apr. 9	Hackensack, N. J.	Mar. 13
	Adv. Mar. 13 to 27.	
Apr. 9	New Jersey	Mar. 20
	Adv. Mar. 13 to Apr. 3.	
Apr. 9	Center, N. D.	Mar. 20
Apr. 9	Providence, R. I.	Mar. 27
	Adv. Mar. 20 and 27.	
Apr. 9	Ithaca, N. Y.	Mar. 27
Apr. 9	Baltimore, Md.	Apr. 3
Apr. 9	Wabasha, Minn.	Apr. 3
Apr. 9	Racine, Wis.	Apr. 3
Apr. 10	Indiana	Mar. 20
Apr. 10	Middlebourne, W. Va.	Mar. 20
Apr. 10	Nevada	Mar. 27
Apr. 10	Farmville, N. C.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 10	Cairo, Ga.	Apr. 3
Apr. 10	Walnut Ridge, Ark.	Apr. 3
Apr. 11	Jamestown, N. D.	Mar. 20
Apr. 11	Pennsylvania	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 11	Ebro, Minn.	Mar. 27
Apr. 11	Redwood Falls, Minn.	Apr. 3
Apr. 11	Dodgeville, Wis.	Apr. 3
Apr. 11	Be'oit, Wis.	Apr. 3
Apr. 11	Toledo, Ohio	Apr. 3
Apr. 11	South Bend, Wash.	Apr. 3
Apr. 11	Springdale, Pa.	Apr. 3
Apr. 11	Michigan	Apr. 3
Apr. 12	La Moure, N. D.	Mar. 27
Apr. 12	Johnstown, Pa.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 12	Indiana	Apr. 3
Apr. 12	Sleepy Eye, Minn.	Apr. 3
Apr. 13	Columbus, O.	Apr. 3
Apr. 14	Johnson City, Tenn.	Mar. 20
Apr. 14	Tunica, Miss.	Mar. 20
Apr. 14	Minneapolis, Minn.	Mar. 27
Apr. 14	Lincoln, Neb.	Mar. 27
Apr. 14	Everett, Wash.	Apr. 3
Apr. 14	Savannah, Ga.	Apr. 3
Apr. 14	Washington, Pa.	Apr. 3
Apr. 15	Billings, Mont.	Mar 20
Apr. 15	Greenville, Miss.	Mar. 13
	Adv. Mar. 20 to Apr. 3.	
Apr. 15	St. Louis, Mo.	Mar. 20
Apr. 15	Columbus, Neb.	Mar. 27
Apr. 15	Keyser, W. Va.	Mar. 27
Apr. 15	Pawtucket, R. I.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 15	Bronson, Fla.	Apr. 3
Apr. 15	Pittsburgh, Pa.	Apr. 3
Apr. 15	Keyser, W. Va.	Apr. 3
Apr. 15	Midland, Mich.	Apr. 3
Apr. 15	Fergus Falls, Minn.	Apr. 3
Apr. 16	Wayne, Neb.	Mar. 27
Apr. 16	Rhode Island	Apr. 3
	Adv. Apr. 3.	
Apr. 17	Arkansas	Apr. 3
Apr. 17	New York, N. Y.	Apr. 3
Apr. 18	Goldendale, Wash.	Apr. 3
Apr. 19	Gandy, Neb.	Mar. 27
Apr. 20	Terra Haute, Ind.	Apr. 3
Apr. 21	Indiana	Apr. 3
Apr. 21	New Iberia, La.	Apr. 3
Apr. 21	Tulsa, Okla.	Apr. 3
Apr. 21	Kent, Wash.	Apr. 3
Apr. 22	Spencer, W. Va.	Mar. 13
Apr. 23	Illinois	Apr. 3
Apr. 24	Illinois	Apr. 3
Apr. 24	New York, N. Y.	Apr. 3
	Adv. Apr. 3.	
Apr. 24	New Mexico	Apr. 3
Apr. 24	Auburn, Me.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 27	Pittsburgh, Pa.	Apr. 3
June 10	Clarksville, Pa.	Apr. 3

RAILWAYS

Apr. 8	Pennsylvania	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 9	Ontario	Apr. 3
Apr. 11	Ontario	Apr. 3
Apr. 15	British Columbia	Apr. 3

EXCAVATION AND DREDGING

Apr. 8	Hollandale, Miss.	Feb. 13
Apr. 8	Mason City, Ia.	Apr. 3
Apr. 9	Mason City, Ia.	Apr. 3
Apr. 9	Clarinda, Ia.	Apr. 3
Apr. 10	Crookstone, Minn.	Apr. 3
Apr. 11	Bridgeport, Conn.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 15	Trenton, N. J.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 15	Ft. Dodge, Ia.	Apr. 3
Apr. 16	Spencer, Ia.	Apr. 3
Apr. 22	Crowley, La.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 29	New York, N. Y.	Apr. 3
	Adv. Apr. 3.	
May 6	Paragould, Ark.	Apr. 3
May 14	Poplar Bluff, Mo.	Apr. 3

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Apr. 5	Richmond, Va.	Mar. 27
Apr. 7	Hartford, Conn.	Mar. 27
Apr. 7	Brooklyn, N. Y.	Mar. 27
Apr. 9	Guelph, Ont.	Apr. 3
Apr. 10	Vancouver, Va.	Mar. 27
Apr. 12	New York, N. Y.	Apr. 3
Apr. 14	Brooklyn, N. Y.	Mar. 27
Apr. 15	Long Island City, N. Y	Apr. 3
Apr. 16	Winnipeg, Man.	Mar. 27
Apr. 16	Bellair, O.	Mar. 27
Apr. 18	Sheboygan, Wis.	Mar. 20
May 1	Brainerd, Minn.	Mar. 27
May 1	Joplin, Mo.	Apr. 3

BUILDINGS

Apr. 4	Brooklyn, N. Y.	Mar. 27
Apr. 7	Ordway, Colo.	Mar. 20
Apr. 7	Montreal, Que.	Apr. 3
Apr. 9	Jefferson, Ia.	Mar. 27
Apr. 10	Newaygo, Mich.	Feb. 6
Apr. 10	Grand Forks, N. D.	Apr. 3
Apr. 10	Huntington, Ind.	Apr. 3
Apr. 10	Rome, N. Y.	Mar. 27
Apr. 10	Scottsville, Ky.	Mar. 27
Apr. 11	Cobleskill, N. Y	Apr. 3
Apr. 11	Brantford, Ont.	Apr. 3
Apr. 14	Superior, Wis.	Mar. 27
Apr. 15	Newark, N. J.	Feb. 6
Apr. 15	Chisholm, Minn.	Mar. 27
Apr. 15	Buhl, Minn.	Mar. 27
Apr. 21	Albany, N. Y.	Mar. 27
Apr. 22	Bovey, Minn.	Mar. 20
Apr. 22	Quincy, Cal.	Apr. 3
Apr. 25	Waterdown, Ont.	Apr. 3
May 1	Wakefield, Minn.	Mar. 20
May 1	Virginia, Minn.	Mar. 27
May 1	St. Louis, Mo.	Apr. 3

FEDERAL GOVERNMENT WORK

Apr. 4	Rip-Rap—Block Island, R. I.	Mar. 27
Apr. 5	Pass, Weir, etc. — Wheeling, W. Va.	Mar. 20
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	Timber Wharf — Spec. 3801 —Chelsea, Mass.	Mar. 20
Apr. 7	Roads — Spec. 3796 — Chelsea, Mass.	Mar. 20
Apr. 7	Electrical equipment—Spec. 3785—Pensacola, Fla.	Mar. 27
Apr. 7	Electric Conduit and Switchboard—Spec. 3819—Wards Island, N. Y.	Apr. 3
Apr. 7	Steel — Spec. 3838 — Mare Island, Cal.	Apr. 3
Apr. 8	Dredging — New London, Conn.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Remodeling Post Office, Providence, R. I.	Apr. 3
Apr. 9	Radial Brick Chimney—Wheeling, W. Va.	Mar. 27
Apr. 10	Wreck Removable—Buffalo, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 11	Paving—Lorain, Ohio	Apr. 3
Apr. 12	Dredging—Sacramento, Cal.	Apr. 3
Apr. 12	Drilling Plant, etc.—Buffalo, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 14	Cranes — Spec. 3477 — Boston, Mass.	Mar. 27
Apr. 14	Septic Tank, etc. — Spec. 3841—Chatham, Mass.	Apr. 3
Apr. 14	Building Addition — Spec. 3799—Portsmouth, N. H.	Apr. 3
Apr. 14	Gasoline Supply System—3734—Philadelphia, Pa.	Apr. 3
Apr. 15	Pumps, etc.—Omaha, Neb.	Mar. 6
	Adv. Feb. 27 and Mar. 6	
Apr. 15	Road Work—Washington, D. C.	Mar. 27
Apr. 16	Coal—Jacksonville, Fla.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 16	Removing wreck—Buffalo, N. Y.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 17	Valve Jacks — Wheeling, W. Va.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 18	Post Office—Mt. Pleasant, Mich.	Mar. 13
Apr. 21	Post Office — Rhinelander, Wis.	Mar. 13
Apr. 21	Post Office and Court House —Erie, Pa.	Apr 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 21	Sewage Disposal System—Washington, D. C.	Apr. 3
Apr. 23	Post Office—Gilmer, Tex.	Mar. 13
Apr. 23	Earth Work—St. Louis, Mo.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 23	Soil and Sod—Galveston, Texas	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 24	Dredging — San Francisco, Cal.	Apr. 3

Bids Close		See Eng. News-Record
Apr. 25	Towboat—Memphis, Tenn. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 28	Dredging—New York, N. Y.	Apr. 3
Apr. 28	Officers Quarters — West Point, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 29	Dredging — New York, N. Y. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 30	Levee Work—St. Louis, Mo. Adv. Apr. 3.	Apr. 3
May 1	Wharf—Boston, Mass.	Apr. 3
May 3	Dredging — Jacksonville, Fla. Adv. Apr. 3.	Apr. 3

MISCELLANEOUS

Bids Close		See Eng. News-Record
Apr. 3	Sand, etc. — Long Island City, N. Y.	Mar. 27
Apr. 3	Grits, etc. — New York, N. Y.	Mar. 27
Apr. 4	Paving blocks—New York, N. Y.	Mar. 27
Apr. 8	Road Materials—Columbus, O. Adv. Mar. 20 to Apr. 3.	Mar. 20
Apr. 8	Asphalt, Tar Oil, etc.—Wilmington, Del.	Apr. 3
Apr. 8	Mixer, etc.—Detroit, Mich	Apr. 3
Apr. 8	Road Oil—Winnipeg, Man.	Apr. 3
Apr. 9	Sanitary Work — Willard, N. Y. Adv .Mar. 27 and Apr. 3.	Apr. 3
Apr. 9	Conduit, etc. — Baltimore, Md. Adv. Apr. 3.	Apr. 3
Apr. 10	Limes—Newport, Ark.	Mar. 13
Apr. 11	Culvert—Lockport, N. Y.	Apr. 3
Apr. 11	Paving Material — Maplewood, N. J.	Apr. 3
Apr. 11	Paving Material — Providence, R. I. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 11	Trestle—Trenton, N. J.	Apr. 3
Apr. 15	Pipes, Etc.—Detroit, Mich.	Apr. 3
Apr. 21	Levee—Port Allen, La.	Apr. 3
Apr. 29	Freight Shed—New York, N. Y. Adv. Apr. 3.	Apr. 3

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Mechanicsville—City having surveys made and plans prepared for new water supply system. J. R. Smith, comr. pub. wks.

N. Y., Newark—City voted $280,000 bonds to build gravity water supply system. Work includes pipe line involving 1750 tons c.i. pipe, 1,000,000 gal. rapid sand filtration plant, earth dam and dike, etc. J. P. Wells, Cutler Bldg., Rochester, consult. engr.

N. C., Fayetteville—City plans to issue $40,000 bonds to extend waterworks system. H. J. McBuie, city clk.

S. C., Pickens—City election Apr. 21, to vote on $40,000 bonds to build waterworks and sewerage systems.

Ga., Brunswick—City election soon to vote on $200,000 bonds to build water plant. J. H. Hoplein, mayor.

Ga., Swainsboro—See "Sewers."

Miss., Gloster—City voted $11,000 bonds to install oil burning engines and other machinery in water and electric light plants. Address the mayor.

La., Baton Rouge—City plans to install 5,000,000 gal. capacity pump at water plant; also build concrete foundation for same. About $30,000. J. Mundengee, city engr.

O., Oxford—City receives bids about May or June building 200,000 gal. elevated tank and 1 mi. high tension transmission line; also installing new electric pumps. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Toledo—Lucas Co. receives bids about June laying water supply lines in Norwood addition. Work involves 24,100 ft. 6 in. and 960 ft. 8 in. c.i. pipes. About $49,000. L. A. Boulay, Court House engr.

Mich., Dearborn—City election Apr. 17, to vote on $87,000 bonds to improve waterworks system. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Ark., Springdale—City passed ordinance to build waterworks system. About $75,000. W. L. Winters, Ft. Smith, engr.

Tex., Alpine—See "Sewers.'

Okla., Cardin—City voted $50,000 bonds to build waterworks system. Noted Mar. 13.

Idaho, Iona—City election Apr. 29 to vote on $20,000 bonds to build waterworks system.

Utah, Cedar City—City plans election soon to vote on $20,000 bonds to improve and enlarge waterworks system.

Utah, Paradise—City plans to build waterworks system. Bonds for $15,000 voted for project. T. H. Humphries, Logan, engr.

Cal., Monrovia—City having plans prepared by H Gierlich, city engr., for 2,000,000 gal. rein.-con. rectangular shaped reservoir to replace existing Ivy Ave. reservoir.

B. C., Victoria—Dept. Pub. Wks., Ottawa, Ont., plans to install waterworks system to William Head quarantine station. About $80,000. R. C. Desrochers, secy.

BIDS DESIRED

N. Y., Wards Island—Until Apr. 9, by State Hospital Comn., Capitol, Albany, laying water main at Manhattan State Hospital here. E. S. Elwood, secy.; advertised in this issue.

N. J., Salem—Until Apr. 14, by W. A. W. Grier, mayor, furnishing materials and labor building 130 ft. standpipe, 25 ft. diameter, concrete foundation. N. S. Hires, supt. water dept.; advertised in this issue.

N. C., High Point—Until Apr. 8, by city, improving waterworks. Work involves building brick and concrete filter building, concrete coagulating basin, tower and tank, an auxiliary raw water pumping station, electric driven centrifugal pumps, incidental piping, etc. A. E. Taplin, High Point, engr.

Ga., Atlanta—Until Apr. 9, by city, building coagulating basin No. 5 at water works. W. E. Chamber, purch. agt.

O., Akron—Until Apr. 25, by H. S. Morse, dir. pub. serv., furnishing and laying 2.3 mi. 48 in. and 1 mi. 36 in. pipe line, etc. Bids will be received (a) furnishing 4400 tons 48 in. and 170 tons 36 in. c. i. pipe and 230 tons special castings; (b) laying pipe; (c) furnishing and laying 23 mi. steel pipe and 0.1 mi. 36 in. c.i. pipe. Noted Oct. 31; advertised in this issue.

Ill., Jacksonville—Until Apr. 11, by city, building filtration plant, 1,500,000 gal. capacity, 600 ft. earth dam, etc. R. Pyatt, city clk.; advertised in this issue.

Ia., Spencer—Until Apr. 11, by city, furnishing and laying 6400 ft. 4 in. Class D c. i. pipe, necessary valves, hydrants and other specials. W. L. Fahey, city engr. Former bids rejected. Noted Mar. 13.

Mo., Kansas City—Until Apr. 23, by J. R Samuel, purch. agt., designing and erecting rein.-con. stand pipe, 1,000,000 gal. capacity, at 75th and Homes Sts.; also one with 1,000,000 gal. capacity in North Terrace Park; advertised in this issue. Noted Jan. 30.

Ark., Nashville—Until Apr. 10, by T. H. Bourland, secy. waterworks dist. No. 1, laying 51,250 ft. 4-10 in. c.i. and 2 in. w.i. pipe, furnishing and placing 82 fire hydrants and 72 2-8 in. valves, also building 50,000 gal. tank and tower, 100 ft. high, pumping sta-72—2-8 in. valves, also building 50,000 gal. per minute centrifugal pump, motor, compressor and 2 air lifts and drilling 2 wells. District to furnish c.i. pipe. W. L. Winters, Ft. Smith, engr.

Okla., Pauls Valley—Until Apr. 7, by city, extending waterworks and sewerage systems. About $25,000. W. E. Moore, 1006 Campbell Bldg., Oklahoma, engr. Noted Feb. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract laying pipe line in Causeway St., to C. M. Callahan, 23 South Fairview St., $15,350. Work involves 665 ft. 8-20 in. c.i. pipe, 2050 cu.yd. earth excav., 20 cu.yd. rock excav. and 19 ft. 8-16 in. gates.

★Mass., Boston—Comr. Pub. Wks. let contract laying high pressure water pipe line in Atlantic Ave., involving 1935 ft. 8-20 in. c.i. pipe, 15 cu.yd. concrete, 2600 cu.yd. earth and 20 cu.yd. rock excav., etc., to V. Grande, 59 Hull St., $12,055; in Mozart St., Jamaica Plain, 6300 ft. 6 in. c.i. pipe and 300 cu.yd. excav., to J. Barletta, Genl. Delivery, $9605.

★Conn., Hartford—Comrs. Water Bd. let contract building slow sand filtration plant, to Foundation Co., 233 Bway., New York City. About $627,508. Noted Mar. 27.

★Conn., Wethersfield—Wolcott Hill Fire Dist. let contract building 4 mi. wood pipe water mains, to C. H. Slocumb, 25 Victoria Rd., Hartford, $14,000. Work involves 22,000 ft. 4-8 in. wood pipe.

N. J., Jersey City—City received bids furnishing and laying 39,590 ft. 72 in. riveted steel pipe line between Boonton Reservoir and west entrance of Watchung Tunnel, from Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, Pa., $1,098,076; P. McGovern & Co., 50 East 42nd St., New York City, $1,166,810; Liberty Constr. Co., $1,286,000. Noted Feb. 20.

★Okla., Tulsa—City let contract building intake tower, flow line and accessories, to J. T. Lantry, 303 Bank of Commerce Bldg., Tulsa, $15,800.

Sewers

PROPOSED WORK

Conn., New Haven—City soon lets contract building sewers and appurtenances in Butler St. from Huntington to Read Sts. and in Bassett St. from Butler St. to Shelton Ave. F. L. Ford, city engr.

S. C., Pickens—See "Waterworks."

Ga., Swainsboro—City election Apr. 8 to vote on $50,000 bonds to build sewerage and waterworks systems.

O., Maumee—State Bd. of Health has ordered city to have plans prepared for sewage disposal plant or trunk sewer to connect with Lucas Co. sewerage system, to eliminate discharge of sewage into Maumee River. G. Champe, 610 Nasby Bldg., Toledo, engr.

Mich., Dearborn—City election Apr. 17, to vote on $160,000 bonds to build trunk sewer from Monroe Ave. to Little Rouge River. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract trenching, backfilling and laying 2158 ft. 24 in. vitr. crock sewer arm in Livernois Ave. from Warren Ave. to Majestic Pl., 4786 ft. 5 ft. 6 in. cylindrical sewer in Alter Rd., brick, monolithic concrete, rein.-con., concrete segmental block or 2 ring vitr. segmental block, 8 manholes, etc. C. W. Hubbell, city engr.

Wis., Kenosha—City soon lets contract building sewers in Pickwick Pl. Selma, Fleet and North Chicago Sts., also Park and Norman Aves. Work involves 8175 ft. 12-24 in. vitr. pipe, 45 sewer stubs, 7 catch basins and 20 manholes. P. Hurtgen, city engr.

Wis., Racine—City soon lets contract building sewer in West Blvd. from Kinzie Ave. to Harvey Rd. Work involves 886 lin.ft. 12 in. and 434 lin.ft. 8 in. vitr. sewer, 5 manholes and 2 catch basins.

Ia., Corning—City having plans prepared by Archer & Stevens, engrs., 609 New England Bldg., Kansas City, Mo., for sewage disposal plant and 25,000 ft. 8, 10 and 12 in. sanitary sewers. W. C. Chubb, city clk.

Ia., Rockwell City—City plans to rebuild sanitary sewers in various streets. About $25,000 J. S. Buttner, city clk.

Ia., Williamsburg—City plans to build 5 mi. 6-18 in. sanitary sewer. C. Fletcher, city clk.

Minn., Keewatin—City voted $60,000 bonds to build sewerage system. F. A. McEachlin, clk.

Kan., Douglas—City soon lets contract building sanitary sewerage system. About $40,000. E. P. Pratt, clk. F. E. Devlin, consult. engr. Noted Mar. 27.

Neb., Nebraska City—City election Apr. 29, to vote on bonds to build South Side sewerage system, involving 2150 lin.ft. 24 in. and 7800 lin.ft. 30 in. pipe. About $52,487. E. Y. Grupe, of Grupe & Walter, 430 Bee Bldg., Omaha, constultg. engr.

Mont., Cut Bank—City election Apr. 15, to vote on $48,000 bonds to build sewerage system. H. P. Walters, Minot Bldg., Great Falls, engr.

Ark., Springdale—City passed ordinance to build sewerage system. About $50,000. W. L. Winters, Ft. Smith, engr.

Tex., Alpine—City having plans prepared by C. P. Bartlett, engr., Moore Bldg., San Antonio, for sewer and waterworks systems.

Okla., Pauls Valley—See "Waterworks."

Ore., North Bend—City having plans prepared by R. L. Cavanaugh, city engr., building sewers in Sherman Ave. and district west of Sherman Ave.

Sewers (Continued)

Ore., Portland—City considering building sewerage system to be known as South Branch of Rhine St. sewer. O. Laurgaard, city engr.

BIDS DESIRED

Mass., Brighton (Boston P. O.)—Until Apr. 10, by T. F. Sullivan, comr. pub. wks., building Faneuil Valley Brook Conduit in private land between Bd. Survey St., No. 1889 and Parson St. also pipe sewer and drains in Converse St.

R. I., Providence—Until Apr. 7, by Bd. Contr. & Supplies, building sewer in Hassan St., involving 618 ft. 12 in., 16 ft. 8 in. pipe, 350 ft. 6 in. drain; Overhill Rd., 215 ft. 12 in. and 30 ft. 8 in. pipe, 60 ft. 6 in. drains, 50 cu.yd. ledge excav.; Alexander, Robert and Rutherglen Sts., 420 cu.yd. concrete, 1482 ft. 16 in. brick and 1417 ft. 12 in., 284 ft. 6 and 8 in. and 100 ft. 8 in. pipe, 784 ft. 6 in. drains; Gallatin and Andrene Sts., 48 ft. 34 in. brick with 8 in. pipe, 12 ft. 16 in. brick with iron pipe, 775 ft. 16 in. brick, 40 ft. 12 in. brick, 424 ft. 12 in. pipe, 180 ft. 6 and 8 in. pipe, 720 ft. 6 in. drain, 800 ft. 8 in. under drains, 100 cu.yd. concrete and 50 cu.yd. excav. M. H. Bronsdin, city engr.

N. Y., Buffalo—Until Apr. 12, by A. W. Kreinheder, comr. pub. wks., building 6, 7 and 8 ft. storm water drain known as Sloans Drain. Work involves 11,000 ft. brick, segmental, tile block or rein.-con. pipe, etc. Noted Mar. 6; advertised in this issue.

N. J., Newark—Until May 6, by Passaic Valley Sewerage Comrs., 820 Essex Bldg., constructing Sect. 20, Rutherford-East Rutherford branch intercepting sewer in Rutherford, East Rutherford and Wallington boroughs. Work involves earth excav. and refilling in trench for 768 lin.ft. 24 in., 32,047 lin.ft. 27 in. and 1110 lin.ft. 36 in. circular concrete sewer; 1500 cu.yd. concrete masonry with Portland cement mortar in trench; 100 cu.yd. brick masonry in manholes, etc., laid with Portland cement mortar; 100 cu.yd. rock excav. in trench; excav. and refilling for special structures and for insertion of special structures in local sewer; furnishing and erecting tide gates in local sewer; Erie R. R. crossing, including furnishing and placing timbering, piling and other supports; 21,000 lb. steel for concrete reinforcement, etc. W. M. Brown, ch. engr.

Pa., College Hill (Easton P. O.)—Until Apr. 8, by J. Leeper, secy. of council, building 28,000 ft. sewer with necessary manholes, flush tanks, etc. Pipe to be furnished by boro. H. P. Dawson, Colonial Theatre Bldg., Beaver Falls, boro. engr.; advertised in this issue.

Pa., Springdale—See "Streets and Roads."

Md., Hagerstown—Until April 8, (change of date) by E. L. Heard, secy. sewerage comn., Police Headquarters Bldg., constructing intercepting storm and sanitary sewers in various streets and alleys. Noted Mar. 20.

Va., Roanoke—Until Apr. 15, by W. P. Hunter, city mgr., building sewer to drain property on Lynchburg and Madison Aves. and Jefferson St.

Minn., Duluth—Until May 1, by L. A. Ayres, city engr., laying sanitary sewers in 76th, 77th, 78th, 79th, 80th, 83rd and 84th Aves., involving 8364 ft. 8 in. pipe; outlet sewer on Grand Ave. from 74th to 84th Aves., W., 2746 ft. 10-22 in. pipe; outlet sewer direct from 74th Ave., W. on Grand Ave. to St. Louis River, 2688 ft. 6-27 in. c.i. pipe; overflow sewer on Grand Ave., 500 ft. 22 in. pipe; also building extensions to two water and gas mains systems. About $40,000.

Mo., Maplewood (St. Louis P. O.)—Until Apr. 9, by city, building sewers in Zephyr Hills, Sewer Dist. No. 1, involving 896 cu. yd. Class A., 2520 cu.yd. Class B. and 24,292 cu.yd. Class C. excav., 526 cu.yd. common brick masonry, 20 cu.yd. vitr. brick masonry, 15,000 ft. 12—33 in. vitr. clay and 2300 ft. 42-66 in. segmental block pipes, 43,000 lb. c.i. and 7000 lb. w.i. pipe, etc. W. Stoecher, city engr.

Ark., Nashville—Until Apr. 10, by T. H. Bourland, secy. sewer dist. No. 1, excavating and building 51,500 ft. sewer, involving 144 ft. 8-12 in. c.i. and 51,500 ft. 8-12 in. vitr. pipe, 300 cu.yd. rock trenching, 98 manholes, etc.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids Mar. 26, (1) building sewer in 59th St. from 20th to 21st Aves., (2) Ave. M. from West St. to Ocean Pkway., from J. McCauley, 425 6th Ave., (1) $40,471; B. Peconi & Sons, (1) $43,916, (2) $5298; C. Petracca, Brooklyn, (1) $46,278; De Rienzo Co., 1010 60th St., (2) $5096; E. Galladi Contg. Co., (2) $6256. Noted Mar. 20.

★Ala., Sheffield—City let contract building storm sewers in various streets, to Long & Haggerty, Bessemer. About $90,000.

O., Youngstown—City received bids building (a) 3000 ft. 15 and 18 in. sewer in Parkview Ave., (b) 6600 ft. 15-24 in. sewers in Sugar Creek Sewer Dist., from F. George Co., 1657 Mahoning Ave., (a) $13,218, (b) $52,260; S. H. De Groodt, 611 Erie St., (a) $12,478, (b) $59,725; A. O'Horo, 237 Scott St., (a) $13,218; E. Diorio, 220 Court St., (b) $58,074. Noted Mar. 20.

★Mich., Detroit—Dept. Pub. Wks. let contracts building following vitr. pipe crock lateral sewers: (a) No. 3049, involving 1788 ft. 12-24 in., etc.; (b) No. 3099, 1810 ft. 12-15 in.; (c) No. 3100, 1017 ft. 12-15 in.; (d) No. 3103, 823 ft. 12 in.; (e) No. 3106, 1966 ft. 12-18 in.; (f) No. 3105, 3084 ft. 12-24 in.; (g) No. 3110, 3403 ft. 12-20 in.; (h) No. 3111, 1263 ft. 12-18 in., (i) No. 3112, 760 ft. 12 in.; to W. G. A. Adams, Windsor, Ont., (a) $5500; (h) $4300. J. M. Alfeld, 1208 Ford Bldg., (b) $4171. Liberty Constr. Co., Penobscot Bldg., (c) $1956; (d) $2228. Lennane & McIlvenna, Union Trust Bldg., (e) $7200; (g) $9900; (i) $1666. Brandon & Hanna, 1624 Dime Bank Bldg., (f) $4270. Noted Mar. 13.

Mich., Port Huron—Dept. Pub. Wks. received bids building sewers in (a) Farrand St. from 20th to 24th Sts., involving 2288 ft. 6-20 in. vitr. crock pipes, 7 manholes, 8 catch basins; (b) Martin Ave. from 20th to 17th Sts., 1582 ft. 8-18 in. crock pipes, 6 manholes, 8 catch basins, from B. R. Burge, (a) $6155; (b) $4394; J. Deloyea, (a) $6921; Collins & Campbell, (a) $6172, (b) $4348; J. Kaumeier, (b) $4750. All bidders of Port Huron.

★Mo., Kansas City—Bd. Pub. Wks. let contract building combined storm and sanitary concrete sewer in district bounded by 40th, 43rd, Indiana and Agnes Sts., to T. McCarthy Constr. Co., $36,000. Work involves 42 catchbasins, 38 manholes, 1 drop manhole, 1 double drop manhole and one triple drop manhole, 9370 ft. 10-36 in. pipe.

Bridges

PROPOSED WORK

N. J., Elizabeth—Bd. Freeholders Union Co. receives bids about Apr. 15, building 50 ft. bridge over Robinson Branch of Rahway River, in Clark Twp., 40 ft. wide. About $15,000. J. L. Bauer, 120 Broad St., engr.

N. J., Plainfield—Bd. Freeholders Union Co. (Elizabeth) receives bids about Apr. 15, building 50 ft. bridge over Green Brook on Rock Ave., 40 ft. wide, cost, $14,000; 50 ft. bridge over Green Brook, on Sanford Ave., 50 ft. wide, $14,000. J. L. Bauer, 120 Broad St., Elizabeth, engr.

N. J., Rahway—Bd. Freeholders Union Co., Elizabeth, receives bids about Apr. 15, building 100 ft. bridge over Rahway River on Monroe St., 60 ft. wide. About $40,000. J. L. Bauer, 120 Broad St., Elizabeth, engr.

N. C., Fayetteville—City plans to issue $10,000 bonds to build concrete bridges. H. J. McBuie, city clk.

S. C., Lockhart—State Highway Comn., Columbia, soon lets contract building steel truss bridge with steel trestle approaches, over Broad River linking Chester and Union Counties. R. T. Brown, engr.

Minn., Duluth—St. Louis Co., 5th Dist., plans to expend $50,000 to build Fond-du-lac bridge and $5000 for approaches. R. W. Acton, Courthouse, engr.

Minn., Minneapolis—See "Streets and Roads."

Mont., Bigtimber — See "Streets and Roads."

Mont., Ekalaka — See "Streets and Roads."

Tex., Ballinger—Comrs. Runnels Co. soon receive bids building concrete bridge or viaduct over Colorado River. About $50,000. State Highway Comn. has appropriated $37,000 toward cost. Hess & Skinner, South Western Life Bldg., Dallas, engrs. Noted Mar. 20.

Tex., Galveston—Comrs. Galveston Co. soon let contract building one 30 ft. and two 20 ft. rein.-con. bridges on Galveston-Houston, Rd., near La Marque.

Idaho, Blackfoot — See "Streets and Roads."

Ariz., Cornville—State Legislature, Capitol, Phoenix, appropriated $20,000 to build bridge over Oak Creek near here.

Wash., Chehalis—See "Streets & Roads."

Ont., Toronto—See "Streets and Roads."

BIDS DESIRED

Conn., New Haven—Until Apr. 10, by city, building rein.-con. arch bridge, 70 ft. wide, over Mill River on Organ St., to have two 32 ft. spans and one 36 ft. span. About $70,000. F. L. Ford, city engr. Noted Feb. 13.

N. J., Trenton—Until Apr. 11, by City Comrs. building steel trestle and siding on Enterprise Ave. About $20,000. J. R. Fell, ch. engr.

Ill., Marshall—Until Apr. 19, by Clark Co., building Cumrin Bridge, 40 ft. rein.-con. span, 16 ft. roadway, involving 99.7 cu.yd. concrete, 13,995 lb. reinforcing steel, 491 lb. c.i. rockers and steel plates, etc., cost $3000; Carpenter Bridge, 70 ft. span, $2800; Cornwell Bridge, 22 ft. span, $725; Wells Bridge, 34 ft. span, each 16 ft. roadway, $1000; Crow Bridge, 100 ft. span, involving 41 cu.yd. concrete, 1950 lb. reinforcing steel etc., $6320; all in Melrose Twp. G. F. Birch, Springfield, asst. engr.

Ia., Eldora—Until Apr. 8, by C. Boyian, aud. Hardin Co., building bridges and culverts in various townships. R. Steigerwalt, co. bridge engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Gloucester—City let contract building concrete bridges over Little and Big Birch Creeks, Edwards and Bathel Runs, to E. P. Henry & Son, 98 Green St., Woodbury, $33,561.

N. J., Trenton—City received bids building 64 ft. concrete and steel bridge over Assanpink Creek on Olden Ave., 14 ft. wide, from Celuitiano & Pinto, Trenton, $10,340; H. H. Smith, 949 Bway., New York City, $11,190; Reese Taylor Co., Mechanic Bldg., $11,950.

Ill., Chicago—C. R. Francis, comr. pub. wks. received bids Mar. 21, for superstructure of 3 span cantilever fixed bridge, over north branch Chicago River on Addison St., from Milwaukee Bridge Co., 1400-34th St., Milwaukee, Wis., $41,889; Morava Constr. Co., 122 South Michigan Ave., $43,775; Ketler-Elliott Erection Co., 155 North Clark St., $45,000; substructure, from Paschen Bros., 111 West Washington St., $109,266; Fitzsimons Connel Dredge & Dock Co., 10 South La Salle St., $113,927; Concrete Dock Constr. Co., 133 West Washington St., $124,487. Noted Mar. 13.

Ill., Chicago—C. R. Francis, comr. pub. wks., received bids Mar. 20, for substructure and superstructure of 80 ft. fixed steel bridge on concrete abutments over north branch Chicago River on Kimball Ave., from Overland Constr. Co., 39 South La Salle St., $57,371; Hoeffer & Co., 133 West Washington St., $57,872; Paschen Bros., 111 West Washington St., $59,318; also 70 ft. creosoted pile and timber trestle bridge on Lawndale Ave., from G. P. Cullen, 140 South Dearborn St., $30,872; Kelly-Atkinson Constr. Co., 189 West Madison St., $32,488; Overland Constr. Co., 39 South La Salle St., $35,199. Noted Mar. 13.

★Wis., Beloit—City let contract building rein.-con. bridge, over Rock River, to Klug & Smith, West Allis St., $67,000. Noted Jan. 16.

★Ia., Ft. Dodge—Webster Co. let contract building 9 bridges in various townships, to C. Johnson, Humboldt, $14,938; 9, to A. Olson Constr. Co., Waterloo, $11,036; 3, to W. T. Baxter, Webster City, $2905.

★Ia., Waterloo—City let contract building rein.-con bridge over Cedar River on Souci-Whitney Rd., to Fifield Constr. Co., $73,885.

★Minn., St. Cloud—See "Streets and Roads."

★Cal., Visalia—Bd. Supervs. Tulare Co. let contract building 2 concrete bridges between here and Dinuba, to S. J. Smartt, Bakersfield, $10.85 per cu.yd.; also building 4 concrete bridges, 3 concrete culverts and 7 wings for culverts on Woodville-Tipton highway, to Concrete Pipe & Constr. Co., Porterville, $10 per cu.yd. for class A concrete, $9.75 per cu.yd. for class B concrete. Noted Mar. 6.

Structural Steel

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Washington—See "Streets and Roads."

Reinforced Concrete

PROPOSED WORK

Va., Norfolk—See "Industrial Works."

Mich., Detroit—See "Industrial Works."

Wis., Milwaukee—See "Streets and Roads."

Tex., Galveston—See "Bridges."

BIDS DESIRED

Ont., North Bay—See "Railways, under Ontario."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Deep River**—See "Industrial Works."

★**Conn., New Haven**—See "Miscellaneous."

★**N. J., Gloucester**—See "Bridges."

N. J., Trenton—See "Bridges."

★**Ia., Waterloo**—See "Bridges."

★**Ark., Little Rock**—See "Industrial Works."

Streets and Roads

PROPOSED WORK

N. Y., Buffalo—Erie Co. soon receives bids building 4½ mi. Collins Center-Zoar Rd., Collins Twp., waterbound macadam and 1.8 mi. Langford-New Oregon Rd., East Collins Twp., waterbound macadam. Noted Feb. 6.

N. Y., Rochester—Bd. Contr. & Supply soon lets contract paving with asphalt on Norton St., $130,000, Melville St., $26,000; resurfacing Driving Park Ave. from Lake to Dewey Aves., $17,660, Smith St., $32,000, etc. A. C. Poole, city engr. Noted Mar. 6.

N. Y., Utica—Bd. Contr. & Supply soon lets contract for asphalt paving on Hart St. from Mandeville to Kirkland Sts., and from Plant to Tracy Sts., Gilbert St. from Bleecker St. to Erie Canal, Ontario St. from Bleecker to Catherine Sts.; resurfacing Main St. from John to 1st Sts. and John St. from Baggs Sq. to Erie Canal. A. E. Roche, city engr.

N. J., Bayonne—City plans to pave West 40th St. from Ave. B to Ave. C, asphalt; also Oak St., granite block, blue stone curb and concrete sidewalk. W. H. Clarkson, city engr.

N. J., Camden—Fairview Realty Co., Administration Bldg., Yorkship Village, Camden, soon lets contract for 6 mi. macadam, 2 mi. concrete and 4 mi. cement alley paving, curbs, gutters, sidewalks, etc., for settlement of 1600 houses, Yorkship Village. Work involves 20,000 sq.yd. concrete, 60,000 sq.yd. waterbound macadam and 40,000 lin.-ft. cement curbing.

N. J., Jersey City—City plans to pave Hutton St. from Hudson Co. Blvd. to Liberty Ave. with bituminous concrete; Liberty Ave. between St. Paul's Ave. and Hopkins Ave., asphalt. About $50,000. C. A. Van Keuren, city engr.

N. J., North Bergen—Town plans to improve Bway. from Guttenberg Line to 35th St., cost $10,000; also Bergenline Ave. from Guttenberg Line to end of township.

N. J., North Bergen—Town having plans prepared grading and improving 35th St. from Hudson Blvd. to Hackensack Plank Rd., granite block. About $20,000. P. F. Daly, town engr.

N. J., Tyler—Smith Co. election Apr. 12, to vote on $1,250,000 bonds to build roads.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids building 1842 ft. brick road in Clarion Boro. Noted Mar. 27.

Pa., New Brighton—City rejected bids paving 13th St., between 6th and Penn Aves. New bids will be received in about 30 days. H. T. Barker, city engr. Noted Mar. 13.

Pa., New Kensington—Boro. soon lets contract grading, paving and curbing Catalpa St., from Stanton to Ridge Aves., involving 4000 yd. earth excav., 1720 lin.ft. plain concrete curb and gutter, 640 lin.ft. concrete steel protected curb and gutter, 6500 sq.yd. paving, 1200 lin.ft. concrete cross drains, 520 ft. stone backing curb; Ridge Ave., from end of present pavement to Catalpa St., 410 yd. earth grading, 71 lin.ft. plain concrete curb and gutter, 50 lin.ft. concrete steel protected curb and gutter, 1820 sq.yd. paving, 360 lin.ft. concrete cross drains; North St., from Taylor to Freeport Aves., 2400 cu.yd. earth excav., 1700 lin.ft. plain concrete curb and gutter, 580 lin.ft. steel protected curb and gutter, 720 lin.ft. concrete cross drains, 350 ft. stone backing curb, 3900 sq.yd. paving; North St., from Stanton to Taylor Aves., 880 lin.ft. plain concrete curb and gutter, 390 lin.ft. steel protected curb and gutter; 9th St., from 6th to Pine Sts., resurfacing 4650 sq.yd. with asphaltic concrete. Bids will be received for both brick and rein.-con. paving on 5 in. concrete base. Douglass & McKnight, 1315 Union Bank Bldg., Pittsburgh, boro. engrs.

Pa., Northampton—Town soon lets contract for (1) laying cement sidewalks, curbs and gutters in front of private properties, (2) laying concrete street crossings, (3) laying crushed slag or stone concrete subbase for bituminous or amiesite street paving, (4) laying 1 course cement concrete street paving on East 14th, East 17th and 8th Sts. between Main St. and alley east of Lincoln Ave., (5) excavation and filling required for street grading, (6) furnishing crushed trap rock f.o.b. cars at Northampton and Siegfried, (7) furnishing and carting crushed local stone, (8) unloading and carting upon Laubach Ave. between Main St. and Newport Ave., the amiesite or other bituminous paving material shipped here in railroad cars, (9) laying amiesite or other bituminous paving material on Laubach Ave. J. G. Koch, 1703 Main St., secy.

Pa., Sheridan (Pittsburgh P. O.)—City of Pittsburgh and Pittsburgh Rys. Co., 435 6th Ave., Pittsburgh, plan to improve 3000 ft. Chartiers Ave. from Danley to Stroka Sts., 34 ft., wide. Total cost, $103,000. Railway will appropriate $80,000 toward cost and balance of $23,000 will be paid by city. T. Reed, City County Bldg., engr. F. Uhlenhart, ch. engr. ry.

Va., Norfolk—City voted $750,000 bonds to pave Boush, Plume, Tazewell, Dunmore, 24th and 17th Sts. and Fairfax, Pembroke and Cooley Aves. W. H. Taylor, Jr., city engr.

W. Va., Berkeley Springs—Comrs. Morgan Co. plan to grade and macadamize 5 mi. South Washington St., Martinsburg and Hancock Rds. About $50,000. E. L. Miller, co. engr.

W. Va., Winfield—Comrs. Putnam Co. having surveys made for hard surfacing 9½ mi. road in Curry Dist., 9 ft. wide, with 4½ ft. stone berm on either side. J. S. Parkins, Paradise, engr.

N. C., Danbury—Stokes Co. voted $25,000 bonds to build roads in Beaver Island Twp. R. G. Petree, co. clk.

N. C., Fayetteville—City plans to issue $25,000 bonds to repave various streets. H. J. McBuie, city clk.

N. C., Raleigh—Wake Co. soon lets contract paving 4½ mi. Garner-Raleigh Rd., 16 ft. wide, involving 39,822 sq.yd. concrete, warrenite, brick or asphalt. C. M. Miller, co. engr. Noted Mar. 14, 1918.

N. C., Washington—Beaufort Co. plans election soon to vote on $1,000,000 bonds to build roads.

S. C., Union—Union Co. voted $1,175,000 bonds to improve highways.

Fla., Bradentown—Manatee Co. plans to issue $115,000 bonds to build roads.

Fla., Jacksonville—City having estimates made for improving streets and sidewalks. About $10,000. F. M. Edwards, city engr

Fla., Jacksonville—Duval Co. Comn. soon lets contract paving 6500 sq.yd. Atlantic Blvd. from Kings Rd. to Hendrix Ave. L. L. Meggs, chn.

O., Bradford—City receives bids about June building 7000 ft. Miami and Main Sts., involving 20,000 sq.yd. vitr. brick, concrete or asphalt pavement on 6-in. concrete base and 15,000 lin.ft. stone or concrete curbing. About $110,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Centerburg—City receives bids about May grading, draining, curbing and paving 2700 ft. Hartford St., 26-42 ft. wide, involving 9000 sq.yd. vitr. brick or asphalt block, 5600 lin.ft. concrete curbing and 3000 cu.yd. earth excav. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., East Liverpool—City passed resolution to pave Bway., St. Clair Ave., Leak Hollow Rd., West 8th and Market Sts. About $150,000. J. N. George, East Liverpool, engr.

O., Green Springs—City had surveys made for grading and paving 2500 ft. Main St. 30 ft. wide, involving 9000 sq.yd. vitr. brick on stone foundation. About $30,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Maumee—City plans to grade, curb and pave Conant St. from canal to Wabash R.R. About $10,375. G. Champe, 610 Nasby Bldg., Toledo, engr.

O., Oxford—City receives bids about June paving 2000 ft. High St., 30 ft. wide, involving 7000 sq.yd. vitr. brick and 4400 lin.ft. concrete curbing. About $35,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., South Charleston—City receives bids in summer building 3000 ft. Main St., 30-42 ft. wide, involving 14,000 sq.yd. vitr. brick or wood block on 6-in. concrete base and 6400 lin.ft. stone or concrete curbing. About $75,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Sycamore—City receives bids about May paving 3000 ft. Main and Prospect Sts., 30-40 ft. wide, involving 10,000 sq.yd. vitr. brick or asphalt blocks and 6500 lin.ft. concrete curbing. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Toledo—City receives bids in spring repaving Cherry St. Bridge over Maumee River 1150 ft. long, 54 ft. wide. H. C. McClure, 209 Valentine Bldg., engr.

O., Toledo—City having plans prepared by H. C. McClure, engr., 229 Valentine Bldg., paving Glen St. from Western Ave. to south end of street, 24 ft. wide, also ½ mi. Hawthorne St. from Dorr to Oakland Aves.

O., Toledo—Comrs. Lucas Co. receive bids about June, grading, curbing, and paving with asphalt on 6 in. concrete base, Clarendon Dr., Oakwood and Grand Aves., Foster and West Woodruff Sts., 6200 ft. long, 24 ft. wide. Work involves 13,000 lin.ft. concrete curbing and guttering. About $70,000. C. L. Rood, co. engr.

Ind., Terre Haute—Comrs. Vigo Co. receive bids about Apr. 15, grading and paving 2½ mi. John L. Smith Rd., 18 ft. wide, and 2 mi. John L. Crawford Rd., 18 ft. wide, brick, concrete, asphaltic concrete or vibrolithic on concrete base. About $102,500 and $83,600 respectively. R. E. Gibbons, co. engr.

Michigan—State Highway Comn., Lansing, soon lets contract shaping, draining and surfacing 6.916 mi. Rd. No. 62, Ionia Co., Class B. gravel, 12 ft. wide. Work also includes 235 ft. cement concrete pavement 51 ft. wide and 645 ft. cement concrete 55 ft. wide. F. F. Rogers, state highway comr.

Mich., Battle Creek—City plans election to vote on $200,000 bonds to pave various streets, also build sewers and bridges.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on 6 in. concrete base, Berea or Medina curbing or other curbstone, Springvale Ave. from Ferndale to Dix Aves., 26 ft. wide, cost $29,854; Caleran Ave. from Junction to Cavalry Aves., 26 ft. wide, $15,416; Senator Ave. from Beard St. to Lawndale Ave., 26 ft. wide, $56,718; Honorah Ave. from Ferndale to Dix Aves., 26 ft. wide, $21,344; Leslie Ave. from Oakman to Wabash Aves., 24 ft. wide, $32,916; also north and south alley in block bounded by Field, Sheridan, Forest and Gratiot Aves., 1 course concrete, 20 ft. wide, $5,100. C. W. Hubbell, city engr.

Mich., Highland Park (Detroit P. O.)—City having plans and estimates made grading and paving 1000 ft. Avalon Ave. from Hamilton Blvd. west, asphaltic concrete or concrete, 24 ft. wide. About $11,000. L. C. Whitsit, 20 Gerald Ave., engr.

Mich., Port Huron—City having plans and estimates made paving Griswold St. east to railroad track crossing east of 4th St., concrete or brick. About $11,000. E. R. Whitmore, city engr.

Mich., Port Huron—Dept. Streets had plans prepared paving Stone St. from State to Garfield Sts., concrete, $22,000, brick, $31,000; Crescent Pl. from Water to 10th Sts., concrete $5500, brick, $7500; alley in block 58 from Pine St. east and north to 4th St., concrete, $1900, brick,, $2100. E. R. Whitmore, city engr.

Wisconsin—State Highway Comn., Madison, plans to expend $27,000 to build Federal Highway between Radisson and Couderay. Sawyer Co. will bear ½ of cost.

Wis., Milwaukee—Comrs. Milwaukee Co. soon let contract grading and paving Packard Ave. from Plankinton Ave. 1½ mi. north to Lake Rd., involving 13,000 sq.yd. 1 course concrete paving, 6000 cu.yd. excav., 60 cu.yd. concrete culverts and 12 ft. concrete bridge; St. Martins Rd. No. 3 from Loomis to Ryan Rd., Ryan Rd. No. 4 from St. Martins to Center Rd., and 4½ mi. Center Rd. No. 3 from Ryan Rd. to county line, 42,500 sq.yd. 1 and 2 course concrete paving, 20,500 cu.yd. excav., 380 cu.yd. concrete culverts and 20 ft. concrete bridge; grading and paving 1¾ mi. Burleigh St. No. 2 from 43rd St. west to Lisbon Rd., bituminous or 1 course concrete on concrete foundation, 24,000 sq.yd. paving, 9000 cu.yd. excav. and 90 cu.yd. concrete in culverts. G. Hampel, co. clk.

Streets and Roads (Continued)

Ia., Cedar Rapids—T. M. Sinclair Co., Ltd., 3rd St. and 16th Ave., having plans prepared by A. C. Pryor, engr., c/o owner, for 10,000 yd. concrete paving in yards at plant.

Ia., Humboldt—City soon receives bids for 15 blocks of paving. C. H. Currie, Webster City, engr.

Ia., Onawa—City soon receives bids for 83 blocks of paving. W. E. Standeven, 4911 Webster St., Omaha, Neb., engr.

Ia., Sioux City—T. H. Johnson, city engr., receives bids about May 3, for 24 blocks paving, 42 ft. wide. Work involves 15168 lin.ft. concrete curbing, 15,168 lin.ft. concrete gutter and 35,400 sq.yd. concrete.

Ia., Sioux City—City soon lets contract repaving 6000 sq.yd. Wall St. viaduct and 3200 sq.yd. 4th St. viaduct, 40 ft. wide. Work involves 9200 sq.yd. vitr. brick, wood block, asphalt, concrete or bituminous concrete. T. H. Johnson, city engr.

Minn., Aitkin—Comrs. Aitkin Co. plan to grade and gravel 30 mi. state-aid road, 24 ft. wide. About $150,000. Work involves 150,000 cu.yd. earth excav. and 30,000 cu.yd. gravel surfacing. T. J. O'Hara, co. engr.

Minn., Bagley—Comrs. Clearwater Co. plan to grade and gravel 16 mi. state-aid road, 24 ft. wide. About $80,000. Work involves 90,000 cu.yd. earth excav. and 19,000 cu.yd. graveling and surfacing. B. F. Umland, co. engr.

Minn., Carlton—Comrs. Carlton Co. plan to grade, gravel and build bridges and culverts on 20 mi. state-aid road, 24 ft. wide. About $300,000. Work involves 120,000 cu.yd. earth excav. and 24,000 cu.yd. grading and surfacing. P. D. Mold, co. engr.

Minn., Duluth—Comrs. St. Louis Co. plan to expend $47,500 for roads in 1st Dist.; $140,000 in 2nd Dist.; $57,500 in 3rd Dist.; $155,000 in 4th Dist.; $235,000 each in 5th and 6th Dists.; $280,000 in 7th Dist. R. W. Acton, Courthouse, engr.

Minn., Foley—Comrs. Benton Co. plan to grade and gravel 22 mi. state-aid road, 24 ft. wide. About $100,000. Work involves 110,000 cu.yd. earth excav. and 26,000 cu.yd. gravel surfacing. J. L. Tierney, co. engr.

Minn., Grand Marais—Comrs. Cook Co. plan to grade, gravel and build bridges and culverts on 7 mi. state-aid road, 24 ft. wide. About $80,000. Work involves 70,000 cu.yd. earth excav. and 84,000 cu.yd. gravel.

Minn., Mankato—Comrs. Blue Earth Co. plan to pave 7 mi. state-aid road, 18 ft. wide. About $175,000. Work involves 35,000 cu.yd. earth excav. and 74,000 cu.yd. paving. N. Moe, co. engr.

Minn., Minneapolis—Comrs. Hennepin Co. plan to grade, gravel and build bridges on 12 mi. road from Cedar to Farmington Aves., 30 ft. wide. About $200,000. E. E. Terrell, Courthouse, engr.

Minn., Moorhead—Comrs. Clay Co. plan to grade, gravel and surface 12 mi. state-aid road project, 24 ft. wide. About $60,000. Work involves 50,000 cu.yd. earth excav. and 14,000 cu.yd. graveling and surfacing. E. Martinson, co. engr.

Minn., New Ulm—Comrs. Brown Co. plan to grade and build bridges and culverts on 8 mi. state-aid road, 18 ft. wide. About $200,000. Work involves 24,000 cu.yd. excav. and 84,000 cu.yd. paving. C. N. Robertson, co engr.

Minn., St. Paul—Comrs. Ramsey Co. plan to grade and gravel 1¾ mi. Anoka Co. line Rd. from Centerville, west. About $10,000. G. J. Ries, co. aud.

Minn., Windom—Comrs. Cottonwood Co. plan to grade, gravel and build culverts on 15 mi. state-aid road, 24 ft wide. About $60,000. Work involves 80,000 cu.yd. earth excav. and 18,000 cu.yd. graveling. D. R. Savage, co. engr.

Montana—State Highway Comn., Helena, receives bids about April building following Federal-Aid roads:

Big Horn Co., Hardin-Custer Rd., 2.02 mi. gravel surfaced road, 18 ft. wide, 9 to 12 in. thick, about 4000 cu.yd. excav., $12,532. Carbon Co., Black and White Trail, 2.69 mi. gravel surfaced road, 10 ft. wide, 6 in. thick, about 19,000 cu.yd. excav., $17,551. Dawson Co., Red Trail, east of Glendive, 7.5 mi. gravel surfaced road, 9 ft. wide, 6 in. thick, about 12,000 cu.yd. excav., $21,940; Red Trail, west of Glendive, 9 mi. gravel surfaced road, 9 ft. wide, 6 in. thick, about 9500 cu.yd. excav., $21,368. P. D. Pratt, engr. Noted Jan. 23.

Mont., Bigtimber—Sweet Grass Co. voted $100,000 bonds to improve roads and bridges. Noted Mar. 26.

Mont., Dillon—City plans to pave 26,257 sq.yd. Montana and Idaho Sts., with connecting cross streets. About $75,000. G. V. Elder, Dillon, engr.

Mont., Ekalaka—Carbon Co., plans to build roads and bridges. About $30,703 and $8,960 respectively available for projects. A. B. Cooley, Red Lodge, engr.

Mont., Thompson Falls—Sanders Co. plans to grade and gravel 11 mi. Plains-Eddy Rd. About $20,000. T. Johnston, co. surv. Federal Government asked to appropriate toward cost.

Arkansas—Comrs. Rd. Impvt. Dist. No. 1, at office of State Highway Comn., Little Rock, soon lets contract building 37 mi. road, Boone Co. About $3000 per mile.

Arkansas—W. C. Ross, state highway engr., Little Rock, soon lets contract for 10 mi. road in Impvt. Dist. No. 5, Prairie Co., 22 ft. wide, involving 25,460 cu.yd. earth excav., 354 cu.yd. rein.-con. in culverts, 40 lin. ft. steel bridge and 60,000 tons crushed stone. Alternate bids on gravel with 70,225 gal. asphalt surface treatment.

Ark., Marion—Comrs. Rd. Impvt. Dist. No. 6, Crittenden Co., soon let contract building 62 mi. gravel road including bridges and culverts. J. E. Fry, Earle, engr. for district.

Ark., Pine Bluff—Comrs. Rd. Impt. Dist. No. 5, Jefferson Co., soon lets contract resurfacing 10 mi. old macadam road with bituminous covering and repairing drainage structures. Parkes Eng. Co., Citizens Bank Bldg., engrs.

Tex., Bastrop—Bastrop Co. voted $250,000 bonds to build roads in Elgin Precinct; $35,000 in Paige Precinct, and $35,000 in McDade Precinct. Noted Feb. 27.

Tex., Beeville—Bee Co. election Apr. 19. to vote on $600,000 bonds to build roads.

Tex., Brownsville—Cameron Co. voted $300,000 bonds to build county's part of State Highway No. 12, from here to Hidalgo Co. line at La Feria, 27 mi. long, heavy gravel base, bituminous top.

Tex., Cameron—Milam Co., Branchville Rd. Dist. No. 14, voted $25,000 bonds to build road between 2 highways.

Tex., Cameron—Milam Co. plans to vote on $20,000 bonds to build roads in Dist. No. 23; $15,000 in Dist. No. 20, and $10,000 in Dist. No. 24.

Tex., Coleman—Comrs. Coleman Co. Precinct No. 2, voted $100,000 bonds to build roads.

Tex., Georgetown—Williamson Co. election Apr. 19 to vote on $1,500,000 bonds to build roads.

Tex., Giddings—Comrs. Lee Co. rejected bids received Mar. 4, building 16 mi. gravel road. Work will be readvertised.

Tex., Granbury—Comrs. Hood Co. voted $140,000 bonds to build 140 mi. hard surfaced road from Ft. Worth to Brownwood.

Tex., Greenville—Comrs. Hunt Co. voted $2,000,000 bonds to build roads.

Tex., Henderson — City voted $50,000 bonds to pave streets.

Tex., Huntsville—City Council passed resolutions authorizing paving Main St. from courthouse to main entrance of San Houston normal school, with 6. in. rein.-con.

Tex., Kaufman—Kaufman Co., (3 precincts) voted $1,450,000 bonds to build highways.

Tex., Kingsville—Kleberg Co. voted $350,000 bonds to build Sect. 12, King of Trails Highway, gravel type base with bituminous surface.

Tex., Mt. Pleasant—Comrs. Titus Co. voted $1,000,000 bonds to build roads.

Tex., Mt. Vernon—Comrs. Franklin Co. voted $500,000 bonds to build roads.

Tex., Port Arthur—City had plans prepared paving with shell, 40 mi. streets in residential section, 16 ft. wide. About $275,000.

Okla., Bristow—City had preliminary plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, paving various streets with brick. About $70,000.

Okla., Madill—City had preliminary plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, paving various streets with concrete. About $75,000.

Idaho, Blackfoot—Bingham Co. election Apr. 12 to vote on $600,000 bonds to build roads and bridges.

Utah, Richfield—City plans to pave, curb, gutter and drain streets in Dist. No. 1. About $130,000.

Utah, Vernal—Unita Co. election Apr. 10, to vote on $150,000 bonds to improve roads.

Washington—State Highway Comn., Olympia, rejected all bids received Mar. 17, grading, draining and surfacing 2 mi. Inland Empire Highway, Ferry Co.; 13.8 mi. Sunset Highway from Waterville, east, Douglas Co., 14.95 mi. Central Washington Highway from Sprague to Cheney, Spokane and Lincoln Counties and 5.3 mi. Sunset Highway in vicinity of Baird, Douglas Co. Noted Mar. 6.

Wash., Anacortes—City plans to improve 35th St. About $31,508. F. D. Cartwright, city clk.

Wash., Chehalis—Lewis Co. has $440,000 available from state and Federal aid funds for road and bridge work during 1919. Plans include completing 7 mi. gap on Pacific Highway from here to Toledo, cost, $180,000; Pacific Highway to Mayfield, $100,000; State Rd. No. 18, from Morton to Glenoma, $40,000; from Fiffe to Lewis, $80,000; building Nesika bridge span, $20,000, Toledo bridge, 180 ft. steel span with paved approaches, $100,000.

Wash., Mt. Vernon—City having plans prepared for paving and curbing 1700 ft. Lawrence and 6th Sts., 24 ft. wide, 1 course concrete or bituminous concrete on concrete base or bituminous macadam on block base. About $14,250.

Wash., Port Angeles—City plans to improve streets constituting road from city to Ocean View cemetery. Cost between $20,000 and $30,000.

Oregon—State Highway Comn., Portland, having surveys made and estimates prepared paving road from Astoria to Seaside; Clatsop Co. appropriated $65,000 toward cost, balance to be borne by state; paving Pacific Highway through Jackson Co. R. A. Booth, comr.

Ore., Astoria—City soon lets contract hard surfacing Astor St. from 2nd to 10th Sts. G. T. McClean, city engr.

Ore., Enterprise—City voted $25,000 bonds to pave various streets.

Ore., Marshfield—J. W. Butler, city recorder, receives bids about May 1, hard-surfacing and building concrete walks on Bway. from Market Ave. to Front St., N., 1 block Park Ave. west of Bway., Elrod Ave. and 6th St. About $46,420. E. K. Burton, city engr.

Ore., Portland—City considering hard-surfacing 18 ft. center strip of East 39th St. from Francis Ave. to Powell Valley Rd.; full width of Francis Ave. from Kenilworth Addition to East 42nd St.; Bway. from East 45th St. to Sandy Blvd.; East 53rd St. from East Glisan to East Hoyt Sts., East 47th St. O. Laurgaard, city engr.

Ore., Portland—City soon lets contract improving Gloucester, Hereford and Hodge Sts., artificial stone or asphalt on concrete foundation, not less than 3 in. deep. O. Laurgaard, city engr.

Ont., Toronto—Toronto & York Good Rds. Comm. soon lets contract building water-bound macadam and concrete roads, also number of concrete bridges. About $80,000. E. A. James, 57 Adelaide St., E., engr.

P. E. I., Charlottetown—City plans to pave 25,000 to 35,000 yds. streets, asphalt or bitulithic. J. J. McKinnon, 41 Queen St., chn. street com.

BIDS DESIRED

Me., Auburn—Until Apr. 24, by city, improving and paving 12,000 sq.yd. various streets, vitr. block, concrete or granite block. G. W. Bumpus, city clk.; advertised in this issue. Noted Mar. 13.

Massachusetts—Until Apr. 8, by A. W. Dean, comr. state highways, Boston, building 10,000 ft. highway, 18-24 ft. wide, Danvers Twp., involving 4200 cu.yd. earth, 1050 cu.yd. rock excav., 300 cu.yd. borrow, 7400 cu.yd. broken stone, 45,000 gal. bituminous material, 1670 ft. 10-18 in. vitr. pipe, 72 ft. 12 in. c.i. pipe, 5400 ft. fence and 3900 cu. yd. stone filling.

Rhode Island—Until Apr. 16, by State Bd. Pub. Rds., State House, Providence, furnishing and applying 485,000 gal. asphaltic oil or refined tar to macadam sections of state highway. Roads to be treated are divided into 3 divisions and separate bids will be received for furnishing and applying oil or tar on each division; advertised in this issue.

New York—Until Apr. 17, by State Highway Comn., 55 Lancaster St., Albany, building roads in following counties:

Albany Co., Coeymans-Indian Fields Rd., Part 1, involving 4400 cu.yd. earth excav., 10 cu.yd. rock, 15 lin.ft. 12 in., 75 lin.ft. 20 in., and 100 lin.ft. 6 in. vitr. clay pipe, 14 ton c.i. pipe, 350 cu.yd. concrete, 2500 lb. iron and steel, 825 cu.yd. broken stone, 200 cu.yd. field or quarry stone, 500 cu.yd. bituminous macadam, 2000 cu.yd. cement concrete, 1800 sq.yd. stone block, 13,500 gal. bituminous material, 10,100 lin.ft. concrete curbing, cost, $73,000.

Chemung Co., Horseheads-Cayuta Rd., 80

Streets and Roads (Continued)

cu.yd. earth excav., 45 cu.yd. concrete, 60 cu.yd. concrete pavement, 250 ft. round timber grubbing in place, 325 cu.yd. gravel, cost, $5000.

Erie Co., Evans Center-Farnham Rd., 50 cu.yd. rock excav., 26,000 cu.yd. earth excav., 20 ton c.i. pipe, 419 cu.yd. concrete, 100 tons broken stone, 9400 cu.yd. cement concrete pavement, 1000 cu.yd. slag, 380,600 sq.ft. metal reinforcement, $182,100; Marilla-Wales Center Rd., 33,000 cu.yd. earth excav., 75 cu.yd. rock excav., 1200 lin.ft. 6 in. vitr. clay drain, 14 tons c.i. pipe, 530 cu.yd. concrete, 2150 cu.yd. gutters, 4800 lb. steel and iron, 8475 cu.yd. cement concrete pavement, 224,000 sq.ft. metal reinforcement, $186,800.

Fulton Co., Oppenheim-Dolgeville Rd., 22,000 cu.yd. excav., 500 cu.yd. rock excav., 50 ft. 18 in. and 500 lin.ft. 6 in. clay pipe, 2 tons c.i. pipe, 395 cu.yd. concrete, 454 cu.yd. broken stone, 8230 cu.yd. field or quarry stone, 3875 cu.yd. water bound macadam, 15,500 gal. bituminous material, $100,100.

Herkimer Co., Van Hornesville-Starkville Rd., 22,500 cu.yd. earth excav., 1000 cu.yd. rock excav., 50 lin.ft. 12 in., 80 lin.ft. 15 in. and 50 lin.ft. 24 in. vitr. clay pipe, 2500 lin.ft. 6 in. porous clay pipe, 1040 cu.yd. concrete, 2750 sq.yd. cobble gutters, 7750 lb. steel and iron, 450 cu.yd. broken stone, 1600 cu.yd. field or quarry stone, 4650 cu.yd. waterbound macadam, 17,000 gal. bituminous material, $152,600; Paines Hollow-Stonehouse Rd., 28,500 cu.yd. earth excav., 100 cu.yd. rock excav., 100 lin.ft. 12 in. and 100 lin.ft. 24 in. vitr. clay pipe, 100 lin.ft. 6 in. porous tile pipe, 585 cu.yd. concrete, 4300 sq.yd. cobble gutter, 8380 cu.yd. field or quarry stone, 3910 cu.yd. waterbound macadam, $134,000.

Oneida Co., North Western-Boonville Rd., Part 1, 42,000 cu.yd. earth excav., 500 cu.yd. rock excav., 100 lin.ft. 6 in. vitr. clay drain, 600 lin.ft. 6 in. porous tile, 860 cu.yd. concrete, 6800 lb. iron and steel, 180 cu.yd. broken stone, 9710 cu.yd. field or quarry stone, 4240 cu.yd. waterbound macadam, 15,500 gal. bituminous material, $141,700; North Western-Boonville Rd., Part 2, 38,000 cu.yd. earth excav., 600 cu.yd. rock excav., 820 cu.yd. concrete, 9050 cu.yd. field or quarry stone, 3950 cu.yd. waterbound macadam, $131,500.

Putnam Co., Patterson-Dutchess Co., line Rd., 6000 cu.yd. earth excav., 1500 cu. yd. rock excav., 100 lin.ft. 6 in. vitr. clay underdrain, 200 cu.yd. concrete, 1500 lb. metal reinforcement, 3190 cu.yd. field or quarry stone, 1120 cu.yd. bituminous macadam, 29,000 gal. bituminous material, $39,400.

St. Lawrence Co., Massena-Winthrop Rd., Part 1, 20,200 cu.yd. earth excav., 277 cu.yd. concrete, 720 sq.yd. cobble gutters, 10,500 cu.yd. field or quarry stone, 3800 cu.yd. bituminous macadam, 103,000 gal. bituminous material, $104,299; Nicholville-St. Regis Rd., Part 1, 18,600 cu.yd. earth excav., 650 cu.yd. rock excav., 285 cu.yd. concrete, 1025 sq.yd. cobble gutter, 5440 cu.yd. field or quarry stone, 2390 cu.yd. bituminous macadam, 64,400 gal. bituminous material, $71,212.

Tompkins Co., South Lansing-Myers Rd., 10,500 cu.yd. earth excav., 200 cu.yd. rock excav., 1000 lin.ft. 20 in. vitr. clay pipe, 250 cu.yd. concrete, 2000 sq.yd. concrete gutter, 4350 cu.yd. field or quarry stone, 1745 cu.yd. waterbound macadam, $60,100.

Washington Co., Whitehall-Dresden Rd., Part 2, 69,200 cu.yd. earth excav., 970 cu.yd. concrete, 2900 lin.ft. wooden guard rail, 5500 cu.yd. broken stone, 2900 cu.yd. field or quarry stone, 4000 cu.yd. bituminous macadam, 95,800 gal. bituminous material, $213,738.

Wayne Co., Pittsford-Palmyra Rd., Part 3, 11,000 cu.yd. earth excav., 50 cu.yd. rock excav., 500 lin.ft. 6 in. vitr. tile drain, 20 tons c.i. pipe, 200 cu.yd. concrete, 2100 lb. reinforcement, 85 cu.yd. broken stone, 4945 cu.yd. cement concrete pavement, 1300 cu.yd. gravel, $71,498.

Wyoming Co., Perry Center-Moscow Rd., Part 1, 10,000 cu.yd. earth excav., 100 cu.yd. rock excav., 1000 lin.ft. 6 in. vitr. clay pipe, 190 cu.yd. concrete, 1700 sq.yd. cobble gutters, 2250 lin.ft. wooden guard rail, 1600 cu.yd. field or quarry stone, 2075 cu.yd. bituminous macadam, 55,500 gal. bituminous material; $81,600, also repairing roads in following counties:

Chenango Co., resurfacing Guilford Rd., involving 600 cu.yd. field or quarry stone, 990 cu.yd. bituminous macadam, 26,650 gal. bituminous material, $14,848.

Dutchess Co., rebuilding Northeast Center-Sharon Sta. Rd., 5400 cu.yd. excav., 6150 cu.yd. field or quarry stone, 2290 cu.yd. bituminous macadam, 55,000 gal. bituminous material; advertised in this issue.

N. Y., New York—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, paving portions of terminal sites at Mott Haven, Greenpoint and Gowanus Bay, contr. 44-P. Work involves 2700 cu.yd. excav., 1900 cu.yd. 3rd class concrete, 12,000 lb. c.i. pipe and specials, 1900 lin.ft. concrete curb and edging, 2100 sq.yd. macadam pavement, 10,000 sq.yd. stone block pavement, 2500 sq.yd. relaid stone block pavement, 1125 sq.yd. asphalt pavement, etc., about $94,340; advertised in this issue.

N. J., Irvington—Until Apr. 7, by city comrs., curbing Stuyvesant Ave. from city line to Lyons Ave., involving 8550 lin.ft. concrete; paving and curbing Grove Terrace from Grove St. to East Speedway Ave., 1510 lin.ft. concrete curbing and 2510 sq.yd. concrete paving; furnishing and applying 20,000 gal. tarvia B and 7000 gal. asphalt binder; furnishing 1000 tons ½ in. screenings, 500 tons ¾ in. and 500 tons 1½ in. stone trap rock; laying 175 ft. 4 in. sewer connections in Stuyvesant Ave. from city line to Lyons Ave. I. J. Casey, Jr., Town Hall, engr.

N. J., Newark—Until Apr. 8, by T. L. Raymond, dir. dept. streets and pub. impvts., repaving Niagara St. from Ferry to Rome Sts., involving 8100 sq.yd. asphalt.

Pa., Clarksville—Until June 10, (change of date) by A. M. Custer, boro clk., laying about 1300 lin.ft. waterbound macadam and one course concrete pavement, 24 ft. wide. Noted Mar. 20.

Pa., Johnstown—Until Apr. 12, by W. Mosholder, pres. bd. superv. Upper Yoder Twp., building 28,500 lin.ft. Millcreek Rd., 3 in. vitr. block on concrete base. Bids will also be accepted for furnishing, unloading, hauling and stacking 3500 M 3 in. vitr. blocks, 12,000 barrels Portland cement, 2000 lin.ft. 24 in. rein.-con. pipe, 2000 lin.ft. 30 in. rein.-con. pipe and 2000 lin.ft. 12-24 in. c.i. pipe. F. B. Barnhart, Swank Bldg., attorney for supervs.; advertised in this issue.

Pa., Pittsburgh—Until Apr. 15, by J. P. Moore, controller, Allegheny Co., building 5300 ft. Renton Rd., from Plum to Renton Twps., Telford macadam, 16 ft. wide. R. V. Warren, Court House, engr.

Pa., Pittsburgh—Until Apr. 22, by Comrs. Allegheny Co. building 2900 ft. Duncan Ave., from Butler Plank Rd. to Butler Pike, Hampton Twp., 18 ft. wide, Telford macadam. R. V. Warren, co. engr. Noted Mar. 27.

Pa., Springdale—Until Apr. 11, by H. J. Barnes, boro. secy., improving Pittsburgh St. Work involves 5430 cu.yd. grading, 13,600 lin.ft. concrete curb, 600 lin.ft. backing curb, 70,000 sq.ft. concrete sidewalk, and 1250 lin.ft. 15-24 in. sewer, etc. Douglass & McKnight, Columbia Bank Bldg., Pittsburgh, boro. engrs.

Pa., Washington—Until Apr. 14, by T. J. Underwood, controller Washington Co., resurfacing with concrete 0.9 mi. Taylorstown Rd., from point near Taylorstown Sta., extending toward village of Taylorstown; 2 mi. Monongahela-Donora Rd., from Black Diamond extending to boro line of Donora; also resurfacing with concrete on concrete base and brick wearing surface ¾ mi. Pike Run Rd. from boro line of Coal Center to point near Crescent power house.

Maryland—Until Apr. 8, by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 2.65 mi. concrete highway from St. Michaels to Claiborne, 26 ft. wide, 3 ft. dirt shoulders, in Talbot Co., Contr. No. T-11. F. A. Zouck, chn., advertised in this issue.

Md., Baltimore—Until Apr. 9, by Bd. Awards, grading and paving 1¼ mi. alleys, 3-10 ft. wide, cement concrete, in various sections of city, Contr. 31, 32 and 33. Work involves 7920 sq.yd. 6 in. cement concrete. Noted Mar. 27.

Md., Hagerstown—Until Apr. 8, by D. A. Wolfinger, clk. Washington Co., building 2.34 mi. St. Pauls Church Rd., concrete or macadam, 14 ft. wide with 5 ft. dirt shoulders, from St. Pauls Church to Pennsylvania line, state aid. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

W. Va., Keyser—Until Apr. 15, by Mineral Co. building 12 mi. Class "A" road from Ridgely to Alaska, in Frankfort Dist., State Aid Project No. 36. E. Smith, Piedmont, engr.

N. C., Farmville—Until Apr. 10, by R. E. Belcher, mayor and Bd. Comrs., for 25,000 or 50,000 sq.yd. asphalt, bitulithic, brick or other pavement, 15,000 lin.ft. granite or concrete curb, 15,000 lin.ft. concrete gutter, and 20,000 sq.yd. sidewalk; advertised in this issue.

Ga., Atlanta—Until Apr. 7, by city paving South Pryor, Whitehall, Juniper, Marietta and Sampson Sts. H. L. Collier, city engr. Noted Mar. 20.

Ga., Cairo—Until Apr. 10, by city, building 13,960 sq.yd. asphalt, brick or concrete pavement, 7149 lin.ft. combined curb and concrete gutter or granite curb and concrete gutter. O. H. Lang, Moultrie, consultg. engr.

Ga., Savannah—Until Apr. 14, by Comrs. Chatham Co., furnishing material and labor for building, draining and paving various roads.

Fla., Bronson—Until Apr. 15, by Comrs. Levy Co., grading and surfacing with limestone 15 mi. road from near Lukens to Sumner, thence to Chiefland Dist. D. F. Thomas, Gainesville, engr.

Ala., Selma—Until Apr. 7, by city building concrete sidewalks on both sides of Alabama Ave. from west curb line of Lauderdale St. to east curb line of Satterfield St.; Selma Ave. from east line of King St. to west line of Lauderdale St.; Selma Ave. from east curb of Broad St. to west curb line of Mechanic St. W. O. Christman, city engr.

Miss., Aberdeen—Until Apr. 8, by Bd. Superv. Monroe Co. building 4.46 mi. Lavender and Hamilton Rd. and 4 mi. Aberdeen and Caladonia Rd. Work involves 60,970 yd. grading, 4564 yd. gravel, 87 stations clearing and grubbing and 465 ft. 18-36 in. pipe. G. G. Ray, clk. G. E. Hauser, Columbus Natl. Bank Bldg., Columbus, engr.

La., New Iberia—Until Apr. 21 (change of date), by H. S. Sealy, mayor, paving Main St. and Railroad Ave. About $150,000. Former bids rejected. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr. Noted Feb. 20.

La., New Iberia—Until Apr. 8, by city, furnishing labor and material for about 35,000 sq.yd. brick, wood block, sheet asphalt, concrete or bituminous pavement with necessary appurtenances. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr.

La., Winnsboro—Until Apr. 8, by Mayor and Bd. of Aldermen, building about 8050 lin.ft. concrete sidewalk, including street crossings and placing vitr. pipe under drains. X. A. Kramer, Magnolia, Miss., consultg. engr.

O., Cleveland—City is receiving bids paving Hege Ave. from East 55th to 58th St., involving 770 cu.yd. excav., 13,175 sq.ft. 4 in. brick on 6 in. concrete foundation, 1045 ft. 5 in. stone curbing, etc.; Dickens Ave. from East 93rd to 91st St., 650 cu.yd. excav., 10,800 sq.ft. 5 in. brick on 6 in. concrete foundation, 778 ft. 5 in. stone curbing, etc.; Claybourne Ave. from West 38th St. to west end, 1595 cu.yd. excav., 42,695 sq.ft. 4 in. brick on 6 in. concrete foundation, 3475 ft. 5 in. stone curbing, etc.; Bernard Ave. from West 105th to 110th Sts., 2025 cu.yd. excav., 29,600 sq.ft. 4 in. brick on 6 in. concrete foundation, 2190 ft. 5 in. stone curbing, etc.; East 57th St. from Hege to Harvard Aves., 575 cu.yd. excav., 9555 sq.ft. 4 in. brick on 6 in. concrete foundation, 785 ft. stone curbing, etc.; McElhattan Ave. from East 136th to 140th Sts., 1850 cu.yd. excav., 21,480 sq.ft. 5 in. brick on 6 in. concrete foundation, 1675 ft. 5 in. stone curbing; Sargent Ave. from West 62nd to 65th St., 500 cu.yd. excav., 13,394 sq.ft. 4 in. brick on 6 in. concrete foundation, 825 ft. 5 in. stone curbing, etc.; West 24th St. from Moore Ave. to north end of Willeyville Allotment, 1305 cu.yd. excav., 25,190 ft. 5 in. brick on 6 in. concrete foundation, 1500 ft. 5 in. stone curbing, etc.; West 24th St. from Franklin Ave. to north end of Willeyville Allotment, 830 cu.yd. excav., 15,585 sq.ft. 5 in. brick on 6 in. concrete foundation, 1215 ft. 5 in. stone curbing, etc.; East 6th St. from Vincent to Euclid Aves., 290 cu.yd. excav., 6300 sq.ft. dressed Medina block on 6 in. concrete foundation, 400 sq.ft. 6 in. concrete sidewalk, etc.; East 58th St. from Hege to Harvard Ave., 520 cu.yd. excav.; 9312 sq.ft. 4 in. brick on 6 in. concrete foundation, 760 ft. 5 in. stone curbing, etc.; East 80th St. from Wade Park to Everett Aves., 420 cu. yd. excav., 8320 sq.ft. 5 in. brick, 715 ft. 5 in. stone curbing, etc.; East 156th St. from Waterloo to Lake Shore Blvd., 2200 cu.yd. excav.; 62,000 sq.ft. 5 in. brick on 58,000 sq.ft. 6 in. concrete foundation, 150 ft. 5 in. stone curbing, 5000 ft. 6 in. curbstone, etc.; Bernard Ave. from West Blvd. to 105th St., 2085 cu.yd. excav., 26,975 sq. ft. 4 in. brick on 6 in. concrete foundation, 1990 ft. 5 in. stone curbing, etc.; grading West 105th St. from Lorain to Thrush Aves., 15,500 cu.yd. excav., etc. R. Hoffman, city engr.

O., Columbus—Until Apr. 13, by G. A. Borden, dir. pub. serv., grading, draining, curbing and paving 630 ft. East Ave. from Olentagy to Kelso Sts., brick or stone block, 24 ft. wide; about $10,970; 210 ft. Neilston St. from Long to Lafayette St., brick or stone block, 36 ft. wide, $5,750; 780 ft. alley

Streets and Roads (Continued)

north of Bryden Rd. from Fairview Ave. to Rhoades St., brick, 20 ft. wide, $8150; 1000 ft. High St. from Poplar Ave. to Cedar St., asphalt 52 ft. wide, $24,240; 1190 ft. Chesnut St. from High to 4th St., asphalt, 52 ft. wide, $29,785.

O., Toledo—Until Apr. 11, by Comrs. Lucas Co., for surface treatment of from 3 to 5 gal. tarvia C. T. to sq.yd. without grit cover of following roads; 16,300 sq.yd. Stitt Rd.; 16,200 sq.yd. Hertzfield Rd.; 22,000 sq.yd. Weckerly Rd.; 12,500 sq.yd. Holloway Rd.; 27,000 sq.yd. Salsbury Rd.; 16,000 sq.yd. Bancroft St.; 24,650 sq.yd. Hill Ave.; 18,000 sq.yd. Migan Ave.; 7500 sq.yd. Glanzman Rd.; 9500 sq.yd. Richards Rd.; 20,600 sq.yd. North Curtice Rd.; 6100 sq.yd. Otter Creek Rd.; 13,500 sq.yd. River Rd.; about $16,788. Also for surface treatment of from 3 to 5 gal. tarvia C. T. on 51,000 sq.yd. Dorr St., No. 24; 46,000 sq.yd. I. C. H. No. 59, No. 30 and Dutch Rd.; 23,000 sq.yd. Albon Rd.; 32,500 sq.yd. Jeffers Rd.; 59,000 sq.yd. Weckerly and Monclova Rds.; 69,000 sq.yd. Waterville-Neapolis Rd.; 51,000 sq.yd. Dorr St. No. 24; 46,000 sq.yd. Hill Ave.; 12,500 sq.yd. Raab Rd.; 34,500 sq.yd. Glendale Ave.; 37,000 sq.yd. Big Ditch Rd.; 37,750 sq.yd. Seamen St.; 90,500 sq.yd. Corduroy Rd.; 27,200 sq.yd. Cedar Point Rd.; 30,000 sq.yd. Richfield Center Rd.; 29,700 sq.yd. Sylvania and Alexis Rds., No. 6 and 54; 16,800 sq.yd. Benore Rd.; 14,800 sq.yd. Suder A[illegible]; 19,400 sq.yd. Matzinger Rd.; about $87,[illegible].

Indiana—Bd. Co. Comrs. building roads in following counties:

Apr. 12, Marion Co., Indianapolis, building road between Pike and Washington Twps. L. K. Fesler, co. aud. Wayne Co., Richmond, improving 7000 ft. highway in Wayne Twp. W. H. Brooks, co. aud.

Apr. 21, Clay Co. Brazil, building gravel road on Clay-Putnam Co. line. W. E. Parrish, Clay Co. aud.

Ind., Terre Haute—Until Apr. 20, by Comrs. Vigo Co. building 1 mi. Wm. Dinkle Rd. 20 ft. wide, brick or concrete. About $30,000. R. E. Gibbons, co. engr.

Michigan—Until Apr. 11, by F. F. Rogers, comr. state highway, Lansing, shaping, draining and surfacing 4.992 mi. Rd. No. 28, 12 ft. wide, Class B. gravel, Burnside and Goodland Twps., Lapeer Co. and Maple Valley Twp., Sanilac Co.; 1.993 mi. Rd. No. 208, 12 ft. wide, Class E waterbound macadam, Windsor and Fairhaven Twps., Huron Co.; 3.085 mi. Rd. No. 202, 12 ft. wide, Class B. gravel, Grant and Sheridan Twps., Clare Co.; 5.601 mi. Rd. No. 203, 12 ft. wide, Class B. gravel, Sheridan Twp., Clare Co.; 6.937 mi. Rd. No. 114, 16 ft. wide, trunk line Class B. gravel or slag, Dayton Twp., Tuscola Co. and Rich Twp., Lapeer Co.

Michigan—Until Apr. 8 (change of date) by F. F. Rogers, comr. state highway, Lansing, building 5.585 mi. road between Paw Paw and Kalamazoo, Van Buren and Kalamazoo Counties, Federal Aid Project No. 29. Noted Feb. 27.

Mich., Midland—Until Apr. 15, by village, grading, draining, curbing and paving 3100 ft. Main, Gordon, Ashman, McDonald, Rodd and Townsend Sts., involving 13,792 sq.yd. pavement on old foundation, 11,921 sq.yd. on new 6 in. concrete base, 6651 lin.ft. curbing and 5740 cu.yd. excav. Bids will be received on all types of pavement. About $61,117. F. G. Champe, 610 Nashby Bldg., Toledo, O., engr.

Illinois—Until Apr. 23, by Division of Highways, Springfield, building following sections, Dixie Highway, brick and concrete: Sect. 1, 39,730 ft. long, 16 ft. wide, involving 70,631 sq.yd. pavement, 29,576 cu.yd. excav., 564 cu.yd. concrete in culverts; Sect. 2, 22,854 ft. long, 16 ft. wide, 40,629 sq.yd. pavement, 15,984 cu.yd. excav., 370 cu.yd. concrete in culverts; Sect. G-15d, 5250 ft. long, 16 ft. wide, 9333 sq.yd. pavement, 1500 cu.yd. excav., 239 cu.yd. concrete in culverts; Sect. 4, 20,999 ft. long, 16 ft. wide, 37,332 sq.yd. pavement, 11,631 cu.yd. excav., 332 cu.yd. concrete in culverts; Sect. H-15d, 5600 ft. long, 16 ft. wide, 9955 sq.yd. pavement, 4594 cu.yd. excav., 512 cu.yd. concrete in culverts; all in Iroquois Co. Sect. 5, 44,539 ft. long, 16 ft. wide, 79,180 sq.yd. pavement, 29,075 cu.yd. excav., 809 cu.yd. concrete in culverts; Iroquois and Kankakee Co.; Sect. K-15d, 11,161 ft. long, 16 ft. wide, 19,842 sq.yd. pavement, 7005 cu.yd. excav., 174 cu.yd. concrete in culverts; Sect. 6, 37,757 ft. long, 16 and 18 ft. wide, 70,667 sq.yd. pavement, 21,259 cu.yd. excav., 262 cu.yd. concrete in culverts; Sect. 7, 35,079 ft. long, 18 ft. wide, 70,158 sq.yd. pavement, 19,976 cu.yd. excav., 468 cu.yd. concrete in culverts, all in Kankakee Co. Alternate bids will be received for Portland cement concrete, monolithic brick (3 and 4 in. brick), bituminous concrete with binder course (Spec. C1, C2, C3 or CT), bituminous concrete without binder course (Spec. C1, C2, C3, or CT). Cement will be furnished on all sections by Dept. Pub. Wks. and Bldgs. R. L. Bell, Buchanan-Link Bldg., Paris, engr., dist. No. 4. Noted Mar. 27.

Illinois—Until Apr. 24, by State Highway Comn., Springfield, building Lincoln Highway in following counties:

Du Page Co., 12,400 ft. Sect. G., 18 ft. wide, involving 24,800 sq.yd. pavement, 202 cu.yd. excav., 91,072 cu.yd. concrett in culverts; 9660 ft. Sect. 2, 19,319 sq.yd. pavement, 10,593 cu.yd. excav.; 8207 ft. Sect. 3, 18 ft. wide, 16,413 sq.yd. pavement, 4745 cu.yd. excav.

Kane Co., 3 mi. Sect. L-15d, 18 ft. wide; 5½ mi. Sect. 4, 18 ft. wide; 4½ mi. Sect. 5, 18 ft. wide; Kane and DeKalb Co., 22,591 ft. Sect. 6, 18 ft. wide, 45,183 sq.yd. pavement, 11,650 cu.yd. excav.

DeKalb Co., 25,083 ft. Sect. 7, 18 ft. wide, 50,166 sq.yd. pavement, 11,540 cu-yd. excav.; 14,400 ft. Sect. G, 16 ft. wide, 25,600 sq.yd. pavement, 6144 cu.yd. excav.; 83,052 ft. Sect. 8, 16 ft. wide, 14,848 sq.yd. pavement, 26,020 cu.yd. excav.; 5337 ft. Sect. 18, 6 ft. wide, 3558 sq.yd. pavement, 650 cu.yd. excav.; De Kalb-Ogle Co., 29,300 ft. Sect 9, 16 ft. wide, 52,089 sq.yd. pavement, 22,765 cu.yd. excav.

Ogle Co., 2 mi. Sect. E-15d, 16 ft. wide.

Lee Co., 14,750 ft. Sect. 12, 16 ft. wide, 26,222 sq.yd. pavement, 11,527 cu.yd. excav.; 34,362 ft. Sect. 14, 16 ft. wide, 61,088 sq.yd. pavement, 20,195 cu.yd. excav.; 14,719 ft. Sect. H-15d, 16 ft. wide, 26,167 sq.yd. pavement, 9350 cu.yd. excav.; 34,330 ft. Sect. 15, 16 and 18 ft. wide, 61,091 sq.yd. pavement, 24,420 cu.yd. excav.

Whiteside Co., 24,687 ft. Sect. 17, 16 ft. wide, 43,888 sq.yd. pavement, 16,042 cu.yd. excav.; 10,135 ft. Sect. H, 16 and 18 ft. wide, 18,426 sq.yd. pavement, 7925 cu.yd. excav.

Alternate bids will be received on Portland cement concrete, 3 and 4 in. monolithic brick, bituminous concrete with or without binder course (Spec. C1, C2, C3 or CT). Noted Mar. 27.

Wis., Beloit—Until Apr. 11, by Bd. Pub. Wks., for 72,000 sq.yd. paving, 51,500 lin. ft. curb and gutter and 30,000 cu.yd., excav.; either 4 in. vitr. brick, 3 in. vertical fiber brick, sheet asphalt, asphaltic concrete, reinforced 1 course concrete or plain 1 course concrete pavement. Separate bids will be received on following size jobs: 1000 to 9999 sq.yd., 10,000 to 24,999 sq.yd., and over 25,000 sq.yd. G. E. Heebuik, chn.

Wis., Dodgeville—Until Apr. 11, by E. J. Perkins, comr. Iowa Co., building road from Lake to River Rd., Project No. 34, involving 11,267 cu.yd. earth excav., 190 cu.yd. excav. borrow, 237 cu.yd. Class A concrete, 6.2 cu.yd. concrete catch basins, 41,557 sq.yd. concrete surfacing and 1816 lin.ft. 15 in. sewer pipe.

Wis., Racine—Until Apr. 9, by Racine Co. Highway Comn., building 3 mi. 12th St. Rd., 16 ft. wide. C. R. Weymouth, Stephensen Bldg., Milwaukee, engr. Noted Jan. 9.

Ia., Logan—Until Apr. 8, by city, building 60,000 sq.yd. concrete or monolithic brick pavement, 40,000 lin.ft. concrete curb and gutter and storm sewerage system. C. L. Huff, city engr. Former bids rejected. Noted Mar. 6.

Ia., Sanborn—Until Apr. 7, by Town Council, paving and curbing 56 blocks with concrete, brick, asphaltic concrete or bitulithic pavement, involving 70,000 sq.yd. paving and 39,000 ft. curbing. J. C. Kerrigan, Primgahar, city engr.

Minn., Fergus Falls—Until Apr. 15, by W. Lincoln, aud. Otter Tail Co. building 19.5 mi. Federal Aid Project No. 29, State Rd. No. 2, involving 153,675 cu.yd. eartn excav. and 12,315 lin.ft. guard rail.

Minn., Henderson—Until Apr. 8, by F. Hoppenstedt, Gaylord, aud. Sibley Co., grading 7.10 mi. road, Washington Lake and Green Isle Twps., Job No. 1802, involving 32,480 cu.yd. excav., 93,797 cu.yd. overhaul, 446 lin.ft. portable culverts; 2.10 mi. road in Dryden Twp. Job No. 1803, 8173 cu.yd. excav., and 11,761 cu.yd. overhaul; 2.6 mi. road in Henderson and Hessenland Twps., Job. No. 1903, 26,072 cu.yd. excav., and 12,376 cu.yd. overhaul.

Minn., Redwood Falls—Until Apr. 11, by Comrs. Redwood Co., grading and surfacing State Rd. No. 10, Jobs. Nos. 1702 A and 1702 B, involving 6199 cu.yd. excav. on A and 25,948 cu.yd. on B; State Rds. Nos. 13 and 14, 2 mi. Job No. 1901, involving 8831 cu.yd. excav., 5½ mi. Job No. 1902, 33,640 cu.yd. excav. H. Myron, Redwood Falls, engr.

Minn., Sleepy Eye—Until Apr. 12, by town, building 5½ mi. road and culverts in Home Twp. W. Dey, town clk. Noted Oct. 24.

Minn., Stillwater—Until Apr. 8, by M. A. Nelson, aud. Washington Co., building Job No. 1902, State Rd. No. 6, involving 21 acres clearing, 0.7 acres grubbing, 35,793 cu.yd. earth excav., 600 lin.ft. guard rail, 103 cu.yd. concrete retaining wall, furnishing and installing 13,000 lin.ft. 12-24 in. concrete culvert pipe, also hauling and loading 7954 cu.yd. gravel surfacing material, etc.

Minn., Wabasha—Until Apr. 9, by G. J. Ginthner, aud. Wabasha Co. building 36 mi. Federal Aid Project No. 21, involving 84,141 cu.yd. earth and 1160 cu.yd. rock excav., also 3120 lin.ft. guard rail.

Wyo., Casper—Until Apr. 8 by city grading, draining and paving Dist. 7, asphaltic concrete, bitulithic, topeka mixture or concrete, cost, $20,000; also grading, draining, paving and curbing Dist. 16, sheet asphalt, asphaltic concrete or bitulithic mixture, $50,000. A. W. Wheeler, Casper, engr.

Arkansas—Until Apr. 17, by State Highway Dept., Little Rock, surfacing and building 55 mi. highway from Little Rock to Hot Springs, concrete or asphalt including culverts and bridges, involving 492,000 cu.yd. earth work, 74 acres clearing and grubbing, 110,000 cu.yd. loose rock, 14,000 cu.yd. solid rock, 4300 ft. 12-30 in. culverts, 1994 yd. concrete in culverts and bridges, etc.; advertised in this issue.

Ark., Walnut Ridge—Until Apr. 10, by Comrs. Rd. Impvt. Dist. No. 5, at office of State Highway Comn., Little Rock, building 9 mi. macadam road, Lawrence Co., involving 115 cu.yd. concrete in drainage structures, 5200 cu.yd. grading and 15,432 tons rock. Pritchett & Hight, Walnut Ridge, engrs. Noted Jan. 9.

Okla., Tulsa—Until Apr. 21, by Comrs. Tulsa Co., grading and paving various roads as follows: Miles 1 to 6 inclusive, of Sect. "H"; Miles 1 to 7 inclusive, Sect. "D"; Miles 1 to 2 inclusive, Sect. "A"; Miles 2 to 5 inclusive, Sect. "K"; Miles 1 to 5 inclusive, Sect. "L"; Miles 1 to 5 inclusive, Sect. "N"; Miles 1 to 8 inclusive, Sect. "Q"; Miles 1 to 5 inclusive, Sect. "R"; and Miles 1 to 4 inclusive, Sect. "S." L. Cline, co. clk.

New Mexico—Until Apr. 24, by State Highway Comn., Santa Fe, for Federal Aid road, projects in Colfax Co. from Raton north to Colorado State line; Santa Fe Co. from Santa Fe south to Pankeys gate; Chaves Co. through Mescalero sands and from Roswell to Comanche Springs, about 45 mi. in all.

Wash., Everett—Until Apr. 14, by Comrs. Snohomish Co., surface grading and paving 3 mi. Bond Project No. 30, 16 ft. wide, concrete 5 and 7 in. thick. About $60,000.

Wash., Goldendale—Until Apr. 18, by R. E. Brook, clk. bd. Klickitat Co., Comrs., improving Goldendale-Maryhill Rd.

Wash., Kent—Until Apr. 21, by city, curbing 1 mi. and paving 4 mi. 1st, 2nd, 3rd, 4th and 5th Aves., 20 ft. wide, concrete on 6½ in. concrete base. B. M. McHugh, city engr.

Wash., South Bend—Until Apr. 11, by Comrs. Pacific Co., for concrete paving on Natl. Highway as follows: 1.8 mi. from Nalpee to Stauffers bridge, 9 ft. wide, 2.35 mi. from Stauffers to Lillys bridge, 9 ft. wide, 1.76 mi. from Menlo to Gisseys Crossing, 9 and 18 ft. wide, 1.5 mi. from Raymond city limits to East Raymond, 9 ft. wide. H. A. Gibbs, co. engr.

Wash., Waterville—Until Apr. 8, by Comrs. Douglas Co., grading, draining and graveling 6½ mi. permanent Highway No. 8, 20 ft. wide. Work involves 6735 cu.yd. earth excav., 12,694 cu.yd. gravel, 316 ft. 12-24 in. concrete pipe, etc. Noted Feb. 20.

Ore., Portland—Until Apr. 7, by Comrs. Multnomah Co., improving East 17th St. from Naholem St. to Ochoco Aves., Pacific Highway, Sects. A and B, from macadam road intersection to southerly boundary of Multnomah Co., macadam road from Dakota St. to southerly boundary of city, 92nd St. to points south and north of Foster Rd., cement concrete, 1 course, No. 1, cement concrete course No. 2, asphaltic concrete No. 1 and 2 on crushed stone base. R. W. Hoyd, chn. bd. comrs.

Que., Longueuil—Until Apr. 7, by town, paving with concrete St. Antoine and St. Charles Sts. and du Bord de l' Eau Rd. About $20,000. R. Bournet, secy.-treas.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Com. Boston, let contract grading and draining 17,200 ft. highway between Berkshire, Dalton and Windsor Twps., 18-24 ft. wide, to

Streets and Roads (Continued)

J. Ferguson, Dorchester, $107,666. Work involves 21,900 cu.yd. earth excav., 1000 cu.yd. rock excav., 14,600 cu.yd. stone filling, 335 cu.yd. Portland cement masonry and 7750 tons bituminous macadam on gravel base. Noted Mar. 20.

★**Mass., Boston**—Comrs. Pub. Wks. let contract paving East Newton St., to Bermudez Co., 246 1st St., Cambridge., $12,365. Work involves 4900 sq.yd. asphalt to be laid on present street surface and 2085 lin.ft. concrete curbing.

★**Mass., Brighton** (Boston P.O.)—City let contract paving Bellevista Rd., 40 and 50 ft. wide, to J. F. Lynch, 60 Harriett St., Brighton, $21,262. Work involves 3100 lin.ft. concrete curbing, 15,060 sq.ft. sidewalk, 3200 cu.yd. earth excav. and 4540 sq.yd. asphalt on 7 in. concrete base.

★**Conn., New Haven**—Bd. Pub. Wks. let contract paving (a) Henry St.; (b) Liberty St.; (c) Day St.; (d) Humphrey St., sheet asphalt; (e) Cottage St.; (f) Fillmore St.; (g) Pendleton St.; (h) Chatham St.; (i) Goffe St.; (j) Henry St.; (k) Winthrop Ave.; (l) Clinton Ave.; (m) Goffe St.; (n) Humphrey St., bituminous macadam; (o) Humphrey St., concrete; (p) Spring St.; (q) Union Ave., national pavement, to C. W. Blakeslee Co., 58 Waverly St., (a) $11,191; (b) $6568; (c) $4525; (d) $4950; (e) $8346; (f) $6363; (g) $9765; (h) $15,938; (i) $4986; (j) $14,241; (k) $6867; (l) $7391; (m) 2593; (n) $6812; (o) $11,771; Franklin Contg. Co., 52 Vanderbilt Ave., New York City, (p) $8558; (q) $25,290. Noted Mar. 20.

N. Y., Buffalo—Erie Co. received bids Mar. 18, building 3 mi. East Concord-Springville Rd., Concord Twp., waterbound macadam, from F. J. Mumm Contg. Co., 176 Best St., $37,700; Meyer & Meyer Corp., Depew, $38,282.

N. Y., Buffalo—Erie Co. received bids Mar. 25, building (1) 3.8 mi. Center St., 12 ft. wide, waterbound macadam, Golden Twp., (2) 2.8 mi. Rapids-Greiner Rd. waterbound macadam, Newstead and Clarence Twps., (3) 4.6 mi. Pontiac-Derby Rd., waterbound macadam, Evans Twp., (4) 1 mi. Delaware Ave., concrete pavement on one or both sides of street, Kenmore village, (5) 1 mi. Delaware Ave. Rd., Tonawanda Twp., (a) local stone top (b) slag top (c) imported stone top (d) one side (e) both sides, from E. J. Hessel, East Aurora, (1a) $49,160 (1b) $53,000; Rossney Contg. Corp., 37 Heath St., (1a) $53,900, (1b) $58,000, (3) $37,900, (4d) $30,000, (4e) $58,680; F. W. Knickenberg, 702 Michigan Ave., (1a) $59,300, (1b) $72,675, (4c) $26,500, (4e) $53,000, (5) $26,500; Meyer & Meyer Corp., Depew, (2b) $24,800, (2c) $24,800, (4d) $30,000, (4e) $60,000; Cold Spring Constr. Co., 458 Ellicott Sq., (2b) $22,000, (2c) $22,700; Harrison Eng. Corp., Ellicott Sq., (3) $39,600; F. J. Mumm Contg. Co., 176 Best St., (3) $41,700.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids Mar. 28, regulating, regrading and repaving roadway, granite block on concrete foundation, building sewers, inlets and basins, in Park Ave. and East 41st St., from Burnside Contg. Co., 270 Burnside Ave., $35,845; Asphalt Constr. Co., 2197 Madison Ave., $37,082; O'Rourke Contg. Co., 150 Nassau St., $37,562. Noted Mar. 20.

N. Y., New York—H. Bruckner, pres. Bronx Boro., received bids Mar. 27, building transverse road, regulating, grading, regrading, etc., paving and repaving East 161st St., Grant, Sherman and Walton Aves., granite blocks and sheet asphalt on concrete foundation, from F. Schneider, Westchester Ave. and Bronx River Rd., $638,327; Terry & Tench, Grand Central Terminal, $665,600; P. T. Cox, 154 Nassau St., $695,484. Noted Mar. 13.

N. J., North Bergen—City received bid repairing 23rd St. from Hudson Blvd. to New Durham Ave. with asphalt block, from Curtin Bros., 45 Madison St., Guttenberg, $17,000. Noted Jan. 9.

N. J., North Bergen—Town received bid improving Liberty Rd., Jefferson, Ferry, Lincoln and River Sts., with belgian block, blue stone curb, from J. Devilin Contg. Co., 114 West 27th St., Guttenberg, $30,000. Noted Mar. 20.

★**Pennsylvania**—State Highway Comn., Harrisburg, let contracts building roads as follows: (a) Adams Co.; (b) Berks Co.; (c) Clinton Co.; (d) Delaware Co.; (e) Elk Co.; (f) Erie Co.; (f1) Springfield Twp.; (f2) Harbor Creek and Northeast Twps.; (f3) Fairview and Girard Twps.; (g) Fayette Co.; (h) Greene Co.; (i) Lancaster Co.; (j) Lawrence Co.; (k) Lehigh Co.; (l) Monroe Co.; (m) Tioga Co.; (n) Warren Co., to M. Bennett & Sons, Indiana, (a) $182,230; Eastern Paving Co., Colonial Trust Bldg., Phila., (b) $53,809; (d) $69,538; Bush & Stewart, Trust Bldg., Williamsport, (c) $113,463; Foundation Co., 233 Bway., New York City, (e) $53,685; (i) $141,627; Highway Constr. Co., Erie, (f1) $54,003; (f3) $99,213; Griff Constr. Co., Erie, (f2) $162,594; Reagan & Lynch, Uniontown, (g) $242,841; Concrete Oil Tank Co., Pittsburgh, (h) $325,490; Souder Constr. Co., 214 East Orange St., Lancaster, (i) $40,483; Burns Bros., 525 South Mill St., New Castle, (j) $38,801; Blaisdell Contg. & Engr. Corp., 238 Spencer St., Brooklyn, N. Y., (k) $240,102; R. J. Delong, Williamsport, (m) $72,816; R. T. Beck, Warren, (n) $203,806. Noted Mar. 27.

Pennsylvania—State Highway Comn., Capitol, Harrisburg, received bids Mar. 28 building roads as follows: (a) Armstrong Co., (b) Berks Co., (c) Bradford Co., (d) Cambria Co., (e) Center Co., (f) Clinton Co., (g) Crawford Co., (b) Elk Co., (i) Erie Co., (j) Franklin Co., (k) McKean Co., (l) Mercer Co., (m) Northampton Co., (n) Potter Co., (o) Warren Co., from Freilino Bros., Leechburg, (a) $191,231; L. H. Hileman Constr. Co., 217 First Natl. Bank Bldg., New Kensington, (a) $197,657; State Constr. Co., 2nd Ave. and 5th St., New Kensington, (a) $201,893; Neumeyer Bros., 1416 East 4th St., South Bethlehem, (b) $96,905; G. Nordinger, E. P. Wilbur Trust Co. Bldg., Bethlehem, (b) $86,766; Hamilton Kapnek Constr. Co., 1365 Ridge Ave., Chicago, Ill., (b) $95,437; Foundation Co., 233 Bway., New York City, (c) $305,527, (h) $266,353; H. G. Schroeder, 416 Mercantile Bldg., Rochester, N. Y., (c) $357,435; Warren Moore & Co., Colonial Trust Bldg., Phila., (c) $297,616; Thermic Coal & Supply Co., Holidaysburg, (d) $70,136; Bd. Supervs. Wilmore, R. D. No. 2 Croyle Twp., Cambria Co., S. Haddon, secy., (d) $54,843; Vipond Constr. Co., 2222 Beale Ave., Altoona, (d) $67,129; G. I. Thompson & Co., Borough Bldg., Clearfield, (e) $13,931; Gifford & Pritchard, Philipsburg, (e) $12,891; Miller Constr. Co., P. O. Box 33, Punxsutawney, (f) $108,746, (h) $249,176; Snyder-Phillips Co., 273 Mt. Pleasant Ave., Phila., (f) $110,995; Burgess & Dorrier, Scottsville, Va., (f) $113,901; Baldwin & Welcomer, Union City, (g) $114,759; Keystone Constr. Co., 131 Mead Ave., Meadville, (g) $116,997; Lynch Constr. Co., 403 Pennsylvania Bldg., Phila., (h) $275,248; Mayer-Blair Constr. Co., 312 Commerce Bldg., Erie, (i) $152,478; (k) $21,618; J. McCormick & Son, 645 West 10th St., Erie, (i) $149,467; J. J. Doyle, trading as J. and M. Doyle, 457 West Third St., Erie, (i) $150,482; D. C. McAleer Constr. Co., 402 Builders Exch., Baltimore, Md., (j) $199,092; Souder Constr. Co., 26 East King St., Lancaster; (j) $186,528; Consolidated Eng. Co., 243 Calvert Bldg., Baltimore, Md., (j) $208,275; P. F. Connolly, Koppel, (k) $20,785; E. M. Love & Son, Corry, (k) $20,787; J. McCormick & Bro., 1009 Poplar St., Erie (l) $160,557; Brackenridge Sand & Gravel Co., Brackenridge, (l) $154,791; Faber Eng. & Constr. Co., 1012 Bessemer Bldg., Pittsburgh, (l) $157,991; Smith McCormick & Co., Inc., and McInerney & McNeal, Inc., Northampton Natl. Bank Bldg., Easton, (m) $327,470; McArthur Bros. Co., 120 Bway., New York City, (m) $318,500; E. B. Arbogast, 16 North 7th St., Stroudsburg, (m) $327,326; Horn & Devling, Galeton, (n) $99,401; Tyne & Willey, 407 Savings Bank Bldg., Binghamton, (n) $99,062; M. Dolan, 35 Fairmount Ave., Jamestown, N. Y., (o) $70,612. Noted Mar. 6.

★**Pa., Dravosburg**—Boro. and Comrs. Allegheny Co., (Pittsburgh), let contract grading, paving and curbing 2250 ft. Richland Ave., 20 ft. wide, to T. Cronin, 17th and Muriel Sts. About $43,692. Work involves 5200 sq.yd. vitr. brick on 6 in. concrete base, 4400 lin.ft. plain concreted curbing, 12,500 cu.yd. earth excav., 300 ft. 15-18 in. pipe and 500 ft. 4 in. tile drain. Noted Mar. 6.

Pa., Stony Creek (Johnstown P.O.)—A. C. Roberts, twp. secy., received lowest bid building 6000 ft. Solomon Run Rd., vitr. fire clay brick on concrete foundation, 18 ft. wide, involving 5000 yd. grading and 1500 ft. guard fence, from E. A. James; about $52,800. Noted Mar. 20.

★**Delaware**—State Highway Dept., Dover, let contract completing Shellpot Park Rd. or Phila. Pike, to Suburban Eng. & Contg. Co., Wilmington, $75,561. Noted Mar. 6.

★**Va., Louisa**—Louisa Co. let contract building 2.52 mi. Bibbs Store Rd., 20 ft. wide, between here and Forks, and 1.72 mi. Kents Store Rd., 20 ft. wide, between here and Bells Cross Rd., to L. J. Chandler, Virgilina, $9474 and $7370 respectively.

★**Va., Portsmouth**—Norfolk Co. let contract building 2 mi. concrete road, 5 in. at side, 7 in. in center, from Ocean View to Willoughby Spit, to A. Coster, 302 Arcade Bldg., Norfolk, $2.09 per sq. yd. Noted Feb. 20.

★**W. Va., Parsons**—Tucker Co. let contract grading ½ mi. road from Parsons to Hendricks, involving 9000 cu.yd. earth excav. and 5000 cu.yd. rock excav., to J. B. Funkhouser, Hambleton, $15,300.

★**N. C., Durham**—Comrs. Durham Co. let contract building 6 mi. Roxboro Rd., bitulithic on old macadam base, to R. G. Lassiter, Oxford. About $60,000.

★**N. C., Greensboro**—City let contract grading, paving and curbing North Mendenhall St., to R. G. Lassiter, Oxford, $22,000. Work involves 7083 sq.yd. asphalt, 5100 lin.ft. concrete curbing and 12,000 cu.yd. earth excav.

★**Ala., Sheffield**—City let contract paving various streets to Foy-Proctor Co., Ind. Bldg., Nashville, Tenn., $210,000.

★**Miss., Yazoo**—Comrs. Yazoo Co., let contract grading draining and graveling 24 mi. road in Beat 1, to Phillips, Nixon & Phillips, Muscle Shoals, Ala.; cost $61,645. Noted Mar. 6.

★**La., Shreveport**—City will pave various streets, involving 140,000 sq.yd. asphaltic concrete. Work will be done by day labor. Noted Mar. 20

Ohio—State Highway Comm., Columbus, received low bids Mar. 28, building roads as follows:

Columbiana Co., Sect. "Q," Cleveland-East Liverpool Rd., grading, building bridges and culverts and paving with concrete, from Campbell Bros. Co., Stambaugh Bldg., Youngstown, $35,.935; J. C. Devine Co., Alliance, $36,484; McLane & Hepburn, Lisbon, $36,584.

Gallia Co., Sect. "H," Ohio River Rd., grading, building bridges and culverts and paving with waterbound macadam, J. A. Jones, Gallapolis, $19,676; R. Wolfe, Gallapolis, $19,998.

Greene Co., Sect. "K," Columbus-Cincinnati Rd., grading, building bridges and culverts and paving with waterbound macadam, Koffroth, Casey & Mansberger, Richwood, $34,935; Wilson Eng. Co., Xenia, $35,979; C. L. Biggs, Findlay, $36,229.

Guernsey Co., Sect. "S," Steubenville-Cambridge Rd., grading, building bridges and culverts and paving with waterbound macadam, S. W. Wrightsel & Son, Logan, $30,680.

Hancock Co., Sect. "G," Findlay-Kenton Rd., grading, building bridges and culverts and paving with asphaltic concrete, Johnston Const. Co., 418 South Clinton St., Chicago, $56,975.

Holmes Co., Sect. "B-1," Millersburg-Wooster Rd., grading, building bridges and culverts and paving with concrete, W. M. Gray, Bowling Green, $76,231.

Knox Co., Sect. "M," Columbus-Wooster Rd., grading, building bridges and culverts and paving with concrete, E. W. Conley, Eaton, $163,690; H. P. Streicher & Co., 319 Terminal Bldg., Toledo, $164,314.

Montgomery Co., Sect. "O-1," Cincinnati-Dayton Rd., grading, building bridges and culverts and paving, Bigler Bros., Middletown, rein.-con., $58,141; York & Studebaker, Greenville, $58,664; Williams & Little Co., Cleveland, $58,684; S. M. Billiter, Covington, Ky., bituminous macadam, $52,663, and $54,476; Renick & Smith, Findlay, $53,338.58 and $55,200; J. Wroe, Dayton, $53,338.58, and $55,200; rock asphalt, $57,012; J. C. McCann, Columbus, $55,200; rock asphalt, E. C. Roudebaugh, Logan, $49,924.

Montgomery Co., Sect. "O-2," Dayton-Cincinnati Rd., grading, building bridges and culverts and paving, A. L. Teegarden, Union City, Ind., rein.-con., $44,846.75; Bigler Bros., Middletown, $46,560; Williams & Little Co., Cleveland, both, $46,560; bituminous macadam, S. M. Billiter, Covington, Ky., $45,673.95, and $46,941; Highway Constr. Co., rock asphalt, Elyria, $45,777 and $45,893; J. Wroe, Dayton, $46,181, and $47,448; J. C. McCann, Columbus, Renick & Smith-Findlay $46,181 and 47,448, rock asphalt, $48,335; E. C. Roudebaugh, Logan, $47,448, rock asphalt, $48,841.

Muskingun Co., Sect. "L-2," Zanesville-Cincinnati Rd., grading, building bridges and culverts and paving with tarbound macadam, Adams Bros., Zanesville, $16,478.

Wayne Co., Sect. "E," Cleveland-Wooster Rd., grading, building bridges and culverts and paving, Lee, Griggs & Anderson, Millersburg, concrete, $137,958; monolithic brick, $143,825, bituminous macadam, $141,075.

Wayne Co., Sect. "A," Ashland-Wooster Rd., grading, building bridges and culverts and paving with monolithic brick, W. S. Newhall Co., Citizens Bldg., Cleveland.

Streets and Roads (Continued)

Wayne Co., Sect. "M-1," Mansfield-Wooster Rd., grading, building bridges and culverts and paving, H. S. Scott, Ashland, concrete, $33,025.62; D. A. Phillips & Son, Ashland, monolithic brick, $33,301. Noted Mar. 20.

★O., Akron—City let contract paving 1700 ft. Firestone Blvd., Firestone Park, 32 ft. wide, to McAlonan Bros., 197 West Buchtel Ave., $27,000. Work involves 7120 sq.yd. vitr. brick on 6 in. semi-monolithic base, 3400 lin.ft. granite curbing and 2800 cu.yd. earth excav.

O., Cleveland—City received bids paving (a) Aetna Rd. from East 103rd St. 516 ft. west, involving 910 cu.yd. excav., 15,116 sq.ft. 4 in. brick on 6 in. concrete foundation, 1120 ft. 5 in. stone curbing, etc.;

(b) East 102nd St. from Empire to Kempton Ave., 1030 cu.yd. excav., 21,400 sq.ft. 5 in. brick on 6 in. concrete foundation, 1090 ft. 5 in. stone curb, etc.;

(c) Eliot Ave. from East 102nd to East 104th Sts., 600 cu.yd. excav., 17,560 sq.ft. 4 in. brick on 6 in. concrete foundation, 1425 ft. 5 in. stone curb, etc.;

(d) Denison Ave. from West 14th to West 25th Sts., 3300 cu.yd. excav., 65,568 sq.ft. 5 in. brick on 6 in. concrete foundation, 1600 ft. 5 in. stone curb;

(e) East 143rd St. from Sylvia to Westropp Aves., 1130 cu.yd. excav., 14,400 sq.ft. 4 in. brick on 6 in. concrete foundation, 1240 ft. 5 in. stone curb, etc.;

(f) Woodside Ave. from Eddy Rd. to easterly end, 2300 cu.yd. excav., 46,500 sq.ft. 4 in. brick on 6 in. concrete foundation, 3490 ft. 5 in. stone curb, etc.;

(g) East 125th St. from Phillips to Castlewood Aves., 1135 cu.yd. excav., 17,050 sq.ft. 4 in. brick on 6 in. concrete foundation, 1110 ft. 5 in. curb, etc.;

(h) East 104th St. from Union to Aetna Rds., 1660 cu.yd. excav., 38,815 sq.ft. 4 in. brick on 6 in. concrete foundation, 3115 ft. 5 in. stone curb, etc.;

(i) East 103rd St. from Union to Eliot Ave., 1060 cu.yd. excav., 27,490 sq.ft. 4 in. brick on 6 in. concrete foundation, 2170 ft. 5 in. stone curb, etc.;

(j) East 103rd St. from Union to Aetna Rds., 2280 cu.yd. excav., 42,440 sq.ft. 4 in. brick on 6 in. concrete foundation, 3045 ft. 5 in. stone curb, etc.;

(k) Roehl Ave. from Fulton Rd. to West 33rd St., 550 cu.yd. excav., 15,390 sq.ft. 5 in. brick on 6 in. concrete foundation, 1274 ft. 5 in. stone curb, etc.;

(l) West 91st St. from Denison to Maywood Ave., 2600 cu.yd. excav., 54,746 sq.yd. 4 in. brick on 6 in. concrete foundation, 4460 ft. 5 in. stone curb, etc.;

(m) West 90th St. from Denison to Maywood Aves., 2900 cu.yd. excav., 52,845 sq.ft. 4 in. brick on 6 in. concrete foundation, 4330 ft. 5 in. stone curb, etc.;

(n) Poe Ave. from West 39th St. to Fulton Rd., 1010 cu.yd. excav., 20,350 sq.ft. 4 in. brick on 6 in. concrete foundation, 1655 ft. 5 in. stone curb, etc.;

(o) East 143rd St. from Westropp Ave. to Lake Shore Blvd., 2200 cu.yd. excav., 24,530 sq.ft. 4 in. brick on 6 in. concrete foundation, 1750 ft. 5 in. stone curb, etc.;

(p) East 102nd St. from St. Clair to Folk Aves., 370 cu.yd. excav., 13,020 sq.ft. brick, 1060 ft. 5 in. stone curb, etc.;

(q) East 102nd St. from Kempton to Adams Aves., 190 cu.yd. excav., 3550 sq.ft. 5 in. brick on 6 in. concrete foundation, 475 ft. 5 in. stone curb, etc.;

(r) East 102nd St. from Empire to Yale Aves., 160 cu.yd. excav., 3000 sq.ft. 5 in. brick on 6 in. concrete foundation, 400 ft. 5 in. stone curb, etc., from

Enterprise Paving Co., 4836 Bway., (a) $10,174; (c) $11,620; (d) $51,979; (i) $17,934; (j) $27,315; (l) $33,929.

Baldwin Bros., 226 Avenue Bldg., (a) $10,419; (b) $13,986; (c) $11,670; (d) $51,979; (e) $10,243; (f) $29,803; (g) $11,362; (h) $25,361; (j) $27,369; (k) $9559; (m) $34,091; (n) $12,659; (o) $17,603; (p) $6369; (q) $2842; (r) $1939.

Rieley Bros., 357 Arcade, (a) $10,523; (b) $13,935; (k) $9837; (n) $13,089; (p) $6277; (q) $2800; (r) $1926.

McHugh Bros., 527 Society for Savings Bldg., (a) $14,005; (f) $29,518; (l) $33,817; (m) $33,171; (p) $6387; (q) $2731.

A. M. Pepa, 527 Society for Savings Bldg., (c) $11,537; (h) $252,118; (i) $17,792; (j) $27,403.

Roehl Bros., West 25th St. and St. Claire Ave., (d) $51,686; (k) $9210; (l) $33,596; (m) $32,939; (n) $12,444.

Gould & Maybach, 823 East 150th St., (e) $10,147; (g) $11,373; (o) $17,415.

Bentley Bros., 403 Electric Bldg., (e) $10,456; (f) $30,110; (o) $17,961.

G. B. Hening & Co., 527 Society for Savings Bldg., (g) $11,261.

R. P. Burnett, 527 Society for Savings Bldg., (h) $25,268; (i) $17,780.

Cleveland Trinidad Co., 3409 Trumbull Ave., (r) $1839.

★O., Euclid—City let contract building sidewalks on Lake Shore Blvd., to F. B. Stein, Euclid, $21,088. Work involves 3500 cu.yd. earth excav., 95,000 sq.ft. 2½ x 6 in. stone, 95,000 sq.ft. 3 x 6 in. stone and 95,000 sq.ft. 2½ in. concrete.

★O., Steubenville—City let contract paving 5th St. from Franklin Ave. to the "Dump" vitr. brick and creosoted wood block, to H. M. Bates, Steubenville, $80,704. Noted Mar. 6.

O., Toledo—Lucas Co. received bids building 1.63 mi. Stickney Ave., 14 ft. wide, involving 12,380 sq.yd. waterbound macadam and 4407 cu.yd earth excav., from Vollmayer & McMahon, 412 Erie St., $22,436; Zeller Bros., Maumee, $22,577; A. M. Doan, 437 Spitzer Bldg., $22,660; 3.2 mi. Grace Rd., 10 ft. wide, involving 19,000 sq.yd. waterbound macadam and 12,000 cu.yd. earth excav., from J. E. Coon, Swanton, $33,270; A. Langdenderfer, 437 Spitzer Bldg., $33,282; 2 mi. Sylvania Ave., 16 ft. wide, involving 19,500 sq.yd. 1-1½-3 concrete, and 6500 cu.yd. earth excav., from R. A. Garrigan, 434 Valentine Bldg., $45,993; 1.2 mi. Upton Ave., 16 ft. wide, involving 12,000 sq.yd. 1-1½-3 concrete and 11,000 cu.yd. earth excav., from Warner & McKechnie, 320 Nasby Bldg., $34,327; P. H. Watters, 531 Lincoln Ave., $34,805; E. N. Oberle, Grand Rapids, $34,833; 1500 ft. Central Grove Ave., 27 ft. wide, involving 4820 sq.yd. vitr. brick, 4290 sq.yd. bituminous concrete, 3122 lin.ft. stone curbing and 3706 cu.yd. earth excav., from Harris & Tansey, 221 Nasby Bldg., $21,851, brick; Peters Bros. Co., 237 Marion St., $22,496, brick; H. P. Streicher Co., 319 Terminal Bldg., $20,091, asphaltic concrete; 1 mi. Jackman Rd., 16 ft. wide, involving 446 sq.yd. vitr. brick, 9675 sq.yd. 1-1½-3 concrete and 9340 cu.yd. earth excav., from Peters Bros. Co., 237 Marion Bldg., $34,288; Russell & Jennison, 2463 Bway, $34,517; 3.56 mi. Dorr St. from Reynold Rd. to city limits, 18 ft. wide, involving 39,360 sq.yd. 1-1½-3 concrete and 7000 cu.yd. earth excav., from T. P. Garrigan, 434 Valentine Bldg., $96,602. C. L. Rood, Court House Bldg., engr.

★Michigan—State Highway Dept., Lansing, let contract extending 10,072 mi. Sheridan Ave. Class B gravel in Saginaw, to W. S. Hinkley, Flushing, $102,198; 3.576 mi. Class B gravel road, Woodbridge and Camden Twps., Hillsdale Co., to Bishop & Rowlson, Hillsdale, $37,797; 11.659 mi. Class B gravel road 15 ft. wide from Saginaw end of Midland Rd., to Midland Constr. Co., Midland, $174,905; 4.335 mi. Class F concrete road in vicinity of village of Farmington, Oakland Co., to R. D. Baker & Co., 1454-56 Penobscot Bldg., Detroit, $175,710.

Mich., Detroit—Dept. Pub. Wks. received bids paving and grading with 1 course concrete, alley, (a) No. 967; (b) No. 968; (c) No. 969; (d) No. 970; (e) No. 971; (f) No. 972; (g) No. 973; (h) No. 974; (i) No. 975; (j) No. 976; (k) No. 977; (l) No. 978; from T. E. Currie, 20 McGraw Bldg., (a) $6139.

Otis Cement Constr. Co., 806 Hammond Bldg., (a) $6646; (b) $5802; (c) $4990; (d) $3292; (l) $3150.

R. J. Powelson & Co., 1577 Iroquois Ave., (a) $6764; (b) $5440; (c) $4923; (d) $3347; (f) $1729; (h) $5050; (i) $4662; (l) $3194.

R. Porath, 1131 McKinley Ave., (b) $5752; (d) $3347.

Lennane & McIlvenna, Union Trust Bldg., (c) $4855; (e) $2192; (j) $3827; (k) $2760.

Liberty Constr. Co., Penobscot Bldg., (e) $2282; (f) $1740; (i) $4581; (k) $2860.

Oakwood Constr. Co., Ford St. and Wabash R. R., (e) $2202; (f) $1687; (g) $1172; (j) $3767; (k) $2847.

Talbot Co., 400 Penobscot Bldg., (g) $1139; (h) $4964.

E. Meredith, 145 Harper Ave., (g) $1777; (h) $5073; (i) $4625.

Delisle & Boston Cement Constr. Co., 819 Free Press Bldg., (j) $3830. Noted Mar. 20.

★Mich., Detroit—Dept. Pub. Wks. let contracts paving with asphaltic concrete on 6 in. concrete base, Berea or Amherst curbing, (a) Sheridan Ave., (b) Charlevoix Ave., (c) Beals Ave., (d) Newport Ave., (e) Canfield Ave., (f) Linden St., (g) Barker St., (h) Crane Ave., (i) Roby St., (j) Davison Ave., to Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $54,269; (b) $26,522; (c) $20,708; (d) $12,572; (e) $8294; (f) $7873; (g) $6262; W. B. Brady Constr. Co., 1972 Grand River Ave., (h) $25,420; (i) $4068; Cleveland Trinidad Paving Co., 2940 Woodward Ave., (j) $15,376. Noted Mar. 27.

★Mich., Port Huron—City let contract building sidewalks and cross walks for season Apr. 1, 1919, to Apr. 1, 1920, to Pethke Bros., Port Huron, sidewalks at 17c. per sq.ft.; crosswalk approach 17c. per sq.ft., crosswalk roadbed 18c. per sq.ft.; extra fill $1.00 per cu.yd. and crosswalk drains $1.00 each.

Mich., Port Huron—Comrs. Pub. Wks. received bids paving (a) 8180 sq.yd. Lapeer Ave., from 16th to 24th Sts., 28 ft. wide, involving 5200 lin.ft. curbing, 4000 cu.yd. excav., 5200 lin.ft. side drain, 680 yd. sand or cinder fill; (b) 8330 sq.yd. 22nd St. from Griswold to Railroad Sts., 28 ft. wide, involving 4165 cu.yd. excav., 1000 ft. 8 in. sewer, 2700 ft. side drain, 5400 ft. new curbing, 4 manholes, 15 catchbasins, 2 old manholes to grade, 6 catchbasins to reset; (c) 47,120 sq.yd. 10th St. from Military to Water Sts. and 10th Ave. from River St. to Pine Grove Ave., 30 ft. wide, involving 24,000 cu.yd. excav., 7000 yd. filling, 300 ft. 8 in. sewer, 9000 ft. side drain, 400 ft. new curb, 1000 ft. old curb to reset, 4 manholes, 30 catchbasins, 10 old catchbasins to be moved; from J. H. Baker & Sons, Port Huron, (a1) $22,831; (a2) $33,479; (b1) $24,454; (b2) $36,827; (c1) $110,829; (c2), $170,448; O'Sullivan & O'Hara, Port Huron, (a1) $32,882; (a2) $48,013; (b1) $33,872; (b2) $51,148; (c1) $146,988; (c2) $237,039; A. J. Smith Constr. Co., Campau Bldg., Detroit, (a1) $45,739; (b1) $44,,299; (c1) $192,,744; (c2) $272,848.

★Mich., Port Huron—Comrs. St. Clair Co. let contracts paving 11.75 mi. concrete road, 18 ft. wide, from Marine City to south line of county, to Worswick Bros., 410 Hodges Bldg., Detroit, $305,000; 11 mi. from St. Clair to Muttonville, to A. J. Smith Constr. Co., Campau Bldg., Detroit, $335,000.

★Mich., Saginaw—Comrs. Saginaw Co. let contracts paving 6.7 mi. gravel road, 12 ft. wide, in Lakefield and Marion Twps., to Bennett, McEwen & Crane, Brant, $89,000; 4 mi. gravel road, 12 ft. wide in Brant and Brady Twps., to Bacon & Bacon, Brady, $36,447.

★Ill., Belleville—Bd. Supervs. St. Clair Co. let contract for earth grading and building culverts on road from Belleville south to Hecker, Sect. N-15d, and from Belleville to Millstaft, Sect. M. Route 21, to Tritt Bros., Belleville, $35,000 and $16,000 respectively. Noted Mar. 13.

★Ill., Rockford—Winnebago Co. let contract building 29,416 ft. Grant Highway, Sect. H-15d., 18 ft. wide; and 2369 ft. Sect. K, 18 ft. wide, to R. P. Beckstrom, 208 Trust Bldg. About $85,102 and $7131 respectively. Noted Mar. 13.

★Wis., Kenosha—City let contract, to C. Peterson, Kenosha, paving, curbing and guttering Durkee Ave., involving 2700 sq.yd. concrete at $2.35 per sq.yd., 950 lin.ft. curbing and guttering, $0.68 per lin.ft.; Julius St., 1967 sq. yd. vitr. vertical fibre brick, $2.66 per sq.yd., 590 lin.ft. curbing and guttering, $0.68 per lin.ft.; South Howland Ave., 12,635 sq.yd. vertical fibre brick on 5 in. concrete base, $2.62 per sq. yd., 3900 lin.ft. curbing and guttering, $0.68 per lin. ft.; Charles St., 3960 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq. yd., 1500 lin.ft. curbing and guttering, $0.68 per lin. ft.; Middle St., 12,000 sq.yd. vertical fibre brick on 5 in. concrete base, $2.62 per sq.yd., 3000 lin.ft. curbing and guttering, $0.68 per lin.ft.; South Sheridan Rd., 7200 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq.yd., 1670 lin.ft. curbing and guttering, $0.68 per lin.ft.; North Fremont Ave., 3456 sq.yd. vertical fibre brick on 5 in. concrete base, $2.67 per sq.yd., 972 lin.ft. curbing and guttering, $0.68 per lin.ft.; Wisconsin St., 4800 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq. yd., 1350 lin.ft. curbing and guttering, $0.68 per lin.ft.; Park Ave., 550 sq.yd. vertical fibre brick on 5 in. concrete base, $2.66 per sq. yd., 150 lin.ft. curbing and guttering, $0.68 per lin.ft.; North Newell St., 5600 sq.yd. vertical fibre brick on 5 in. concrete base, $2.63 per sq.yd., 1500 lin.ft. curbing and guttering, $0.68 per lin. ft.; South Newell St., 2820 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq.yd., 770 lin.ft. curbing and guttering, $0.68 per lin.ft.; Western Impvt. Co., 9th St., Racine, Howe and Division Sts., North Howland Ave. and Park Row, 15,858 sq.yd. sheet asphalt (type A) on 5 in. concrete base, $2.38 per sq.yd., 5090 lin.ft. curbing and guttering, $0.73 per lin.ft. Noted Feb. 20.

★Minn., St. Cloud—Comrs. Stearns Co. let contract building 20 mi. Federal Aid Project No. 25, State Rd. Nos. 1 and 12 as follows: Grading to H. Thursdale & Co., Bemidji, $43,000; surfacing, to Joy Bros., St. Paul; bridges and culverts, to Guarantee Constr. Co., 834 Palace Bldg., Minneapolis, $13,000; concrete culverts, to Con-

Streets and Roads (Continued)

crete Culvert Co., Winona, $2606. Noted Mar. 6.

★Neb., Lincoln—City let contract paving 1900 ft. 26th St., 30 ft. wide, Dist. 299, 3 in. vertical fibre with asphalt filler, to Roberts Constr. Co., 1st Natl. Bank Bldg., $23,051; resurfacing 2040 ft. 17th St., 40 ft. wide, Dist. 71, 2 in. asphaltic concrete over old brick pavement, to Abel Constr. Co., Terminal Bldg., $7842. Noted Mar. 27.

★Mo., St. Louis—City let contracts improving about 2 mi. of following alleys, brick and concrete: (a) No. 881, in block 3061 and 3060 from Koeln to Robert Aves. and its east extension in city block 3061 from Michigan to Virginia Aves.

(b) No. 882, city block 4595A, between Clayton, Berthold and Louisville Aves. and west line of block 4 of Oakland Terrace 1st addition;

(c) No. 883, in block 1283, from Compton to Louisiana Aves. and between Eads and St Vincent Aves.;

(d) No. 884, in city block 4448 north from Lexington to Natural Bridge Aves. and 124 ft. west of and parallel with Taylor Ave;

(e) No. 885, in city block 3806 West A, from Ridge to Wells Aves. and between Montclair and Clara Aves.;

(f) No. 886, in city block 5519 between McPherson and DeBaliviere Aves., Kingsbury Pl. and Laurel St.;

(g) No. 887, in city block 5167, from Brannon to Macklind Aves., and between Devonshire and Lansdowne Aves.;

(h) No. 888, in city blocks 3599 and 5039, between Margaretta, Farlin, Fair and Red Bud Aves.;

(i) No. 889, in city block 5445, from Klemm St. to Tower Grove Ave. and between Lafayette and McRee Aves.;

(j) No. 896, in city block 5444 from Klemm St. to Tower Grove Ave. and between DeTonty St. and Lafayette Ave.;

(k) No. 891, in city block 4155, from Russell Pl. to Oak Hill Ave. and between Humphrey and Wyoming Sts.;

(l) No. 892, in city block 1598, from Potomac St. to Fairview Ave. and between Grace and Giles Aves.;

(m) No. 893, in city block 3817 East A, from Minerva to Ridge Aves. and between Temple Pl. and Blackstone Ave.;

(n) No. 894, in city block 3817 East B, from Minerva to Ridge Aves. and between Clara Ave. and Temple Pl., to Eyermann Constr. Co., 1216 South Grand St., (a) $5771; (i) $2832; (j) $2710; (k) $2762; (l) $2063.

T. E. Cavanagh, 6452 Oakland Ave., (b) $3462; (c) $3518.

Skrainka Constr. Co., Security Bldg., (d) $2434.

F. A. Stiers, 4512 Enright St., (e) $2351; (f) $5061; (g) $4559; (m) $1534; (n) $1635.

J. E. Perkinson, 3237 Carter St., (h) $4383. Noted Feb. 20.

★Mo., St. Louis—Bd. Pub. Serv. let contract paving and curbing Minnesota Ave. from Osceola to Merrimac Sts., to Eyermann Constr. Co., 1216 South Grand St., $22,329. Noted Feb. 27.

★Tex., Dallas—City let contract paving Alton St. from Beacon to Henderson Sts., 30 ft. roadway, to Texas Bitulithic Co., Praetorian Bldg., $15,261. Work involves 2738 lin.ft. concrete curbing, 2738 lin.ft. gutter, 105 sq.ft. sidewalk, 850 cu.yd. earth excav., and 4417 sq.yd. asphalt on 5 in. concrete base.

★Tex., Montague—Comrs. Montague Co. let contract building 9 mi. hard surfaced roads, to Womack Constr. Co., Sherman. About $400,000. Noted Nov. 14.

★Tex., San Antonio—City let contract to Uvalde Rock Asphalt Co., Swearington Bldg. for concrete curbs and surfacing roadway with ½ in. rock asphalt on 3000 ft. Michigan Ave. from Russell to Fowler Sts., 30 ft. wide, involving 10,000 sq.yd. asphalt, at $0.50 per sq.yd., 6000 ft. concrete curbing, $0.50 per ft., 3860 ft. Nebraska St. from Walnut to Palmetto Sts., 30 ft. wide, 12,800 sq.yd. asphalt, $0.50 per sq.yd., 7720 ft. concrete curbing, $0.60 per ft.; building concrete curb and surfacing roadway with 2 in. rock asphalt or 1875 ft. Summit Ave. from Blanco Rd. to Capitol Ave., 30 ft. wide, 6250 sq.yd. asphalt, $1.25 per sq.yd., 3750 ft. concrete curbing, $0.60 per ft.; 570 ft. Agarita Ave. from Blanco Rd. to Aganier Ave., 30 ft. wide, 1900 sq.yd. asphalt, $1.25 per sq.yd., 1140 ft. concrete curbing, $0.50 per ft.

★Utah—State Rd. Comn. Capitol, Salt Lake City, let contract building 17,242 ft. road from Centerville to Farmington, 18 ft. wide, involving 34,846 sq.yd. 6-8 in. concrete, to Christensen, Jacobs & Gardner, Salt Lake City, $78,786; building 17,232 ft. road from Clearfield to Sunset, 18 ft. wide, involving 34,466 sq.yd. 6-8 in. concrete, and 15,586 ft. road from Kaysville to Layton, 18 ft. wide, involving 4799 sq.yd. 6-8 in. concrete, to Lynch Constr. Co., 5th West and 2nd South Sts., Salt Lake City, at $87,542 and $75,756, respectively. All roads in Davis Co. Noted Mar. 20.

★Ariz., Clifton—Bd. Supervs. Greenlee Co. let contract building 32½ mi. Sects. 1-6 and part of 7, Clifton-Springerville Rd., to Webster, Webster & Kerby, Clifton, $236,459. Noted Mar. 20.

★Washington—State Highway Comn., Olympia, let contract grading, draining and surfacing 3.6 mi. Pacific Highway, Pioneer, La Center and Clarke Counties, to D. A. Williams, Tacoma, $31,805; 3.4 mi. Inland Empire Highway from Uniontown to Idaho State line, Whitman Co., to H. C. Malott, Seattle, $43,533; 1 mi. State Rd. No. 12, from Methow to Carlton, also building 2 steel bridges, Okanogan Co., to Northwestern Paving Co., Spokane, $35,949; 1.8 mi. Olympic Highway, Grays Harbor Co., to Tuttle & Duffy, Montesano, $17,383. Noted Mar. 6.

Washington—State Highway Dept., Olympia, received bids Mar. 17, clearing, grading and draining (1) 13 mi. Inland Empire Highway from Spokane Co. line to Springdale, Stevens Co., (2) 8.8 mi. Inland Empire Highway from Oakesdale to Garfield, Whitman Co., from Genl. Constr. Co., North 1324 Elm St., (1) $153,474, (2) $12,383; Carlson Norman Co., (1) $159,013; Clifton Applegate Co., Hutton Bldg., (1) $162,069, (2) $45,477; Mitchell Bros., East 127 Mission St., (2) $39,622. All contractors of Spokane. Noted Mar. 6.

★Wash., Seattle—Bd. Pub. Wks. let contract building 1100 ft. timbered trestle roadway, 23 ft. wide, 5 ft. sidewalks at Northlake Ave. connection to approach to Eastlake bridge, to J. A. McEachern Co., Bell St. Dock, $34,097. Noted Mar. 27.

★Wash., Seattle—Bd. Pub. Wks. let contract laying concrete sidewalks on Belvidere Ave., 6 ft. wide, to D. H. Traphagen, Walker Bldg., $21,395; on Orcas St., to Florito Bros., 1630 25th Ave., $31,189. Noted Mar. 27.

Wash., Seattle—Bd. Pub. Wks. received bids Mar. 21, (1) paving, grading, laying armored concrete curbs, etc., on 2½ mi. Leary Ave., 18 ft. wide (a) 6 in. concrete (b) 7 in. concrete (c) 8 in. concrete (2) concrete walks on ½ mi. 1st Ave., S., 6 ft. wide, from Bressi & Morceri, Seattle, (1a) $71,174, (1b) $77,774, (1c) $83,299; Kaiser Paving Co., Everett, (1a) $71,888, (1b) $77,168, (1c) $82,228; R. G. Stevenson, 1327 Ewing St., (1a) $75,302, (1b) $82,522, (1c) $90,172; F. McLellan, Seattle, (2) $22,120; J. L. Smith, Seattle, (2) $22,595; Goetz Bros., Seattle, (2) $22,847. Noted Mar. 13.

Ore., The Dalles—City received only bid from United Constr. Co., Northwest Bank Bldg., Portland, paving 6th, 7th and Lincoln Sts., $11,762; upper Union St., $9110; 9th St., $23,826. Noted Mar 27.

★Quebec—Provincial Government, Quebec, will gravel 31,410 ft. Geneva Rd., and road leading to Carillon, St. Andrew's Parish, Argenteuil Co., 18-22 ft. wide, cost $21,871; also 3.44 mi. Main Rd. and Notre Dame St., Village of Masson, Labelle Co., 18 ft. wide, $22,766. Work will be done by day labor.

Railways

PROPOSED WORK

Oregon—Chamber of Commerce, Portland, having plans prepared for rail connection between Klamath Falls and Portland via. Strahorn project or Natron cut off.

California—See "Miscellaneous," Modesto.

Ontario—Canadian Nat'l. Rys., 27 Wellington St., E., Toronto, soon lets contract building 2 concrete abutments and 2 culverts from Pembroke to North Bay, cost $15,000; 8 concrete abutments and 1 culvert from Ottawa to Quebec, $20,000; 6 concrete abutments and 2 culverts from Toronto to Sudbury, $20,000; 2 concrete abutments and 3 culverts, from Toronto to Ottawa, $15,000. A. F. Stewart, ch. engr.

BIDS DESIRED

Ontario—Until Apr. 9, by A. F. Stewart, ch. engr., Canadian Natl. Rys., 27 Wellington St., E., Toronto, building concrete abutments, piers and culverts along line from Jellicoe to McKindy. About $20,000.

Ontario—Until Apr. 11, by A. F. Stewart, ch. engr., Canadian Natl. Rys., 27 Wellington St. E., Toronto, building 1 concrete culvert and 2 concrete abutments at North Bay. About $20,900.

British Columbia—Until Apr. 15, by M. H. McLeod, vice-pres., Canadian National Rys., 1 Toronto St., Toronto, Ont., building line from Kamloops to Kelowna, including branch from Vernon to Lumby. T. H White, Metropolitan Bldg., Vancouver, ch engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ontario—Hydro Electric Comn. of Ontario, University Ave., Toronto, will build 80 mi. radial electric railway from Toronto to Niagara Falls. About $20,000,000. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

N. C., Washington—Drainage—Pitt Co. D. D. soon lets contract building drainage system to cover 15,000 acres in Grindle Creek, between Bethel and Pactolas, involving 23 mi. canal, 8-30 ft. wide at bottom and 16-40 ft. wide at top.

Wis., Milwaukee — Excavation — See "Streets and Roads."

Ia., Nevada—Ditch.—Bd. Supervs. Story Co. plan to widen, deepen and clean out Skunk River Ditch No. 4, from Polk Co. line northwesterly 11 mi., to mouth of Squaw Creek. Ditch will be widened to 140 ft. between Polk Co line and southeast corner Sect. 25, Washington Twp., and to 130 ft. between Washington Twp. and mouth of Squaw Creek; new cut will be 8.5 ft. About $120,000. W. A. Olson, engr.

Mo., St. Joseph—Drainage—Platte River D. D. No. 1, Buchanan Co., had plans prepared building 16 mi. channel, 40 ft. wide, to drain 10,000 acres along Platte River, Three Forks River and River 102. C. O. Cornelius, secy.-treas., W. D. Hazen, Commercial Bldg., engr. Noted May 9, 1918.

Mont., Twin Bridges—Irrigation—Superior Land Co receives bids about Apr. 20, building irrigation and drainage system to develop land in Madison Co. Work involves 11.2 mi. irrigation canals with 25 to 2.5 second ft. capacity, main drainage ditch to be 4½ mi. long, bottom width of 2-4 ft., involving 59,500 cu.yd. excav. and 4 laterals 3 mi. long involving 29,500 cu.yd. excav. C Adams, Twin Bridges, engr.

Idaho, Jerome—Canal—North Side Twin Falls Canal Co., Jerome, plans to build 3½ mi. canal to have capacity of 2000 cu.ft. per second, to replace reservoir. About $75,000. E. B. Darlington, Jerome, engr.

Utah, Ogden—Drainage—Huntsville D. D. No. 1, Weber Co., being organized to build system to drain 10,000 acres. About $50,000.

Ore., Echo—Irrigation—State Irrigation Securities Comn. considering plans for construction of Teel Irrigation project comprising 16,000 acres land near here and 4000 acres on Butte Creek. Water will be taken from Hidaway, Cable and Camas Creek; canal will pass through 2 mi. tunnel, 20 mi. above Pilot Rock. Cost, $1,000,000. About $500,000 available.

Cal., Corcoran—Corcoran Irrigation Dist. will petition Bd. Supervs. Kings Co., Hanford, for authorization to form irrigation district to supply water to irrigate about 50,000 acres land. Water will be brought from Kings, Tule and Kaweah Rivers, Cross and Cameron Creeks, proposed Pine Flat Dam, etc. Plans include construction of dams, reservoirs, canals, wells, installation of pumps, etc.

Cal., Terra Bella—Irrigation—Terra Bella Irrigation Dist. sold $40,000 bonds; proceeds will be used to extend irrigation systems.

BIDS DESIRED

Conn., Bridgeport—Dredging—Until Apr. 11, by B. F. Cooney, clk. bd. park comrs., Security Bldg., dredging 40,000 cu.yd. for filling at Fayerweather Island, Seaside Park; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, dredging at barge canal terminals, Piers 5 and 6, East River, at Greenpoint and Long Island City, Contr. No. 77. Work involves 38,000 cu.yd. excav. About $40,325; advertised in this issue.

N. C., Beaufort—Drainage—Virginia-Carolina Farms Co., Beaufort, is receiving bids building drainage system to cover 40,000 acres of open black prairie land in Carteret Co., involving 12 separate outlets and 1,700,000 cu.yd. excav. B. M. Potter, Beaufort, engr.

La., Crowley—Ditches—Until Apr. 22, by Iota—Longpoint D. D., Arcadia Parish, for 50 mi. ditch, involving 495,000 cu.yd. excav. L. F. Milner, pres.; advertised in this issue.

Wis., Beloit—Excavation—See "Streets and Roads."

Excavation and Dredging (Continued)

Ia., Clarinda—Channel—Until Apr. 9, by Bd. Supervs. Page Co., building 20,507 ft. channel for East Tarko River in D. D. No. 15, involving 175,390 cu.yd. excav. V. Freed, co. aud.

Ia., Ft. Dodge—Excavation—Until Apr. 15, by C. A. Snook, aud. Webster Co., cleaning out lateral No. 1, D. D. No. 6, 9000 ft. long, 4 ft. wide at bottom, slopes 1 to 1, average depth 4.4 ft., involving 13,000 cu.-yd. excav.

Ia., Mason City—Ditch—Until Apr. 8, by P. Weigand, aud. Cerro Gordo Co., building D. D. No. 57. Work involves 64,200 ft. 6-34 in. tile, 20 cu.yd. concrete headwall, etc. Noted Sept. 26.

Ia., Mason City—Ditch—Until Apr. 9, by P. Weigand, aud. Cerro Gordo Co., building Sect. 4 and 5, Joint D. D. No. 1, in Cerro Gordo Co. (Mason City), Hancock Co. (Garner) and Franklin Co. (Hampton)). Work involves 56,250 ft. 6-36 in. tile. Sect. 4, and 27,970 ft. 6-18 in. tile, Sect. 5.

Ia., Spencer—Ditch—Until Apr. 16, by Bd. Supervs. Clay Co., building D. D. No. 37. Work involves 114,280 ft. 6-26 in. tile A. W. Chamberlain, co. aud.

Minn., Crookston—Ditch—Until Apr. 10, by H. J. Wette, aud. Polk Co., building Co. Ditch No. 121, involving 13,417 cu.yd. excav. About $0.20 per cu.yd.

Minn., Fergus Falls—Excavation—See "Streets and Roads."

Minn., Henderson — Excavation — See "Streets and Roads."

Minn., Redwood Falls—Excavation—See "Streets and Roads."

Minn., Wabasha — Excavation — See "Streets and Roads."

Mont., Whitehall—Irrigation—Until Apr. 10, by Whitehall Irrigation Dist., building 40 mi. canals, involving 200,000 cu.yd. excav. and earth dam, 6 to have capacity of 20,000 acre ft. water. About $200,000. G. Baker, Whitehall, ch. engr. Noted Feb. 20.

Mo., Poplar Bluff—Excavation—Until May 14, by Bd. Comn. Inter River D.D., Butler Co., building 206 mi. open ditch, 12-55 in. wide at base, 8 ft. deep, involving 7,733,500 cu.yd. floating and dry land dredgework. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. Noted Feb. 13.

Ark., Paragould—Ditch—Until May 6, by St. Francis D.D., at Piggott, for open ditches in Blue Cane Dist., 9 mi. long, 30 ft. bottom, 8 ft. deep, 7 mi. with 12 ft. bottom and 7ft. deep; 13 mi. Grassy Slough D.D. No. 11, 12 ft. bottom, 7 ft. deep, 9 mi. with 45 ft. bottom and 8 ft. deep; also 13 mi. levees in Blue Cane subdistrict, 8 ft. crown, 8 ft. height, 2-1 slopes, involving 500,000 cu.yd. embankment in levees and 1,715,000 cu.yd. floating dredgework. J. R. Rhyne, Corning, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Dorchester (Boston P. O.)—Dredging—Park Comn., Boston, let contract dredging and cleaning shore and approach to Tenean Beach, involving 13,000 cu.yd. earth excav., to Gerrish Dredging Co., 101 Tremont St., Boston, $13,815; excavating, grading slope and draining areas adjacent to and comprising Tenean Beach, involving 1400 cu.yd. dry earth excav., 5100 cu.yd. filling, 1020 ft. 4-6 in. vitr. clay, to D. M. Biggs & Co., Dorchester, $15,222.

N. J., North Bergen—Excavation—Bd. Educ. received lowest bid excavating sites of 2 schools here, from M. Volfe, 595 10th St., West New York, $6.00 per yd. for rock and $1.60 per yd. for earth. Noted Mar. 20.

★Md., Claiborne—Dredging, etc.—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract dredging 25 ft. channel to wharf, to Furst Dredging Co., 1515 Fidelity Bldg., Baltimore, $10,000; building timber and wooden pile pier and wharf, 128 ft. long, 24 ft. mide on one end and 64 ft. wide on other end, to Bailey & Dodson, Claiborne, $8000. Work involves 137,500 cu.yd. floating dredgework.

★Miss., Yazoo—Drainage—See Streets & Roads.

Ia., Mason City—Drainage—Comrs. Cerro Gordo Co. let contract for tile for drainage system in Joint Dist. No. 1, to Cement Products Co., Spencer, $14,225; labor, to W. A. De Long, 3107 East 14th St., Des Moines, $9950.

Minn., Tyler—Ditch—Comrs. Lincoln Co. (Ivanhoe) received only bid building Co. Ditch No. 45, from Gilbert & Myking, Fairmont, $13,680. A. L. Swenson, co. aud. Noted Feb. 6.

Tex., Dallas—Excavation—See "Streets and Roads."

★Cal., El Centro—Repairing Levee—Imperial Irrigation Dist. will close break 5600 ft. wide in levee in Mexico, southeast of Calexico involving 92,000 cu.yd. earth work; and also build rock revetment on Volcano Lake levee for about 8 mi. in Mexico, involving 120,000 cu.yd. rock. Work will be done by day labor, as no bids were received Mar. 18. Noted Mar. 6.

Industrial Works

PROPOSED WORK

Me., Pittsfield—McGilvery-Cummings Co. had plans prepared for 2-story, 190 x 220 ft. mill. About $200,000.

R. I., Providence—B. B. Knight Estate, Broad St., soon receives bids building 1 story, 92 x 133 ft. brick and concrete garage, rein.-con. flooring, concrete foundation, on Eddy and Dorrance Sts. About $35,000.

N. Y., Brooklyn—J. Bene & Sons, 641 Dean St., soon receives bids building 2 story, 100 x 100 ft., steel and brick factory, rein.-con. flooring, concrete foundation, on Clinton Ave. near Fulton St. M. Freehof, 405 Lexington Ave., New York City, archt. Noted Mar. 20.

N. Y., Long Island City—Steinway & Sons, 107 East 14th St., New York City, having plans prepared by W. K. Benedict, archt., 527 5th Ave., New York City, for alterations and rein.-con. and steel addition, rein.-con. flooring, concrete foundation, to existing factory on Ditmar Ave. between 15th and 16th Aves. here. About $75,000.

N. Y., New York—W. M. B. Conable, archt., 14 East 46th St., soon lets contract building 2-story, 50 x 100 ft., brick, steel and rein.-con. warehouse, rein.-con. flooring, concrete foundation, on 59th St. and 10tn Ave., for W. Zinsser & Co., 195 William St. About $35,000.

N. Y., New York—Industrial School, 418-420 West 41st St., soon receives bids building 4 story, 50 x 99 ft., steel and brick garage, rein.-con. flooring, concrete foundation. About $75,000. G. McCabe, 96 5th Ave., archt. Noted Mar. 20.

N. Y., New York—T. Piercy, 207 Thomson St., having plans prepared by F. E. Vitolo, archt., 56 West 45th St., for 3 story, 39 x 100 ft., steel and brick garage, rein.-con. flooring, concrete foundation, at 125-129 3rd Ave. About $50,000.

N. Y., Niagara Falls—U. S. Alloys Co., River Rd., Buffalo, purchased 30 acre site here and plans to build factory.

N. Y., Watertown—Ice Co. of Watertown, 80 Public Sq., plans to build ice plant with 15,000 ton capacity. Address L. Washburn, c/o company.

N. J., Collingswood—Camden Motor Corp., c/o D. M. Davis, Temple Bldg., Camden, plans to build 2 story, 300 x 350 ft., mill construction factory, rein.-con. flooring, concrete foundation on City Line and White Horse Pike here. About $750,000. Peuckert & Wunder, 310 Chestnut St., Phila., archts.

N. J., Millville—Eastern Potash Co., 120 Bway., New York City, plans to build factory on banks of Raritan River here. About $2,000,000.

N. J., Newton—Mazey Mills Co., 320 5th Ave., New York City, plans to build brick factory here. About $50,000.

Md., Baltimore—Baltimore Machine & Decorating Co., 1st Ave. and 9th St., plans to rebuild 3 story, 50 x 50 ft., steel, concrete and brick factory. Cost between $40,000 and $50,000.

Va., Norfolk—Jersey Queen Corp., 1299 High St., Portsmouth, having plans prepared by Peebles & Ferguson, archts., Norfolk, building 3 story, 84 x 122 ft., rein.-con. factory. About $175,000.

Fla., Ft. Pierce—East Coast Cattle Co., 1425 Ave. D., Miami, soon receives bids building abattoir here. About $100,000.

O., Akron—McNeil Boiler Co., Crosier and Sweitzer Sts., plans to rebuild 90 x 400 ft. brick boiler factory recently destroyed by fire. About $60,000.

O., Cleveland—Clark Mfg. Co., East 38th St. and Perkins Ave., having plans prepared by H. E. Shimmin, archt., 2053 Euclid Ave., building 3 story, 100 x 144 ft. brick, steel and rein.-con. factory addition, rein.-con. flooring, concrete foundation. About $100,000.

O., Cleveland—Dickey-Grabler Wks., 118 Noble St., having plans prepared building 1 and 2 story, 46 x 69 and 106 x 268 ft. brick, steel and concrete factory and office building, concrete foundation, on West 104th St. and Madison Ave. About $75,000.

O., Cleveland—Drake Process Mchy. Co. 1255 West 4th St., plans to build 3 story, 50 x 160 ft. brick, steel and concrete factory, rein.-con. flooring, concrete foundation. About $75,000.

O., Cleveland—Garland Co., 5716 Euclid Ave., having plans prepared by S. H. Weis, engr., 1032 Schoefield Bldg., building 2 story, 48 x 121 ft., brick and steel factory, at 3800 East 91st St. About $30,000.

O., Cleveland—Widlar Co., 722 Bolivar Rd., plans to build 7 story brick, steel and rein.-con. warehouse, concrete foundation, on Orange Ave. About $150,000.

O., Columbus—O. Darst, archt., Brunson Bldg., soon receives bids building 3 story, 43 x 84 ft., brick and concrete factory on Oak St., for Columbus Pharmacal Co., 332 Oak St. About $55,000.

Mich., Battle Creek—City plans election to vote on $400,000 bonds to build lighting plant.

Mich., Detroit—Commerce Motor Car Co., Solvay and Mackie Sts., having preliminary plans prepared by F. J. Winter, archt., 2331 Dime Bank Bldg., for 2 story, rein.-con. factory, with 285 ft. frontage on Mackie St.

Mich., Detroit—Detroit Edison Co., David Whitney Bldg., having plans prepared for 30,000 k.w. brick and steel addition to Delray Power Plant, concrete foundation, on West Jefferson Ave.

Mich., Detroit—Schlieder Mfg. Co., East Grand Blvd. and Oakland Ave., having plans prepared by Brown & Preston, archts., 406 Empire Bldg., for 3 story brick and rein.-con. addition to plant, rein.-con. flooring, concrete foundation. About $80,000.

Mich., Grand Rapids—Furniture Manufacturers' Assn. of Grand Rapids, 216 Lyon St., N. W., having plans prepared by Robinson & Campau, archts., 450 Housemann Bldg., for 3-story, 120 x 250 ft. warehouse on Fulton St. W. About $50,000. Noted Dec. 26, 1918.

Mich., Grand Rapids—Kelly Ice Cream Co., Ionia Ave., having plans prepared by Robinson & Campau, archits., 450 Housemann Bldg., for 2-story, 60 x 150 ft. factory on Commerce Ave.

Ill., Charleston—Brown Shoe Co., 17th and Washington Sts., St. Louis, Mo., having plans prepared by L. Herron, engr., c/o owners, building brick and concrete factory, concrete foundation, here. About $100,000.

Ill., Chicago—Pullman Couch Co., 3759 South Ashland Ave., having plans prepared by S. S. Joy, archt., 2001 West 39th St., building 4 story, 125 x 400 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on 38th St. and Ashland Ave. About $275,000.

Ill., Granite City—G. W. Niedring-Hause, vice pres., Natl. Enameling & Stamping Co. and C. Studebaker, c/o Studebaker Corp., and others, purchased 200 acre site and had plans prepared for coke pig iron plant. About $7,000,000.

Wis., Manitowac—Manitowac Seed Co., 1009 South Main St., soon lets contract building 3 story, 40 x 80 ft. warehouse. A. Guttman, pres.

Minn., Edgerton—E. V. Pol plans to build 1 or 2 story, 50 x 150 ft., brick storage warehouse and automobile sales room.

Minn., Fairmont—Sumner Engine Co. had preliminary plans prepared for 50 x 250 ft. factory. C. H. Brodt, pres.

Minn., Minneapolis—Robertson Shoe Co., 315 1st Ave., N., plans to build 3 story, brick and timber factory, brick foundation. About $50,000. G. W. Robertson, pres.

Minn., Minneapolis—Wallace Coach & Carriage Co., 12 East Grant St., plans to build 2 story, brick and timber factory, brick foundation. About $50,000. T. C. Wallace, pres.

Minn., Pipestone—Standard Oil Co., 4th and Oak Sts., Minneapolis, plans to build 2 story, brick filling station, brick foundation, here. About $75,000.

Minn., Red Wing—City soon lets contract building 100 x 100 ft., brick and rein.-con. light and power plant; also new district system. About $350,000. L. P. Wolff, 1000 Germania Bldg., St. Paul, engr.

Minn., St. Paul—Comrs. Ramsey Co. plan to build 40 x 225 ft., brick and stucco stock barn on county farm. About $61,000. Buechner & Orth, 500 Shubert Bldg., archts.

Neb., Clarkson—City soon lets contract rebuilding electric light and pumping plant. Henningson Eng. Co., 1122 Farnum St., Omaha, engrs. Noted Oct. 31.

Neb., Holdrege—City soon receives bids building electric light plant. Bonds for $68,000 voted for project.

Industrial Works (Continued)

Mo., St. Louis—See "Miscellaneous."

Mo., St. Louis—Mineral Refining & Chemical Corp., Iron Mountain tracks and Des Pere River, plans to build addition to plant. About $500,000. A. E. F. Versen, c/o owner, engr.

Mo., St. Louis—Tate & Nordmeyer Eng. Co., archts. and engrs., International Life Bldg., soon receives bids building 146 x 338 ft. cooling plant on 23rd and Papin Sts., for Heil Packing Co., 2216 La Salle St. About $100,000.

Mo., St. Louis—Yawitz Dyeing & Cleaning Co., Suburban and Wittier Sts., plans to build 1 and 2-story, 50 x 135 ft. brick and timber factory, concrete foundation, on Delmar and Walton Sts. About $50,000. S Yawitz, pres.

Mo., Sikeston—City election June 2, to vote on $75,000 bonds to build electric light plant. E. J. Malone, Jr., city clk. Noted Jan. 16.

Ark., Ashdown—United Oil Mills having plans prepared by J. G. Reid, archt., Chicago, rebuilding 2 story, 60 x 130 ft. oil mill recently destroyed by fire. W. Y. Foster, Sr., pres. Noted Feb. 6.

Ark., Springdale—City plans to build lighting plant. About $50,000. W. L. Winters, Ft. Smith, engr.

Tex., McAllen—Rio Grande Motor Co. having plans prepared by A. H. Woolridge, archt., Crow Bldg., building 70 x 113 ft., concrete and brick garage. About $25,000.

Utah, Salt Lake City—Husler Flour Mills, South State St., plans to build 6-8 story flour mill, on 5th South and 3rd West Sts. About $300,000.

Wash., Wenatchee—Standard Oil Co. plans to build storage warehouse, office, garage and lubricating oils storage tank here.

Ore., Pendleton—Standard Oil Co., 409 Ann St., plans to replace and enlarge oil distributing plant. Project includes 24 x 70 ft. brick warehouse and 24 x 68 ft. garage, two tanks 30 ft. high, 20 ft. and 30 ft. in diam.; 4 tanks now at station will be moved to new location and 3 more put in. About $30,000. H. J. Jack, local mgr.

Cal., Modesto—See "Miscellaneous."

Que., Donnacona—Donnacona Paper Co. purchased 183,360 acres timber land on Jaques Cartier River, 27 mi. from Quebec and plans to develop power, including dam, flume, power house and installing electric generating equipment. G. H. P. Gould, Lyons Falls, N. Y, pres.

Que., Montreal—Gagnon & Hebert, 55 Kent St., having plans prepared building 4 story, 100 x 100 ft., brick shoe factory on Kent St. About $75,000.

Que., Montreal—La Reine Mineral Water Co., 1320 Notre Dame St., had plans prepared by A. Piche, archt., 33 Belmont St., building 3 story, 60 x 80 ft., mill construction factory, rein.-con. flooring, concrete foundation, on Duvernay St. About $30,000.

Ont., Cobourg—Douglas Packing Co., Fairport, N. Y., purchased site here and plans to build 3 story canning factory. About $150,000.

Ont., Port Dover—Port Dover Canning Co. plans to build 2 story, 50 x 90 ft., cement block addition to factory. About $25,000.

Ont., Preston—Ice Palace plans to build ice plant. About $30,000.

Sask., Regina—Continental Oil Co., purchased site here and plans to build oil refinery. About $1,000,000.

Alta., Calgary—W. R. Hull & Co., 201 Grain Exch. Bldg., plans to build warehouse. About $25,000. Lawson & Fordyce, 1226 8th Ave. W., archts.

Alta., Medicine Hat.—Ingersoll Oil Co., 918 St. Patrick St., Montreal, Que., soon lets contract building 100 x 100 ft., brick warehouse here. About $56,000. M. D. McLean, Medicine Hat, engr.

B. C., Vancouver—Gardiner & Mercer, archts., 827 Birks Bldg., receive bids about Apr. 10, building 2 story, 50 x 60 ft. pattern shop, 54 x 125 ft. boiler and blacksmith shop, 50 x 250 ft. marine ways of 2000 ton capacity, jetty and office building, on Georgia St., near Coal Harbor, for Mainland Engr. Co., 422 Railway St. About $70,000. Noted Feb. 20.

BIDS DESIRED

N. Y., Long Island City—Until Apr. 15, by A. Cohen, 212-5th Ave., New York City, building 3 story, 73 x 193 ft., brick and steel mill, rein.-con. flooring, concrete foundation, on William and Freeman Sts., here. About $60,000. D. Seabury, 12 East Ave., Pawtucket, R. I., archt. Noted Mar 20.

N. Y., New York—Until Apr. 12, by J. Fisher, archt., 25 Ave. A, building 2½ story, 70 x 150 ft., brick and steel warehouse, rein.-con. flooring, concrete foundation, 3rd and Tompkins Sts., for Horowitz Bros., 371 East 4th St. About $75,000. Noted Feb. 13.

Ill., Chicago—E. H. Frommann, archt., 64 West Randolph St., is receiving bids for 2-story, 125 x 200 ft. mill construction factory, concrete foundation, on Cortland and Kilbourne Sts., for Natl. Enameling & Stamping Co., 346 West Kinzie St. About $85,000.

Ill., Chicago—Mundie & Jensen, archts., 39 South La Salle St., receiving bids building 3 story, 67 x 194 ft., 2 story, 194 x 414 ft. and 1 story 81 x 108 ft. brick and timber piano factory, rein.-con. flooring and concrete foundation, on Kedzie Ave. and 48th Pl., for Melville Clark Piano Co., 25 East Jackson St. About $400,000.

Mo., Joplin—Until May 1, by C. Lubhoelter, archt., 215 West 9th St., building 3 story, 104 x 120 ft. brick warehouse, concrete foundation on Virginia Ave. between 5th and 6th Sts., for Christmas Dry Goods Co., 501-3 Main St. About $50,000.

Ont., Guelph—Until Apr. 9, by James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, building 3 story, 60 x 100 ft., rein.-con. and brick, addition to plant, rein.-con. flooring, concrete foundation, for Patridge Rubber Co., Metcalf St. About $60,000. Noted Mar. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Cambridge** (Boston P. O.)—Boston Confectionery Co. let contract building 5-story, 75 x 80 ft. rein.-con. and steel factory, rein.-con. flooring and concrete foundation, on Main and State Sts. here, to W. M. Bailey Co., 88 Broad St., Boston. About $130,000.

★**Mass., Cambridge** (Boston P. O.)—F. H. Dow Co. let contract building 5-story, 60 x 100 ft. rein.con. and steel factory, rein.-con. flooring and concrete foundation, on Main St., to W. M. Bailey Co., 88 Broad St., Boston. About $150,000.

★**R. I., Providence**—Providence Ice Co., 17 Exch. St., let contract building 2 story, 90 x 135 ft. brick and steel ice plant, to Lord Constr. Co., Fields Point. About $30,000.

★**Conn., Deep River**—Pratt, Read & Co. let contract building 1 story, 60 x 70 ft. machine shop and 2 story, 20 x 40 ft. addition to kiln and stock room, rein.-con., to Ellison Constr. Co., 60 Prospect St., Hartford. About $25,000.

★**N. Y., Brooklyn**—H. Fein, 626 Essex St., will build 1 story, 100 x 150 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Pitkin Ave. and Hinsdale St. About $40,000. Work will be done by day labor. Noted Mar. 20.

★**N. Y., Brooklyn**—Realty Supply Co., 215 Montague St., will build 1 story, 100 x 125 ft., brick and steel garage, rein-con. flooring, concrete foundation, at 6150 4th Ave. About $35,000. Work will be done by day labor.

★**N. Y., Brooklyn**—M. Robertson, 1623 Pitkin Ave., will build 1 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 1964 Pitkin Ave. About $35,000. Work will be done by day labor.

★**N. Y., Long Island City**—Genl. Carbonic Co., 444 Van Brunt St., Brooklyn, let contract constructing four 1 story, brick and steel buildings, concrete foundation, on 6th St. and West Ave., to Austin Co., 217 Bway., New York City. About $200,000; cost plus percentage basis.

★**N. Y., New York**—Elder & Wells, 65 9th Ave., let contract building 1 and 2 story, 100 x 120 ft., brick garage and office, rein.-con. flooring, concrete foundation, to G. A. Carpenter, 18 East 41st St. About $55,000.

★**N. Y., New York**—St. Patrick's Cathedral, 24 East 52nd St., let contract building 1 story, 175 x 200 ft. steel and brick garage, rein.-con. flooring, concrete foundation, on 11th St. and 1st Ave., to B. Mieburg, 3120 Bway. About $65,000.

★**N. Y., New York**—Urndmiller Realty Co., c/o Sommerfield & Stickler, archts, 31 Union Sq., will build 2-story, steel and brick warehouse, rein.-con. flooring, concrete foundation, on 10th Ave., 55th and 56th Sts. About $30,000. Work will be done by day labor. 455 West 55th St. Corp., lessee.

★**N. Y., Rochester**—Gleason Wks., 1000 University Ave., let contract building 2 story, 80 x 365 ft., steel and brick addition to factory, to A. Friedrich & Sons Co., 710 Lake Ave. About $75,000

★**Ala., Birmingham**—Joubert-Goslin Machine & Fdry. Co., 8th Ave., let contract building addition to machine shop, to Ingalls Iron Wks., 802 Ave. D, and C. M. Allen & Son, 114½ North 21st St. About $35,000.

★**La., New Orleans**—New Orleans Petroleum Co., Woolworth Bldg., New York City, will build oil refinery, 15 miles from here. About $1,500,000. Work will be done by day labor.

★**O., Cincinnati**—Globe-Wernicke Co., Norwood St., let contract building 3 story, 75 x 350 ft., brick factory on Montgomery Rd., to Ferro-Concrete Constr. Co., Richmond and Harriet Sts., $200,000, cost plus percentage basis.

★**O., Cleveland**—Uhl & Jaster Co., 1900 Euclid Bldg., will build 1 and 2 story, 40 x 130 ft., brick, steel and rein.-con. warehouse and office, concrete foundation, at 5003-5 St. Clair Ave. About $50,000. Work will be done by day labor.

★**Mich., Detroit** — Central Forge Co., Euclid Ave., let contract for 2 story, 70 x 302 ft. steel forge shop, rein.-con. flooring, concrete foundation and 2 story, 70 x 302 ft. steel heat treating plant, brick flooring, concrete foundation, on Euclid Ave. and Grand Trunk R. R. tracks, to Whitehead & Kales Iron Wks., Beecher Ave. and Michigan Central R. R. Noted Mar. 20.

★**Mich., Detroit**—Stecker Electric & Machine Co., 34 Bates St., let contract building 3 story, 75 x 250 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on Dewey and Greenwood Aves., to W. S. Pocock & Co., 515 Hammond Bldg. About $135,000. Noted Mar. 20.

★**Ill., Alton**—Alton Straw & Boxboard Paper Co., will build steel and rein.-con. addition to factory. About $25,000. Work will be done by day labor.

★**Ill., Chicago**—I. Blum, 919 Fulton St., let contract building 3 story, 50 x 118 ft. brick and rein.-con. meat products plant, rein.-con. flooring, concrete foundation, at 942 Fulton St., to J. Grosser, c/o G. H. Grussing, archt., 154 West Randolph St. About $80,000.

Ia., Oelwein—Oelwein Auto Co. let contract building 2 story, 75 x 140 ft., rein.-con. and brick garage, to T. Stark & Co., 118 South 11th St., W., Cedar Rapids. About $45,000.

Neb., Omaha—See "Buildings."

★**Neb., Omaha**—Higgins Packing Co., 1315 Woodmen of World Bldg., let contract building 1st unit of cold storage plant, 4 story, 50 x 100 ft., brick, on 36th and L Sts., to J. Hansen, 803 Ave. F., Council Bluffs, Ia., $70,000.

★**Ark., Little Rock**—Dixie Cotton Oil Co., East of North Little Rock, will build 2 story, 60 x 240 ft. rein.-con. mill, rein.-con. flooring, concrete foundation, along Rock Island R.R. tracks, east of city. About $75,000. Work will be done by day labor.

★**Que., Montreal**—La Parisienne Shoe Co., 614 La Salle Ave., let contract building 4 story, 50 x 60 ft. concrete, steel and brick factory on La Salle Ave., to A. Mercure, 419 Labroque St. About $60,000.

Buildings

PROPOSED WORK

Mass., Holyoke—Church—Second Congregational Church Society, plans to rebuild church on Hampden St. recently destroyed by fire. Loss, $325,000. Address Bd. Trustees, Holyoke.

Mass., Roxbury (Boston P. O.)—Store and Office—G. Kimball having plans prepared by A. J. Carpenter, Jr., archt., 39 Dunreath St., for 1 story, 112 x 160 ft. brick and concrete on Washington St. About $50,000.

R. I., Providence—Home—Polish Society, 408 Hartford Ave., plans to build home. About $50,000. Address A. Czubak.

Conn., Bridgeport — Church — Trinity Methodist Episcopal Society, Remer St. and North Ave., plans to build church on North Main St. above St. Vincent's Hospital. Cost between $50,000 and $60,000.

Conn., Bridgeport—School—A Figlewski, pastor, St. Michaels Polish congregation, 310 Sterling St., soon receives bids for 3½-story, 90 x 150 ft. brick, steel and concrete, rein.-con. flooring, concrete foundation, on Sterling and Kossuth Sts. About $160,000. Noted Mar. 13.

Conn., Waterbury—Fire Station—City soon receives bids building 2-story, 37 x 58 ft. brick, rein.-con. flooring and concrete foundation, on Bunker Hill Ave. About $50,000. J. T. Smith, 36 North Main St., archt. Noted Feb. 20.

Buildings (Continued)

Conn., Waterbury—Fire and Police Station—City soon receives bids building 2-story, 35 x 38 ft. and 16 x 40 ft. brick, rein.-con. flooring, concrete foundation, on Thomaston Ave. About $50,000. J. T. Smith, 36 North Main St., archt. Noted Feb. 20.

Conn., West Hartford (Hartford P. O.)—Hotel—B. A. Jellew, archt., 756 Main St., receives bids about Apr. 14, building 3 story, 65 x 82 ft. brick, concrete foundation on Main St. and Farmington Ave., for Allen & Judd, 170 Sargent St. About $65,000.

N. Y., Binghamton—Theater—Majestic Real Estate Co. having plans prepared for theater. About $250,000. Address J. G. Brownlow, 66 Chenango St.

N. Y., New York—Bank—Italian Savings Bank, Cleveland Pl. and Spring St., soon receives bids building 10 story, 100 x 150 ft., brick and steel, concrete foundation. About $150,000. C. P. H. Gilbert, 1123 Bway, archt.

N. Y., New York—Store and Lofts—Langdon Co., Inc., 85 Liberty St., having plans prepared by Maynicks & Franke, archts., 25 East 26th St., for 15 story, 50 x 85 ft., brick and steel, concrete foundation, at 119 West 41st St. About $600,000.

N. Y., New York—Hotel—Mason Realty Corp., 418 Central Park, W., having plans prepared by Zipkes, Wolf & Kudroff, archts., 25 West 42nd St., for 1 story, brick and stone addition to hotel. About $100,000.

N. Y., New York—Club—77th Div. Assn., 280 Madison Ave., having preliminary sketches prepared by Warren & Wetmore, archts., 10 East 47th St., for 100 x 200 ft., brick and steel, concrete foundation on Lafayette and 8th Sts. About $5,000,000.

N. Y., Saratoga—Community House—Redemptorist Fathers of St. Clements College, Lake Ave., soon receive bids building 3 story, rein.-con. and brick. About $500,000.

N. J., Harrison—School—Bd. Educ. having tentative plans prepared by J. B. Baker, archt., 111 North 4th St., building 175 x 175 x 200 ft., concrete brick and steel school on 3rd and Harrison Sts., rein.-con. flooring, concrete foundation, to include auditorium, gymnasium and playgrounds. About $275,000.

N. J., Jersey City—Store and Office—Schulte Cigar Stores Co., 386 Bway., New York City, has leased 100 x 125 ft. plot at Summit Tube Station entrance here and plans to build 2 story. About $50,000.

N. J., Jersey City—Theater—Natl. Theater Co., 433 Central Ave., plans to build 95 x 155 ft., terra-cotta, limestone and pressed brick, on Central Ave. and Sherman Pl. About $75,000.

Mich., Adrian—Gymnasium, etc.—Industrial Home for Girls plans to build gymnasium, cost $50,000; laundry and equipment, $25,000; install new plumbing and shower baths, $14,000.

O., Cleveland—Office—See "Industrial Works."

Ill., Chicago—Office—Old Colony Life Insurance Co., 2721 South Michigan Ave., had plans prepared by C. A. Eckstrom, archt., 5 North La Salle St., for 16 story, 50 x 165 ft. fireproof building, on Jackson Blvd. and La Salle St. About $1,000,000.

Ill., Lincoln—Cottages—E. D. Martin, archt., Capitol Bldg., Springfield, soon receives bids building three 1 and 2-story, 50 x 100 ft. brick and tile cottages at Lincoln State School and College. About $65,000.

Ill., Quincy—Hotel—Royal Hotel Co., 513 Hampshire St., plans to build 7 or 8-story annex to Hotel Quincy. About $100,000. C. H. Achelpohl, mgr.

Ill., Springfield—Theater and Office—Springfield Realty & Impvt. Co. having preliminary plans prepared for 5 story, 150 x 165 ft. fireproof building. About $350,000.

Ill., Streator—Store and Office—D. C. Murray, 309 East Main St., soon lets contract building 5-story, 50 x 142 ft. brick and rein.-con., concrete foundation. About $175,000. G. C. Nimmons & Co., 120 South Michigan Ave., Chicago, archts. Noted Feb. 6.

Ia., Cedar Rapids—School—Bd. Educ. plans to build brick and stone school. About $50,000. J. A. Motejl, 219 Cedar Rapids Natl. Bank Bldg., secy.

Ia., Iowa City—School—Roman Catholic congregation, c/o J. O'Leary, chn. bldg. com., 1110 East Court St., plans to build here. About $100,000.

Minn., Ely—Hotel—Ely Hotel Co. plans to build 3 story, brick, rein.-con. flooring, concrete foundation. About $75,000. M. J. Murphy, 1st State Bank Bldg., chn. of com.

Minn., Minneapolis—Exchange and Office—Northwestern Telephone Exch. Co., 224 South 5th St., having plans prepared by Hewitt & Brown, archts., 716 4th Ave., S., for 11 story, 157 x 132 ft., brick and steel, rein.-con. flooring, brick foundation on 3rd Ave. S. and 5th St. About $1,000,000.

Minn., Minneapolis—Office—D. C. Bell Investment Co., 226 Security Bldg., plans to build, on 2nd Ave., S., and 6th St. About $1,500,000.

Minn., Minneapolis—Theater—Mill City Investment Co. plans to build 3 story, 110 x 127 ft., brick and terra cotta theater and hall on Lake St. near Nicollet St. About $100,000. D. C. Swain, Plymouth Bldg., archt.

Minn., Pipestone—Theater—Hines Theater Co. plans to build 2 story, 50 x 150 ft., brick and timber, brick foundation. About $50,000.

Minn., St. Paul—Hotel—Minor Hotel Co., Magee Hotel, plans to build 16 story on 9th and Robert Sts. About $500,000. M. Fitzpatrick, 17 West 9th St., archt.

Kan., Topeka—Dormitory, etc.—Washburn College, 17th and College Sts., receives bids about July 1, building 3 story, 75 x 150 ft. rein.-con. and steel dormitory and social center. About $125,000. R. E. Scamell, Topeka, archt.

Neb., Collegeview—School—City voted $60,000 bonds to build school.

Neb., Omaha—Club House—Knights of Columbus, 2025 Dodge St., plan to build brick club house, to include auditorium, swimming pool, etc. About $200,000.

N. D., Grand Forks—Hall—Salvation Army plans to build 3 story, 35 x 80 ft. brick and stone on De Mers Ave.

Wyo., Laramie—Court House and Jail Albany Co. election Apr. 22, to vote on $200,000 bonds to purchase site, build and equip court house and jail.

Mont., Great Falls—School—Bd. Educ., School Dist. 1, receives bids in fall for grade school. About $160,000. Bird & Van Teylingen, Great Falls, archts.

Mo., Joplin—Theater—Ideal Theater Co., 528 Main St., plans to build 3 story, 100 x 120 ft. brick, rein.-con. flooring, concrete foundation on 6th and Main Sts. About $50,000.

Mo., St. Louis—Bank—Third Natl. Bank, Bway. and Olive St., receives bids about May 1, building 2 story, 41 x 127 ft. brick, rein.-con. and steel annex, rein.-con. flooring, concrete foundation. About $100,000. G. F. A. Brueggman, 902 Third Natl. Bank Bldg., archt. Noted Jan. 16.

Mo., St. Louis—Theater—H. and W. Scherrer, 5955 Easton Ave., receive bids in summer building 2 story, 150 x 225 ft. at 5586 Easton Ave. About $200,000.

Tex., Houston—Schools—City election May 25 to vote on $500,000 bonds to build high school and $300,000 for ward school.

Okla., Elk City—High School—Bd. Educ. having plans prepared by Hawk & Parr, archts., Security Bldg., Oklahoma, building 2 story, brick and stone. About $125,000.

Okla., Muskogee—Exhibit—State Legislature, Oklahoma, appropriated $50,000 to construct Indian and Agricultural exhibit building at fair grounds, here.

Okla., Muskogee—School—City voted $400,000 bonds to build schools.

Okla., Oklahoma—Schools—City voted $1,000,000 bonds to build schools.

Okla., Okmulgee—High School—Bd. Educ. having plans prepared by Smith, Rea, Lovitt & Senter, archts., Parkinson Bldg., for rein.-con. and brick. About $200,000.

Okla., Okmulgee—Theater—J. Feeney having plans prepared by Smith, Rea, Lovitt & Senter, archts., Parkinson Bldg., for 1 story, 50 x 140 ft., rein.-con. and brick. About $75,000.

Idaho, Payette—School—City election Apr. 12, to vote on $75,000 bonds to build high school in Dist. 32. E. B. Holmes, clk.

Utah, Ogden—Schools—City plans election soon to vote on $500,000 bonds to build high and grade schools.

Utah, Richmond—High School—Comrs. Cache Co. having plans prepared by L. Hodgson, archt., Commercial Bldg., Logan, for high school. About $75,000.

Ariz., Chandler—School—School Trustees plan to build school. Bonds for $125,000 voted for project.

Ariz., Morenci—School—School Trustees having plans prepared by C. L. Wilson, archts., Monrovia, Cal., for 2 story, rein.-con., rein.-con. flooring, concrete foundation here. Address Capt. J. P. Hodgson. Noted Mar. 20.

Ariz., Tucson—Courthouse—Bd. Supervs. Pima Co. having plans prepared by W. Curlett & Son, archts., 518 Merchants Natl. Bank Bldg., Los Angeles, building rein.-con. courthouse, concrete foundation. About $500,000. Bonds will be voted for project.

Ariz., Tucson—Store, etc.—Congress Realty Co. having plans prepared by W. Curlett & Son, archts., 518 Merchants Natl. Bank Bldg., Los Angeles, Cal., for 2 story, concrete and brick store, theater and office, rein.-con. flooring, concrete foundation. About $50,000.

Wash., Vancouver—High School—City plans to sell $75,000 bonds to build addition to high school.

Ore., Salem—Dormitory, etc.—R. B. Goodin, secy. state bd. control, Capitol Bldg., soon lets contract building brick hospital dormitory and boys' dormitory at State Institution for Feeble Minded. Noted Mar. 20.

Cal., Anaheim—Church—First Methodist Episcopal congregation having plans prepared by N. F. Marsh, archt., 211 Bway. Central Bldg., Los Angeles, building 2-story, 80 x 120 ft., frame and plaster, concrete foundation. About $50,000.

Cal., San Francisco—Hotel and Office—Salvation Army, 417 Market St., having plans prepared by G. W. Kelham, archt., Sharon Bldg., for 6 story. About $250,000.

Cal., Santa Barbara—Resort—G. Proctor, pres. Granite Springs Water Co., Granite Springs, N. Y., plans to build resort. Plans include bath house, swimming pools, beach features, 100 houses, building sewers, streets, etc., in Montecito Sect. Cost between $75,000 and $125,000.

N. B., Moncton—Schools—School Bd. receives bids about May 1 building 3 story school. About $150,000. F. N. Brodie, 42 Princess St., St. John, archt. Noted Feb. 27.

Que., Montreal—Exchange—Bell Telephone Co., 118 Notre Dame St., W., having plans prepared by J. W. Carmichael, archt., 29 Hospital St., for telephone exchange. Cost to exceed $300,000.

Ont., Gravenhurst—Sanitorium—Calydou Sanitorium plans to build 4 story, steel and brick. About $75,000.

Ont., Humberstone—School—School Bd. plans to build 50 x 100 ft., steel and brick. About $50,000. W. Kinsley, Humberstone, engr.

Ont., St. Catharines—Schools—School Bd. receives competitive plans until Apr. 15 building two 1 story schools. About $75,000 each. C. T. McBride, secy. treas.

Ont., Toronto—Office—Dominion Bank, Dominion Bank Bldg., had plans prepared by Darling & Pearson, archts., 2 Leader Lane, building 2 story, steel and brick, rein.-con. flooring, on Yonge St. About $250,000.

Alta., Medicine Hat—Business Block—H. L. Tweed, Tweed Block, soon receives bids building 3 story, 60 x 100 ft., brick. About $50,000.

Alta., Medicine Hat—Court House—Dept. Pub. Wks., Edmonton, had plans prepared by R. Blakey, archt., Parliment Bldg., Edmonton, building brick court house here. About $150,000.

Alta., Red Deer—Theater—F. N. Smith having plans prepared by C. A. J. Sherman, archt., Red Deer, building 50 x 130 ft., brick and stone, concrete foundation, on Gaete Ave., S. About $50,000.

B. C., Vancouver—Bank and Office—Somerville & Putman, archts., London Bldg., receive bids in about 6 weeks, building 3 story, 48 x 95 ft., stone, on Hastings and Seymour Sts., for Union Bank. About $250,000. Noted Mar. 20.

BIDS DESIRED

N. Y., Cobleskill—School—Until Apr. 11, by D. D. Frisbie, pres. bd. trustees, Schoharie State School of Agriculture, at office of Comrs. of Agriculture, State and Lodge Sts., Albany, building 2 story, 40 x 70 ft., concrete and brick, rein.-con. flooring, concrete foundation. About $50,000.

Ill., Forest Park (Oak Park P. O.)—Theatre and Stores—H. L. Newhouse, archt., 4630 Prairie Ave., Chicago, is receiving bids for 1 story, 120 x 200 ft. brick and timber, brick foundation, on Madison and Des Plaines Sts., here, for A. Harris, 35th and Iron Sts., Chicago. About $85,000. Noted Mar. 13.

Buildings (Continued)

Minn., Brainerd—Courthouse—Until June 3 (change of date) by Comrs. Crow Wing Co., building 90 x 125 ft., rein.-con., rein.-con. flooring, concrete foundation. About $275,000. Alden & Harris, 1011 New York Life Bldg., St. Paul, archts. Noted Mar. 27.

N. D., Grand Forks—Theater—Until Apr. 10 by A. J. Kavanaugh, building 3 story brick at 413-15 De Mers Ave. About $100,000. Buechner & Orth, Minneapolis, Minn., archts. Noted Feb. 27.

Mont., Hardin—High School—Until Apr. 7, by Bd. Educ. building high school in Dist. No. 17. About $100,000. Dedrick & Bebbe, Billings, archts.

Mo., St. Louis—Bank—Until May 1, by G. Brueggeman, archt., 902 3rd Natl. Bank Bldg., building 4 story, 71 x 127 ft. brick, rein.-con. and steel, rein.-con. flooring, concrete foundation, at 205-207 North Bway., for 3rd Natl. Bank, Bway. and Olive Sts. About $200,000. Noted Jan. 16.

Cal., Quincy—Court House and Jail—Until Apr. 22 (change of date), by Bd. Supervs. Plumas Co., building 4 story, 60 x 120 ft. rein.-con., rein.-con. flooring, concrete foundation. G. A. Sellon, Mitau Bldg., Sacramento, archt. Noted Feb. 20.

Que., Montreal—Office—Until Apr. 7, by Ross & MacDonald, archts., 1 Belmont St., building 2 story, 47 x 80 ft., steel and brick, concrete foundation, on Mill St., for W. Davies Co., Ltd., Mill St. About $50,000.

Ont., Brantford—School—Until Apr. 11 by A. K. Bunnell, secy.-treas., building 12 room school on Rawdon St., for School Bd. W. C. Tilley, 11 Temple Bldg., archt. Noted Feb. 27.

Ont., Waterdown—School—Until Apr. 25, by J. A. Ames, archt., 183 Bold St., Hamilton, building 2 story, concrete, steel and brick, rein.-con. flooring, for School Bd. About $55,000.

PRICES AND CONTRACTS AWARDED

(★Indicates Award of Contract)

★R. I., Providence—Theater—J. Bartley, Seekonk, Mass., let contract altering Scenic Theater on Mathewson St. and building 32 x 72 ft. and 20 x 30 ft. brick, steel and concrete addition, to T. Coffey, 15 Ivy St. About $50,000. Noted Mar. 20.

★Conn., Hartford—Hotel—C. J. Burgess, 64 Brownell Ave., will build 3 story, 89 x 114 ft. brick and timber, with 89 x 125 ft. wing, concrete foundation, on Washington St. About $150,000. Work will be done by day labor.

★Conn., Hartford—Office—Amer. Industrial Bank & Trust Co., 688 Main St. let contract building 15 story, 56 x 156 ft. brick and steel, concrete foundation on Main St., to Godly, Haskel & Ledwich, 244 Madison Ave., New York City. About $600,000.

★Conn., Wallingford — Home — Masonic Charity Foundation of Conn., Masonic Ave., let contract building 4 story, 86 x 105 ft. with 38 x 46 ft. wings, steel and rein-con., rein-con. flooring, concrete foundation, to H. Wales Lines Co., 134 State St., Meriden. About $100,000. Noted Aug. 22, 1918.

N. Y., Bath—Barracks—Bd. Dirs. Soldiers & Sailors Home, received bids Mar. 25, building 2 story, 44 x 151 ft., with rear wing, 44 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation, at State Institution, from T. H. McHale & Son, Cahill Bldg., Syracuse, $71,500; H. P. Sickels Co., 840 University Ave., Rochester, $72,000; Pulford & Dempsey Constr. Co., South Main St., Elmira, $74,770. Noted Feb. 27.

★N. Y., Brooklyn—Hospital—Brooklyn Maternity Hospital, 670 Bushwick Ave., will build 4 story, 75 x 100 ft., brick and steel, concrete foundation, on Bushwick Ave. and Cedar St. About $70,000. Work will be done by day labor. M. Duckman, treas. Noted Mar. 13.

★N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York City, let contract building P. S. 20, 5 story, 92 x 195 ft., brick and steel, concrete foundation, on Roebling St., North 4th and North 5th Sts., and P. S. 182, 5 story, 118 x 192 ft., brick and steel, concrete foundation, on Dumont and Wyona Aves., to P. J. Brennan, 624 Madison Ave., $481,650 and $464,340 respectively. Noted Mar. 20.

N. Y., Buffalo—School—Bd. Educ. received bids building P. S. No. 8, general construction, from Mosier & Summers, 1266 Seneca St., $216,000; heating and ventilating, from H. J. Wood & Co., Buffalo, $50,949; plumbing, from Chippewa Plumbing Co., 88 West Chippewa St., $17,300.

★N. Y., New York—Office—See "Industrial Works."

★N. Y., New York—Office—R. B. Diela, 527 5th Ave., let contract building 1 story, steel and brick addition, concrete foundation, to Wharton Green, 37 West 39th St. About $60,000.

★N. Y., New York—Office—New York Stock Exch., New St., let contract altering and enlarging interior, brick and timber, to M. Eidlitz, 30 East 42nd St. About $75,000.

Md., Baltimore—Store—The Hub, Baltimore and Charles Sts., received bids building 2 story, 40 x 85 ft., steel, brick and concrete addition and altering store front, from Cogswell, Koether & Co., 406 Park Ave.; J. Hiltz & Sons, 3 Clay St.; C. L. Stockhausen Co., Gay and Water Sts., Frainie Bros. & Hengley, 18 Clay St. Total cost, $50,000.

Md., Towson—Orphan Asylum—St. Vincent's Male Orphan Asylum, York Rd., received lowest bid altering existing buildings and constructing 2½ story, 40 x 100 ft., dormitory and 1 story, 40 x 50 ft. boiler house, brick and steel, from J. J. O'Connor, 52 Knickerbocker Bldg., Baltimore, $50,000. Noted Mar. 6.

O., Cleveland—"See Industrial Work."

★O., Cleveland—Bath House, etc.—Bd. Pub. Serv., City Hall, let contract building 2 story, brick, steel and concrete bathhouse and swimming pool, at Brookside Park, to G. A. Rutherford Co., 1922 East 18th St. About $50,000.

★O., Cleveland—Office, etc.—W. Dunbar Co., 8201 Cedar Ave., will build 2 story, 20 x 24 x 113 ft. brick, steel and concrete office and workshop, concrete foundation. About $50,000. Work to be done by day labor.

★Mich., Detroit — Mercantile — Heyn's Bazaar, 147 Woodward Ave., let contract building 8-story, 40 x 100 ft. brick, rein.-con. and steel, rein.-con. flooring and concrete foundation, to H. G. Christman Co., 315 Stevens Bldg. About $250,000. Noted Mar. 13.

★Mich., Detroit—Store and Office—J. R. Thompson Co., 350 North Clark St., Chicago, let contract building 4-story, 40 x 100 ft. brick and steel, concrete foundation, at 146 Woodward Ave., here, to Krahl Constr. Co., 350 North Clark St., Chicago. About $95,000.

Ill., Chicago—School—Bd. Educ. received bids altering existing building and constructing 3 story, 105 x 120 ft. brick and timber addition to Darwin School, rein.-con. flooring as follows: concrete foundation, on Edgewood and North Albany Aves., masonry from J. Buenkirchen, $44,658; A. and E. Anderson Co., 19 South La Salle St., $44,821; J. L. Connelly, 130 West Washington St., $45,330; structural steel, from South Halsted Iron Wks., 1233 West Rand St., $24,447; Wendnagel Co., 600 West 22nd St., $24,990; Frandsen Constr. Co., 64 West Rand St., $25,108; carpentry, from H. Schrik & Co., 3722 West Chicago Ave., $15,399; G. Reininga, $15,848; F. Voss, $16,200; fireproofing, from A. W. Egan, $15,968; Natl. Fireproofing Co., 2600 Shields Ave., $16,778; W. E. Hughes & Co., 133 West Washington St., $17,500. Noted Mar. 13.

★Ill., Chicago—School—Bd. Educ. let contract building two 3-story, 39 x 62 ft. and 47 x 90 ft. brick and steel addition to Davis School on West 39th St. and South Sacramento Blvd., as follows: Masonry, to F. A. Siebold & Son, 133 West Washington St., $59,980; terra cotta, to Northwestern Terra Cotta Co., 175 West Jackson Blvd., $30,590; structural steel, to W. Horn Structural Iron Wks., 336 North Leavitt St., $25,870; carpentry, to F. Voss, $20,985. Noted Mar. 6.

★Wis., Niagara—School—Bd. Educ. let contract building addition to school, to D. Hubert, Menomonie. About $85,000.

★Minn., Bovey—School—Bd. Educ., Coleraine, let contract building 2 story, 120 x 216 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, here, to Evenson & Utterberg, Builders' Exch., Minneapolis, $134,890.

★Neb., Omaha—Salesroom, etc.—Western Motor Car Co., 2047 Farnum St., let contract building 6 story, 132 x 136 ft., steel and concrete salesroom and warehouse, on Farnum St., between 30th and 31st Sts., to G. W. Stiles Constr. Co., Lumber Exch. Bldg., Chicago, $335,000.

★Mo., Joplin—Y. M. C. A., Calumet Bldg., let contract for 5 story, 103 x 129 ft. brick, steel and rein-con. building, rein.-con. flooring, concrete foundation on 5th Ave. and Wall St., to Eberhardt Constr. Co., Salina, Kan., $169,600. Noted Mar. 27.

★Tex., Ft. Worth—Office—W. T. Waggoner, [illegible]st Natl. Bank Bldg., let contract buildi[illegible] 20-story, 75 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on 8th and Houston Sts., to C. S. Lambie Co., 312 Tramway Bldg., Denver, Colo. Noted Feb. 27.

★Okla., Drumright—High School—Bd. Educ. let contract building 1 story, brick and stone, to A. F. Stewart Constr. Co., 2230 West 16th St., Oklahoma, $209,760. Noted Feb. 13.

★Okla., Oklahoma—Arts—Oklahoma State Fair Assn. let contract constructing 1-story, 200 x 200 ft. liberal arts building, at state fair grounds, to Gross Constr. Co., 132½ West 2nd St. About $90,000.

★Colo., Center—School—Bd. Educ. let contract building 2 story, 60 x 275 ft., brick and concrete, rein.-con. flooring, concrete foundation, to J. J. Cooke, Advance Constr. Co., 1601 East 25th Ave., Denver, $71,875. Noted Feb. 27.

★Ore., Portland—Apartment Hotel—Universal Orchard Co., Pittock Blk., let contract building 4-story, 100 x 100 ft. brick, on 3rd and Montgomery Sts., to Bingham & McClelland, Pittock Blk. About $125,000.

Federal Government Work

PROPOSED WORK

Me., Caribou—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 9.

Me., Ft. Fairfield—Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 13, same being in excess of appropriation. Noted Jan. 16.

Mass., Newburyport—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Mass., Southbridge—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

Mass., Winchester—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 16, same being in excess of appropriation. Noted Jan. 23.

R. I., Newport—Emergency Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed project indefinitely; Spec. 3750. Noted Feb. 13.

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Jan. 23.

N. Y., Ward's Island—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3849. About $20,000.

N. Y., Waterloo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

N. J., Vineland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 10, same being in excess of appropriation. Noted Jan. 16.

N. J., Woodbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 7, same being in excess of appropriation. Noted Jan. 16.

Pa., Ft. Mifflin—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3848. About $16,000.

Pa., Franklin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Jan. 23.

Federal Government Work (Continued)

Pa., McKees Rocks—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D C., rejected all bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

Pa., Phila.—Marine Railway—U. S. Eng. Office, 815 Witherspoon Bldg., soon receives bids building 192 ft. marine railway, 52 ft. wide, on Delaware River.

Pa., State College—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 9, same being in excess of appropriation. Noted Jan. 16.

Md., Indianhead—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build county roads; Spec. 3850. About $67,500.

Va., Front Royal—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 10, same being in excess of appropriation. Noted Jan. 16.

Va., Hampton Roads—Medical Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed project indefinitely; Spec. 3462. Noted Sept. 26.

Va., Lorton — Institution Buildings — Dist. Comrs., Dist. Bldg., Wash., D. C., plan to build thirty-one 1 story brick buildings, concrete floors, ranging in size from 25 x 125 ft. to 40 x 125 ft. Materials used as far as possible will be those manufactured by inmates of institution on reservation.

W. Va., Charleston—Roof—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at ordnance plant; Spec. 3840. About $47,300.

W. Va., Charleston—Roof Decks—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build gypsum roof decks at naval ordnance plant; Spec. 3839. About $169.-000.

S. C., Charleston—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build fixed ammunition storehouse; Spec. 3842. About $52,000.

S. C., Lancaster—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 9.

Fla., Key West—Oil Burning Equipment —Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase oil burning equipment for boiler; Spec. 3847. About $6500.

O., Kenton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 15, same being in excess of appropriation. Noted Jan. 23.

Ill., Mt. Carmel—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Ia., Cherokee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D C., rejected all bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt, treas. dept., Wash., D. C., rejected all bids received Jan. 15, same being in excess of appropriation. Noted Jan. 23

Wyo., Buffalo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Dec. 5.

Wyo., Cody—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

Mo., Harrisonville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 20, same being in excess of appropriation. Noted Jan. 23.

Ark., Prescott—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

Tex., North Ft. Worth — Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected all bids received Feb. 24, installing here; Spec. 3577. Noted Feb. 27.

Tex., Orange—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected bids received Jan. 9, same being in excess of appropriation. Noted Jan. 16.

Okla., Shawnee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 16, same being in excess of appropriation. Noted Jan. 23.

Utah, Park City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Ariz., Globe—Post Office and Court House J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 13, same being in excess of appropriation. Noted Jan. 16.

Wash., Puget Sound (Bremerton P. O.)—Reciprocating Air Compressor — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3837. About $62,000.

Ore., Portland—Road Work—L. I. Hewes, dist. engr., bureau pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., soon receives bids building and improving Sect. 2, Canyonville-Galesville Natl. Forest Rd. in Umpqua Natl. Forest, Douglas Co. Work involves 60,000 cu.yd. excav., 10 pipe or concrete culverts, 2 acres clearing and grubbing and 4000 lin.ft. guard rail.

Cal., Bakersfield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 30.

Cal., Mare Island—Structural Shop—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected all bids building structural shop; Spec. 3691. Noted Mar. 13.

BIDS DESIRED

N. H., Portsmouth—Building Addition—Until **Apr. 14,** by Bureau Yards & Docks, Navy Dept., Wash., D. C., building addition to building No. 42 for spar shop; Spec. 3799. About $72,000; $10 deposit required for plans and spec.

Mass., Boston—Wharf—Until May 1, by Light House Supt., rebuilding wharf at light house depot, Woods Hole.

Mass., Chatham—Septic Tank, etc.—Until Apr. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building septic tank, sewage disposal system, and grading streets; Spec. 3841. About $75,000.

R. I., Providence—Remodeling Post Office—Until Apr. 8, (change of date) by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., remodeling post office. Noted Feb. 27.

N. Y., Buffalo—Drilling Plant, etc.—Until Apr. 16, by U. S Eng. Office, Buffalo, hiring a rock drilling plant and dredging in Buffalo River Entrance Channel, Buffalo Harbor; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 29, by U. S. Eng. Office, 601 Army Bldg., New York City., dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 28, by U. S. Eng. Office, 601 Army Bldg., New York City, dredging in Staten Island Sound, New York and New Jersey; advertised in this issue.

N. Y., Wards Island—Electric Conduit and Switchboard—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3819. About $7500. Noted Feb. 27.

N. Y., West Point—Officers' Quarters—Until Apr. 28, by Quartermaster, West Point, building quarters for 8 married officers; advertised in this issue.

Pa., Erie—Post Office and Court House—Until Apr. 21, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., for alterations here; advertised in this issue.

Pa., Phila.—Gasoline Supply System—Until **Apr. 14,** by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3734. About $12,000; $10 deposit required for plans and spec. Noted Mar. 20.

Wash., D. C.—Sewage Disposal System—Until Apr. 21, by Dist. Comrs., Dist. Bldg., Wash., building substructure for Rock Creek Pumping Sta.

Fla., Jacksonville—Dredging—Until May 3, by U. S. Eng. Office, Jacksonville, dredging in Miami Harbor (Biscayne Bay); advertised in this issue.

Tenn., Memphis—Towboat—Until Apr. 25, by Mississippi River Comn., 1st and 2nd Dists., Custom House, Memphis, furnishing stern wheel steel towboat; advertised in this issue.

O., Lorain—Paving—Until Apr. 11, by R. W. Pratt, 814 Hippodrome Bldg., Cleveland, local project engr. for U. S. Shipping Bd., Emergency Fleet Corp., for 27,000 sq.-yd. concrete paving; advertised in this issue.

Mo., St. Louis—Levee Work—Until Apr. 30, by Secy. Mississippi River Comn., 1311 International Life Bldg., for 200,000 cu.yd. earth work by hydraulic method in Muscatine-Louisa Island Levee Dist., Ia.; advertised in this issue.

Tex., Galveston—Soil and Sod—Until Apr. 23, by U. S. Eng. Office, Galveston, furnishing and placing soil and sod at U. S. Reservation, Ft. Crockett; advertised in this issue.

Cal., Mare Island—Steel—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., furnishing steel for structural shop; Spec. 3838. About $700,000.

Cal., Sacramento—Dredging—Until Apr. 12, by U. S. Eng. Office, 405 Custom House, San Francisco, dredging Sacramento, San Joaquin, Feather and Mokelume Rivers, McLeod Lake, Mormon Channel, etc. Work involves over 600,000 cu.yd. floating dredge work in Sacramento River near here.

Cal., San Francisco — Dredging—Until Apr. 24, by U. S. Eng. Office, 401 Custom House, dredging in Oakland Harbor.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Mass., Boston — Cranes — Bureau of Yards & Docks, Navy Dept., Wash., D. C., let contract installing 10 electric traveling cranes in steel stock storage shed, to Bedford Fdry. & Machine Co., 1107 5th St., Bedford, Ind.; $8890 (120 days). Noted Mar. 13.

R. I., Newport — Boathouse — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building boathouse at Naval Torpedo Sta.,

(1) net price and time for work, complete, in accordance with drawings and specification, based on using granite for entire depth of foundations;

(2) net price and time to be added to or deducted from (1) if foundations be constructed of concrete in lieu of granite, as specified in alternative (1);

(3) net price and time to be deducted from (1) if all work specified under head of "Crane" be omitted entirely, from

Harris Structural Steel Co., 1480 Bway., New York City, (1) $99,000, (48 days); (2) deduct $5000; (3) deduct $9700.

C. Meades & Co., 38 Park Row, New York City, $113,200 (time as specified, for work complete).

Hyde & Baxter, 711 13th St., N. W., Wash., D. C., (1) $128,841 (150 days; (2) deduct $14,000; (3) deduct $11,000.

Niles-Bement-Pond Co., 111 Bway, New York City, $9800 (120 days), for cranes only. Noted Mar. 20.

R. I., Newport—Quay, Wall, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building concrete quay wall and fill at Naval Training Sta.,

(1) net price and time for entire work complete in accordance with drawings and specifications;

(2) net price to be added to or deducted from (1) for each linear foot of pile in excess of or less than 50 ft. under section "C-C" of wall;

(3) net price to be added to or deducted from (1) for each linear foot of pile in excess of or less than 20 ft. under section "D-D" of wall;

(4) net price to be added to (1) for each test pile driven

(5) net price to be deducted from (1) for each test used in finished structure, from Hyde & Baxter, 711 13th St., N. W., Wash., D. C., (1) $105,329 (150 days), (2) add $0.65, deduct $0.30; (3) add $0.60, deduct $0.30; (4) add $0.60, deduct $0.15. W. L. Miller & Co., 171 Alfred St., Boston, Mass., (1) $137,943 (140 days); (2) $0.30, (3) $0.20, (4) $35, (5) $12. Raymond Concrete Pile Co., 140 Cedar St., New York City, (1) $139,000 (150 days); (2) add $0.60, deduct $0.05; (3) add $60, deduct $0.05; (4) $100, (5) $15; alternate under (1) $129,000 (150 days). Noted Mar. 20.

R. I., Newport—Water Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., received Bids Mar. 24, erecting one 2,300,-000 gal. steel water tank at Naval Training Sta. (work complete) from Pittsburg Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $11,760 (45 days); Mansfield & Savage, 135 William St., New York City, $17,752 (45 days); C. Meades & Co., 38 Park Row, New York City, $18,230 (45 days). Noted Mar. 20.

Federal Government Work (Continued)

N. Y., Albany—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C. received bids Mar. 27, altering post office and courthouse, from McCann Bldg. Co., 68 State St., $24,790 (90 days); J. Miles & Sons, Worcester, $24,890 (120 days); P. Keeler, 425 Orange St., $28,682 (135 days). Noted Mar. 13.

N. Y., Ft. Lafayette—Dredging—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, dredging here and disposing of material in accordance with drawings and specifications, from Auten Engr. & Contg. Co., 29 B'way., New York City, $0.82 (75 days); N. J. Shipbuilding & Dredging Co., foot of East 28th St., Bayonne, N. J., $39,000 (lump sum) (40-50 days.) Noted Mar. 20.

★**Pa., Phila.—Dredging** — U. S. Eng. Office, Witherspoon Bldg., let contract dredging in Delaware River, Philadelphia Harbor and New Castle, Reedy, Baker and Liston light house ranges, Sect. 1, to Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, $0.4775 per cu.yd.; Amer. Dredging Co., Mariner & Merchant Bldg., (2) $0.218 (3) $0.184 (4) $0.21 per cu.yd.; Maryland Dredge & Contg. Co., Fidelity Bldg., Baltimore, Md., (7) $0.25 (8) $0.25 (9) $0.25 per cu.yd.; Morris & Cummings Dredging Co., 17 State St., New York City, (10) $0.33 per cu.yd. Noted Mar. 20.

★**Md., Annapolis**—Seamanship and Navigation Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at U. S. Naval Academy, here, to Levering & Garrigues, 552 West 23rd St., New York City, $662,692 (270 days). Noted Mar. 20.

★**Md., Baltimore**—Foundation and Rip Rap—Lighthouse Inspector let contract building concrete foundation at Tangier Sound Light Sta., Va., to Newport Contg. & Eng. Co., Silsby Bldg., Newport News, Va., $23,750. Noted Jan. 16.

Md., Indianhead — Incinerator — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 24, building at Naval Proving Ground, (1) price and time (work complete) basing proposal on covering upper walls and roof with galvanized corrugated sheet steel (2) amount added to or deducted from (1) if asbestos protected metal is substituted for galvanized sheet steel on walls and roof, from Borge Incinerator Corp., 1216 Flatiron Bldg., New York City, (1) $6996 (60 days) (2) $648; Sparks Inflammatory Constr. Co., 269 Walnut St., Memphis, Tenn., (1) 5 ton crane, $8633 (60 days) (2) 10 ton crane, $10,140 (60 days); Morse Boulger Destructor Co., 39 Courtland St., New York City, (1) steel stack, $8190 (75 days) iron stack, $8261 (2) add $480. Noted Mar. 13.

★**D. C., Wash.**—Grading—Dist. Comrs., Dist. Bldg., let contract grading and improving streets, roads and avenues, to Continental Contg. Co., 66 Knickerbocker Bldg., Baltimore, Md., $100,000.

★**D. C., Wash.**—Headhouse and Sheds—Dist. Comrs., Dist. Bldg., let contract building 2 story, to W. E. Mooney, Evans Bldg., $50,000. Noted Feb. 27.

★**D. C., Wash.**—Paving—Dist. Comrs., Dist. Bldg., let contract laying Class B asphalt pavement where necessary (during fiscal year ending June 30, 1919) to Cranford Paving Co., 2620 East St., N. W., $100,000. Noted Mar. 13.

★**D. C., Wash.**—Sidewalks—Dist. Comrs., Dist. Bldg., let contract laying cement sidewalks for year ending June 30, 1919, to W. F. Brenizer Co., 101 New York Ave., N. E., $64,000.

D. C., Wash.—Swimming Pools—Dist. Comrs., Dist. Bldg., received bids Mar. 24, building swimming pools at (1) Cardozo Playground, 1st and H Sts., S. W. (2) at Reservation 126, on Virginia Ave. and 10th Sts., S. W., from Carlton Co., Inc., Longacre Bldg., New York City, (1) $11,989 (2) $12,685; S. R. Harris, 2306 1st St. N. W., (1) $9824 (2) $10,412; W. F. Cush, 3rd and R. Sts., N. E., (1) $16,851 (2) $16,506; R. K. Stewart & Son, Farmville, Va., (1) $9650 (2) $10,150. Noted Mar. 20.

Va., Alexandria—Cranes—Bureau Yards & Docks, Navy Dept., received bids Mar. 31, installing 6 "I" beam electric traveling cranes at Naval Assembly plant,

(1) net price and time for 6 cranes complete in accordance with drawings and specification;

(2) net price and time for 6 cranes complete, in accordance with drawings and intent of this specification, but with such modifications as bidder may desire to make. Bids on this item shall be accompanied by complete and detail description and specifications showing wherein bidder's specification differs from this specification, from

Manning, Maxwell & Moore, 119 West 40th St., New York City, (2) $9010 (50 days).

Cameron Eng. Co., East Stroudsburg, Pa., (2) $7760 (90 days).

Euclid Crane & Hoist Co., Chardon Rd., Euclid, O., (1) $9190 (90 days).

Niles-Bement-Pond Co., 111 Bway, New York City, (1) $12,830 (90 days).

Pawling Harnischfeger, 38th St. and National Ave., Milwaukee, Wis., (2) $11,160 (90 days). Noted Mar. 20.

★**S. C., Paris Island**—Extension to Fresh Water System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to G. E. Eng. Co., 417 Canal St., New York City, $10,590 (75 days). Noted Mar. 13.

★**Fla., Pensacola**—Boat Shed and Basin—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to Newport Eng. & Contg. Co., Law Bldg., Newport News, Va., $47,100 (120 days). Noted Mar. 6.

Fla., Pensacola—Power Plant Improvements—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building at Naval Air Sta.,

(1) net price and time for work, complete, in accordance with drawings and specification;

(2) net reduction in price and time from (1) for omitting provision and installation of feed water heater and its connections;

(3) net reduction in price and time from (1) for omitting provision and installation of 250 gal. per minute circulating pump and its piping and electrical connections;

(4) net reduction in price and time from (1) for omitting feed water meter and its connections, from

Carroll Electric Co., 714 12th St., N. W., Wash., D. C., (1) $54,500 (150 days); (2) $1500; (3) $500; (4) $1000.

Lord Constr Co., 105 West 40th St., New York City, (1) $69,467 (135 days), (2) $1284; (3) $936; (4) $845.

J. W. Danforth Co., 72 Ellicott St., Buffalo, N. Y., (1) $69,990 (150 days); (2) $2000; (3) $735; (4) $1000. Noted Mar. 13.

O., Akron—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids altering post office, from W. MacDonald Constr. Co., St. Louis, Mo., $10,165; W. Grohne Co., Joliet, Ill., $10,736; S. D. Brady, Trust Bldg., Franklin, Pa., $19,443. Noted Mar. 6.

Mont., Great Falls—Roads—Bureau Pub. Rds., Missoula, received bids building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co., from White & Brown, Great Falls, $103,488; Rich & Markhus, Prosser, $108,398; Tupper, Renshaw & Wall, Roundup,

Tex., Point Isabel—Radio Buildings—Pub. Wks. Officer received bids Mar. 22, building at St. Joseph, from Eagle Pass Lumber Co., Brownsville, (1) $18,293 deduct $370 if not painted (120 days); H. L. Fitch, 8th and Railroad Sts., Brownsville, (1) $20,739 (2) $18,640 (3) $320; J. McCoy, Monroe and 10th Sts., Brownsville, (1) $16,844 (100 days); Krahl Constr. Co., 350 North Clark St., Chicago, (1) $28,279 (85 days) (2) $22,995 (3) deduct $200 (4) $3491 (5) $1793.

Okla., Woodward — Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C, received bids Mar. 19, (1) limestone (2) sandstone, from C. E. Goodhand, Chadron, Neb. (1) $95,000; Henry & Hatfield Constr. Co., Indianapolis, Ind., (1) $98,206 (2) $99,405; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., (1) $102,450. Noted Feb. 20.

Cal., Mare Island—Fuel Oil Storage Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 24, building storage plant.

(1) 43,830 cu.yd. excav., including back fill and grading, item includes clearing of sites, excavation, back fill, and grading for following items: concrete oil-storage reservoirs, pump well at storage reservoirs, and connecting tunnel between reservoirs and pump well.

(1a) 730 cu.yd. grading crest of hill, item includes excavation and grading required to remove crest of hill between steel tanks.

(2) 4200 cu.yd. 1:2:4 concrete, item includes concrete work for rein.-con. fuel-oil reservoirs and the pump well.

(3) 450,300 lb. reinforcement, item includes reinforcing material required for reinforced concrete covered by (2).

(4) miscellaneous metal work, item includes ventilators and manholes for reservoirs, ladders in reservoirs, pipe-coil supports in reservoirs, and all other miscellaneous metal work in reservoirs not otherwise specified.,

(5) buildings, item includes excavation, filling and grading, and materials and construction for following: boiler house, heater house on wharf, house over pump well, pits for valves, expansion bends and joints, two sludge pits, and foundations for steel residue tank.

(6) mechanical and electrical equipment; item includes equipment for boiler house, pump well, heater house on wharf, steel residue tank, and all other mechanical and electrical equipment not covered by other items and necessary for completed plant whether or not shown on drawings or mentioned in this specification.

(7) Piping: item includes excavation and back fill for and provision and installation of all water, steam, exhaust, oil, and drip piping, except piping in the boiler house; foam solution piping inside reservoirs including standpipes and terra cotta drain piping, all as shown or indicated on drawings, or necessary for the complete installation.

(8) piping in boiler houses, item includes all steam, exhaust, drip, water, boiler feed, oil and blow-off piping and accessories in the boiler house, other than special fittings in piping in connection with mechanical equipment, which shall be covered by (6).

(9) lighting and power; item includes transformers, wiring, piles, fixtures, and accessories for lighting and power systems, complete in every respect, omitting all wiring and fixtures in connection with foam fire protection system.

(10) tests; these include testing of pumping plant and heating system.

(11) gravity foam fire protection system, item includes entire gravity foam system complete including steam and water lines up to tanks, electric control system and all piping and special valves. Bids on this item shall be divided as indicated on special offer sheet.

(12) amount deducted from (6), if one 1000 gal. pump and turbine is omitted from pump well, leaving blanked connections for its future installation,

(13) amount deducted from (6), if one 1000 gal. pump and turbine is omitted from wharf, leaving blanked connections for its future installation,

(14) amount deducted from (9), if all outside lighting is omitted, from

Carroll Electric Co., 714 12th St., Wash., D. C., (1) $.75; (1a) $2.00; (2) $16.00; (3) $.08 (4) $4.200; (5) $48,600; (6) $30,000; (7) $107,000; (8) $500; (9) $5200; (10) $2000; (11) $50,000; (11a) $23,000; (11b) $10,000; (11c) $2400; (11d) $14,000; (11e) $600; (14) $2500. 210 days.

Lindgren & Co., Monadnock Bldg., San Francisco, (1) $1.27; (1a) $.60; (2) $18.50; (3) $5.95; (4) $2500; (5) $34,919; (5a) $.50; (6) $93,430; (7) $110,606; (8) $9450; (9) $7340; (10) $1500; (11) $37,630; (11a) $8180; (11b) $9200; (11c) $7750; (11d) $12,000; (12) $15,200; (13) $14,700; (14) $3000. 210 days.

C. Moore & Co., Shelden Bldg., San Francisco, (1) $.93; (1a) $.63; (2) $17.01; (3) $.0567; (4) $2400; (5) $30,923; (5a) $.36; (6) $110,970; (7) $107,156; (8) $6228; (9) $7630; (10) $1417; (11) $36,140; (11a) $8502; (11b) $17,993; (11d) $1443; (11) $7984; (11e) $218; (12) $14,835; (13) $14,178; (14) $1100. 210 days.

J. W. Danforth Co., 72 Ellicott St., Buffalo, N. Y., (1) .92; (1a) $.10; (2) $16.65; (3) $.053; (4) $2100; (5) $33,172; (5a) Add $ 33-$.22. Dect. (7) $114,000; (8) $10,000; (9) $6900; (10) $1500; (11) $43,448; (11a) $7255; (11b) $21,450; (11c) $2233; (11e) $250; (12) $16,145; (13) $15,025; (14) $3300. 210 days.

Lange & Bergstrom, Sharon Bldg., San Francisco, (1) $1.25 (1a) $1.25 (2) $16 (3) $6.25 (4)$2000 (5) $37,100 (5a) add $.45 deduct $.23 (6)$94,000 (7) $92,100 (8) $8500 (9) $9000 (10) $1000 (11) $40,000 (11a) $88,000 (11b) $22,000 (11c) $1400 (11d) $7500 (11e) $300 (12) $15,878 (13) $15,131 (14) $3100 (210 days).

Almiral & Co., 1 Dominick St., New York City, (1) $1.12 (1a) $.89 (2) $16.43 (3) $.056 (4) $1979 (5) $32,784 (5a) under 40 ft., $.24 over 40 ft., $.42 (6) $98,925 (7) $98,955 (8) $9757 (9) $9102 (10) $1069 (11) $36,587 (11a) $8935 (11b) $14,172 (11c) $1819 (11d) $11,186 (11e) $275 (12) $16,400 (13) $15,858 (14) $3360 (270 days). Noted Mar. 13.

★**Cal., San Diego**—Gasoline Storage and Supply System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to T. Havery Co., 517 South Los Angeles St., Los Angeles, $15,875 (60 days). Noted Feb. 6.

Miscellaneous

PROPOSED WORK

Broken Stone, etc.—New York, N. Y.—C. D. Van Name, pres. Richmond Boro., rejected bids received Mar. 11 furnishing and delivering 800 cu.yd., 1½ in. broken stone, 300 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 1; 1900 cu.yd. 1½ in. broken stone, 750 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 2; 1250 cu.yd. 1½ broken stone, 550 cu.yd. screenings and 60 cu.yd. ¾ in. broken stone of trap rock in Dist. 3. Noted Mar. 13.

Garbage Disposal Plant — Rochester, N. Y.—City plans to build and equip garbage disposal plant. Cobwell Corp. will install $300,000 equipment and run plant if city will furnish building and site.

Paving Materials—Rochester, N. Y.—Bd. Contr. & Supply soon receives bids furnishing 4500 tons asphalt material and 2000 tons crushed stone for road repair work. A. C. Poole, city engr.

Monument—Hoboken, N. J.—City plans to build soldiers and sailors monument in Elysian Park on 11th and Hudson Sts. About $40,000.

Docks and Port—Jersey City, N. J.—City plans to purchase 100 acres of land on Hackensack River between Bayonne Line and Newark and New York branch of Central R. R. of N. J. and with land already owned will build docks and port. Work involves 400,000 cu.yd. fill.

Pipe, etc.—Richmond, Va.—Dept. Pub. Wks. soon lets contract furnishing and delivering vitr. pipe, c.i. frames and covers, stakes, hubs, etc. C. E. Bolling, dir.

Jetties—Sebastian, Fla.—St. Lucie and Broward Counties plan election to vote on $50,000 bonds to build jetties on Sebastian inlet.

Earthwork—Bellevue, O.—Dir. Pub. Serv. receives bids about May, for new reservoir to have 1,000,000 gal. capacity (earthwork only). About $135,000. W. G. Clark, 1047 Spitzer Bldg., Toledo, engr.

Dock—Manitowoc, Wis.—Eastern Wisconsin Electric Co., 428 North 8th St., Sheboygan, plans to tear down old coal dock here and build modern structure. About $150,000. Kelsey Brewer Co., La Crosse, engrs.

Pavilion—Iowa City, Ia.—Iowa City Stock Pavilion Assn., c/o W. Casey, plans to build stock pavilion. About $15,000.

Dock, St. Louis, Mo.—Denero Realty & Mfg. Co., 6900 South Bway., soon receives bids building river dock and addition to farm tractor manufacturing plant. About $150,000. Address C. E. Hayden, 3400 Maury Ave.

Wharves and Docks—Orange, Tex.—City plans to build wharves and docks. Bonds for $150,000 voted for project. Noted Jan. 2.

Monument—Oklahoma, Okla.—State Legislature appropriated $50,000 to build memorial monument on capitol grounds here.

Channel—Kelso, Wash. — Cowlitz Co., (Kalama) and State Highway Comn., Capitol, Olympia, plan to cut channel in Lewis River at Robinson Bend and close old channel. State appropriated $10,000 toward cost. A. Cramer, co. engr.

Gantry Crane — Seattle, Wash. — Port Com. of Port of Seattle Bell St. Warehouse, Bell St., rejected all bids received Feb. 18, furnishing and installing gantry crane, Smiths Cove Impvt. Pier B. Noted Feb. 27.

Pier Extension—Astoria, Ore.—Port of Astoria plans to build 300 ft. extension to Pier 1, to provide uniform entrance facade with space above for offices. R. R. Bartlett, engr.

Bulkheads—Marshfield, Ore.—Port of Coos Bay Comrs. having preliminary plans prepared building several bulkheads in upper Coos Bay; also dredging 18 ft. channel between Smith's mill and bar.

Tanks—Pendleton, Ore.—See "Industrial Works."

Drydock—Portland, Ore.—Pub. Dock Comn. plans to build 12,000 ton drydock. About $1,250,000. G. B. Hegardt, ch. engr.

Tunnel—Portland, Ore.—City considering plans for tunnel through Council Crest connecting Tualitin Valley with city. Cost between $1,500,000 and $2,000,000. O. Laurgaard, city engr.

Dam—Cal., Modesto—Modesto and Turlock Irrigation Dists. plan election to vote on $3,439,000 bonds for Don Pedro Dam project. Plans include construction of concrete arch dam, 279 ft. high, 177 ft. wide, 4 mi. above La Grande dam, cost, $2,787,000; 8 mi. railway from Rosasco to dam site, $93,000; building hydroelectric plant to develop 18,000 h.p. or 12,000 k.w., $609,000. Noted Jan. 30.

Amusement Pier — Seaside, Ore. — City having plans prepared by G. W. Boschke, city engr., for concrete and timber amusement pier, 2000 ft. long, 100 ft. wide, on Bway. St. extending into ocean. About $65,000.

Park Improvements—Edmonton, Alta.—City plans to improve parks to include pavilion and swimming pools. About $30,000.

BIDS DESIRED

Paving Materials—Providence, R. I.—Until Apr. 11, by State Bd. Pub. Wks., State House, furnishing and delivering 90,000 gal. asphalt in wooden barrels or metal drums.; advertised in this issue.

Culverts—Lockport, N. Y.—Until Apr. 11, by L. Nixon, supt. pub. wks., Capitol, Albany, building concrete culvert over Eighteen Mile Creek, Niagara Co. About $10,805. Work involves 3500 cu.yd. excav., 13,000 ft. sheathing 3500 cu.yd. forming embankments, 490 cu.yd. concrete, 16,000 lb. steel reinforcement, etc.

Freight Shed—New York, N. Y.—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, building barge canal terminal freight shed on Pier 93, West 53rd St., North River, Contr. 218 Work involves 366,000 lb. structural steel, 1635 sq.ft. solid metal windows, 6580 sq.ft. corrugated metal siding, 3980 sq.ft. flashings, 14,060 sq.ft. roof covering, etc. About $53,969; advertised in this issue.

Sanitary Work—Willard, N. Y.—Until Apr. 9, by State Hospital Comn., Capitol, Albany, for chlorinating plant at Willard State Hospital here; advertised in this issue.

Paving Material — Maplewood, (South Orange P. O.), N. J.—Until Apr. 11, by Twp. Com. of South Orange, here, furnishing 500 tons 1½ in. and 1000 tons, ¾ in. traprock and 1000 tons screenings. E. R. Halsey, 164 Market St., Newark, engr.

Crushed Stone, etc.—Wilmington, Del.—Until Apr. 8, by Pres. Levy Court, County Bldg., furnishing crushed stone, gravel, slag, road tar and oils, asphalt, etc., f.o.b. at plant and at different railroad stations in county; for sweeping and applying road tar and asphalts; hauling crushed stone, gravel and slag from railroad stations to different roads. C. E. Grubb, co. engr.; advertised in this issue.

Conduits, etc. — Baltimore, Md. — Until Apr. 9, by R. Gwinn, city register, furnishing 100,000 ft. single duct conduit and 100,000 ft. special duct pipe and bends.

Levee—Port Allen, La.—Until Apr. 21, by Bd. State Engrs., 213-215 New Orleans Court Bldg., New Orleans, building part of Port Barre South Levee, in Parish of St. Martin, extending from embankment of Baton Rouge Branch of Southern Pacific R. R. to lower side of Cypremort Bay. Work involves about 400,000 cu.yd. earth embankment. T. G. Erwin, secy.

Mixer, etc.—Detroit, Mich.—Until Apr. 8, by Bd. Water Comrs., 232 Jefferson Ave., furnishing one batch concrete mixer, 1-3 yd. capacity with charging hopper, one stone crusher, mounted on truck with or without elevator, one power hammer suitable for forging iron up to 3 in. diam.

Pipe, etc.—Detroit, Mich.—Until Apr. 15, by Bd. Water Comrs. 232 Jefferson Ave., furnishing one hundred fifty 4 in. gate valves, c.i. suction elbows, 54 in. diam., 15 ft. high, and 1200 ft. 36 in. Class C. [illegible] water pipe.

Pipe, etc., Kansas City, Mo.—Until Apr. 9, by J. R. Samuel, city purch. agt., for manufacture and delivery f.o.b. cars in Kansas City, Kans., on such railroad switches as Bd. Fire & Water Comrs. may designate, and furnishing and laying 8000 lin.ft. 48 in. steel pipes and specials; 8000 lin.ft. 48 in. concrete pipe and special and 8000 lin.ft. 48 in. wood pipe and specials; advertised in this issue.

Road Oil—Winnipeg, Man.—Until Apr. 8, by C. J. Brown, city clk., furnishing 5 to 10 tank cars road oil of 40% and 60% asphaltic base (paraffin base will not be considered).

PRICES AND CONTRACTS AWARDED

(★Indicates Award of Contract)

★Dam, etc.—New Haven, Conn.—City let contract building rein.-con. dam and retaining walls on West River, south of Congress Ave., to C. W. Blakeslee Co., 58 Waverly St., $41,124. Work involves 23 ft. abutments on either side of river, 7 ft. wide to include concrete pier in center of river, etc. Noted Mar. 20.

Conduits, Cables, etc.—New York, N. Y.—Fire Dept. received bids Mar. 31, furnishing, delivering and installing conduits, cables, etc., at Transverse No. 2, Central Park, from Bates Co., 2 Rector St., $40,207; Croker Natl. Fire Prevention Eng. Co., 1270 Bway., $41,225. Noted Mar. 13.

Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ. received bids installing heating and ventilating apparatus in P. S. 40, from D. J. Rice, 42nd St. and Lexington Ave., $62,173; Gillis & Geoghegan, 537 West Bway., $66,478; Teran, Mahaney, Monroe, Grand Central Terminal, $67,300.

★Paving Blocks—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering 630,000 granite paving blocks, to W. J. Fitzgerald, 547 West 45th St., $13,860. Noted Mar. 27.

Rebuilding Crib Bulkhead—New York, N. Y.—Park Bd. received bids Mar. 27, rebuilding upper portion of crib bulkhead along water front of Thomas Jefferson Park, between 111th and 114th Sts., from P. J. Kerns, 2306 Creston Ave., $15,830; I. J. Stander & Co., 118 East 28th St., $15,980; F. Gradwohl Eng. & Contg. Co., 280 Madison Ave., $16,168. Noted Mar. 20.

★Structural Steel—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., received bids erecting structural steel on Sect. 2, Routes 19 and 22, 7th Ave.-Lexington Ave. Rapid Transit R. R., from O. Daniels, Woolworth Bldg., $583,125; Terry & Tench, Grand Central Terminal, $586,700; Snare & Triest, Woolworth Bldg., 695,473. Noted Mar. 20.

Pipe—Johnstown, Pa.—See "Streets & Roads."

Column Foundations — Phila., Pa.—W. S. Twining, dir. dept. city transit, Mershon Bldg., 1211 Chestnut St., received lowest bids Mar. 25 building 68 concrete column foundations on Front St., from above Arch St., to Callowhill St., on Frankford Elevated Ry., from Brown-King Constr. Co., Commercial Trust Bldg., $29,800; I. K. Davis Co., 20th and Spencer Sts., $32,900; Keystone State Constr. Co., Franklin Bank Bldg., $36,900. Noted Mar. 13.

★Wharf, etc.—Claiborne, Md.—See "Excavation and Dredging."

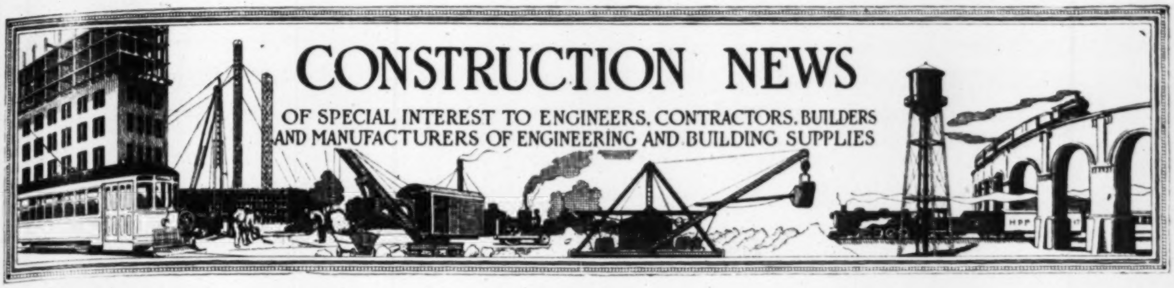
Paving Materials—Detroit, Mich.—Dept. Purchases & Supplies, 1302 Real Estate Exch. Bldg., received bids furnishing 75,000 bbls. Portland cement, (a) paper sack per bbl.; (b) cloth sack per bbl.; (c) in bulk per bbl., from Wabash Portland Cement Co., 1824 Ford Bldg., (a) $2.34; (b) $3.04; Huron Portland Cement Co., 1525 Ford Bldg., (a) $2.57; (b) $3.27; (c) $2.22; J. Calvert Sons, 6 McGraw Bldg., "Burt Brand", (a) $2.47; (b) $3.17; Parker Bros., 15 Atwater St., "Michigan Brand", (a) $2.52; (b) $3.22; Wyandotte Portland Cement Co., Wyandotte, (a) $2.47; (b) $3.17; (c) $2.12; 3000 sq.yd. creosoted blocks, (a) 3½ x 12 rect. blocks per sq.yd.; (b) 3½ x 16 rect. blocks; (c) 3½ x 12 lug; (d) 3½ x 16 lug, from Jennison-Wright Co., 2463 Bway., Toledo, O., (a) $2.09; (b) $2.21; (c) $2.19; (d) $2.31; Southern Wood Preserving Co., Ft. McPherson St., Atlanta, Ga., (a) $2.17; Republic Creosoting Co., 1614 Merchants Bank Bldg., Indianapolis, Ind., (a) $2.085; (b) $2.22; (c) $2.085; (d) $2.22; Compressed Wood Preserving Co., 4665 Spring Grove Ave., Cincinnati, O., (b) $2.30; 15,000 tons more or less, crushed stone ½ in., 1 in. and 2½ in. in size f.o.b. cars, from Solvay Process Co., Delray, $1.40 per ton; Dunbar Stone Co., [illegible] Rouge, $1.30 per ton; France Stone [illegible], Zug Island, $1.40 per ton. Noted Feb. 7 and 20th.

★Rip Rap—Galveston, Tex.—City let contract furnishing rip rap for sea wall, to Dittlinger Lime Co., New Branfels, $14,632.

★Dam—Junction, Utah—State Land Bd., Salt Lake let contract raising, enlarging and reinforcing Piute Dam, to Heiselt Constr. Co., Salt Lake City $59,105. Work involves 2500 cu.yd. earth excav., 100 cu.yd. rock excav., 83,000 cu.yd. earth fill and 165 cu.yd. mass concrete.

Piers—Jellicoe, Ont.—See "Railways, under Ontario."

Subway, Foundation, etc.—St. Boniface, Man.—Provencher Bridge Com. received bids Mar. 20, building steel superstructure for Water St. subway, from Dominion Bridge Co., Ltd., Canada Bldg., Winnipeg; substructure, from Progress Constr. Co., St. Boniface. Noted Mar. 6.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 11	Spencer, Pa.	Apr. 3
Apr. 14	Salem, N. J.	Apr. 3
Apr. 15	Duluth, Minn.	Mar. 13
Apr. 15	Freeport, O. Adv. Mar. 27 and Apr. 3.	Mar. 27
Apr. 18	Akron, O. Adv. Mar. 27 and Apr. 3.	Mar. 27
Apr. 18	Akron, O.	Apr. 10
Apr. 18	Bayonne, N. J. Adv. Apr. 10.	Apr. 10
Apr. 23	Kansas City, Mo. Adv. Apr. 3 and 10.	Apr. 3
Apr. 24	Benson, N. C. Adv. Apr. 3 and 10.	Apr. 10
Apr. 25	Akron, O. Adv. Apr. 3.	Apr. 3

SEWERS

Bids Close		See Eng. News-Record
Apr. 14	Pittston, Pa.	Apr. 10
Apr. 15	Roanoke, Va.	Apr. 3
Apr. 17	Pawtucket, R. I. Adv. Mar. 27 to Apr. 10.	Mar. 27
Apr. 21	Highland Park, N. J. Adv. Apr. 10.	Apr. 10
Apr. 21	Akron, O.	Apr. 10
Apr. 22	Cleveland, O.	Mar. 27
Apr. 22	Akron, O.	Apr. 10
Apr. 24	Chicago, Ill.	Apr. 10
Apr. 24	Coatesville, Pa. Adv. Apr. 10.	Apr. 10
Apr. 28	Flagstaff, Ariz.	Apr. 10
Apr. 30	West Roxbury, Mass.	Apr. 10
May 1	Duluth, Minn.	Apr. 3
May 6	Newark, N. J.	Apr. 3
May 6	Cleveland, O. Adv. Apr. 3 and 10.	Apr. 10

BRIDGES

Bids Close		See Eng. News-Record
Apr. 15	Copper Valley, Va.	Mar. 20
Apr. 15	Plainfield, N. J.	Apr. 3
Apr. 15	Rahway, N. J.	Apr. 3
Apr. 15	Elizabeth, N. J.	Apr. 3
Apr. 16	Ottawa, Ont.	Feb. 20
Apr. 16	Oshkosh, Wis. Adv. Apr. 10.	Apr. 10
Apr. 19	Marshall, Ill.	Apr. 3
Apr. 22	Kingston, N. Y. Adv. Mar. 20.	Mar. 20
Apr. 22	Toledo, O.	Mar. 27
Apr. 29	Franklin, Pa. Adv. Apr. 10.	Apr. 10
Apr. 29	Ottawa, Ont.	Apr. 10
May 5	Akron, O.	Apr. [illegible]

STREETS AND ROADS

Bids Close		See Eng. News-Record
Apr. 11	Pennsylvania Adv. Mar. 20 to Apr. 3.	Mar. 27
Apr. 12	Johnstown, Pa. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 12	Indiana	Apr. 3
Apr. 13	Columbus, O.	Apr. 3
Apr. 14	Johnson City, Tenn.	Mar. 20
Apr. 14	Tunica, Miss.	Mar. 20
Apr. 14	Minneapolis, Minn.	Mar. 27
Apr. 14	Lincoln, Neb.	Mar. 27
Apr. 14	Savannah, Ga.	Apr. 3
Apr. 14	Washington, Pa.	Apr. 3
Apr. 14	Worthington, Minn.	Apr. 10
Apr. 14	Louisana	Apr. 10
Apr. 14	Newark, N. J.	Apr. 10
Apr. 14	Port Huron, Mich.	Apr. 10
Apr. 15	New York, N. Y.	Apr. 10
Apr. 15	Little Rock, Ark.	Apr. 10
Apr. 15	Oregon	Apr. 10
Apr. 15	East Providence, R. I.	Apr. 10
Apr. 15	Billings, Mont.	Mar. 20
Apr. 15	Greenville, Miss. Adv. Mar. 20 to Apr. 3.	Mar. 13
Apr. 15	St. Louis, Mo.	Mar. 20
Apr. 15	Columbus, Neb.	Mar. 27
Apr. 15	Keyser, W. Va.	Mar. 27
Apr. 15	Pawtucket, R. I. Adv. Mar. 27 to Apr. 10.	Mar. 27
Apr. 15	Bronson, Fla.	Apr. 3
Apr. 15	Pittsburgh, Pa.	Apr. 3
Apr. 15	Keyser, W. Va.	Apr. 3
Apr. 15	Midland, Mich.	Apr. 3
Apr. 15	Fergus Falls, Minn.	Apr. 3
Apr. 15	Michigan	Apr. 10
Apr. 15	West Orange, N. J.	Apr. 10
Apr. 16	Wayne, Neb.	Mar. 27
Apr. 16	Rhode Island Adv. Apr. 3.	Apr. 3
Apr. 16	Pawtucket, R. I.	Apr. 10
Apr. 16	Akron, O.	Apr. 10
Apr. 17	Arkansas Adv. Apr. 3 and 10.	Apr. 3
Apr. 17	New York, N. Y.	Apr. 3
Apr. 17	Columbus, O.	Apr. 10
Apr. 17	Cohoes, N. Y. Adv. Apr. 3 and 10.	Apr. 10
Apr. 18	Savannah, Ga. Adv. Apr. 10.	Apr. 10
Apr. 18	Goldendale, Wash.	Apr. 3
Apr. 18	St. George, S. I., N. Y.	Apr. 10
Apr. 18	Ohio	Apr. 10
Apr. 18	Salem, S. D.	Apr. 10
Apr. 19	Strathroy, Ont.	Apr. 10
Apr. 19	Lincoln, Neb.	Apr. 10
Apr. 19	Gandy, Neb.	Mar. 27
Apr. 20	Terra Haute, Ind.	Apr. 3
Apr. 21	Wadena, Minn.	Apr. 10
Apr. 21	Indiana	Apr. 3
Apr. 21	New Iberia, La.	Apr. 3
Apr. 21	Tulsa, Okla.	Apr. 3
Apr. 21	Kent, Wash.	Apr. 3
Apr. 22	Spencer, W. Va.	Mar. 13
Apr. 22	Toledo, Ohio	Apr. 10
Apr. 22	Salem, N. J. Adv. Apr. 10.	Apr. 10
Apr. 22	Hartford, Conn.	Apr. 10
Apr. 22	Maryland Adv. Apr. 10.	Apr. 10
Apr. 22	Bellville, N. J.	Apr. 10
Apr. 22	Maryland	Apr. 10
Apr. 23	Baltimore, Md.	Apr. 10
Apr. 24	Illinois	Apr. 3
Apr. 24	New York, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 24	New Mexico	Apr. 3
Apr. 24	Auburn, Me. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 24	Dormont, Pa.	Apr. 10
Apr. 25	Rutherfordton, N. C.	Apr. 10
Apr. 25	Edenburg, Pa.	Apr. 10
Apr. 27	Pittsburgh, Pa.	Apr. 3
Apr. 30	Akron, O.	Apr. 10
Apr. 30	New York, N. Y.	Apr 10
May 2	Pennsylvania Adv. Apr. 10.	Apr. 10
May 5	North Dakota	Apr. 10
May 5	Worthington, Minn.	Apr. 10
May 7	Burlington, N. J.	Apr. 10
May 15	Plymouth, Wis.	Apr. 10
May 19	Merced, Cal.	Apr. 10
June 10	Clarksville, Pa.	Apr. 3
Apr. 24	New Holland, N. C.	Apr. 10
Apr. 29	New York, N. Y. Adv. Apr. 3.	Apr. 3
May 6	Paragould, Ark.	Apr. 3
May 14	Poplar Bluff, Mo.	Apr. 3
May 15	Mobile, Ala. Adv. Apr. 10.	Apr. 10

RAILWAYS

Bids Close		See Eng. News-Record
Apr. 15	British Columbia	Apr. 3
Apr. 15	Ontario	Apr. 10
Apr. 15	Pennsylvania Adv. Apr. 3 and 10.	Apr. 10

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Apr. 11	Bridgeport, Conn. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 15	Trenton, N. J. Adv. Mar. 20 to Apr. 10.	Mar. 27
Apr. 15	Ft. Dodge, Ia.	Apr. 3
Apr. 16	Spencer, Ia.	Apr. 3
Apr. 20	Albany, N. Y. Adv. Apr. 3 and 10.	Apr. 10
Apr. 22	Crowley, La. Adv. Mar. 27 to Apr. 10.	Apr. 3

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Apr. 10	Vancouver, Va.	Mar. 27
Apr. 12	New York, N. Y.	Apr. 3
Apr. 14	Brooklyn, N. Y.	Mar. 27
Apr. 15	Long Island City, N. Y.	Apr. 3
Apr. 15	New York, N. Y.	Apr. 10
Apr. 16	Providence, R. I.	Apr. 10
Apr. 16	Winnipeg, Man.	Mar. 27
Apr. 16	New Orleans, La.	Apr. 10
Apr. 16	Bellair, O.	Mar. 27
Apr. 18	Sheboygan, Wis.	Mar. 20
Apr. 22	Chippewa Falls, Wis.	Apr. 10
May 1	Brainerd, Minn.	Mar. 27
May 1	Joplin, Mo.	Apr. 3

BUILDINGS

Bids Close		See Eng. News-Record
Apr. 11	Cobleskill, N. Y	Apr. 3
Apr. 14	Superior, Wis.	Mar. 27
Apr. 15	Newark N. J.	Feb. 6
Apr. 15	Chisholm, Minn.	Mar. 27
Apr. 15	Buhl, Minn.	Mar. 27
Apr. 15	Memphis, Tenn.	Apr. 10
Apr. 15	Chicago, Ill.	Apr. 10
Apr. 15	New Orleans, La.	Apr. 10
Apr. 16	Weston, Ont.	Apr. 10
Apr. 16	New Haven, Conn.	Apr. 10
Apr. 16	St. Louis, Mo.	Apr. 10
Apr. 20	Hurley, S. D.	Apr. 10
Apr. 21	Albany, N. Y.	Mar. 27
Apr. 21	Moorhead, Minn.	Apr. 10
Apr. 22	Bovey, Minn.	Mar. 20
Apr. 22	St. Louis, Mo.	Apr. 10
Apr. 22	Quincy, Cal.	Apr. 3
Apr. 22	Lancaster, Minn.	Apr. 10
Apr. 24	Springfield, Mass.	Apr. 10
Apr. 25	Waterdown, Ont.	Apr. 3
Apr. 25	Cameron, Wis.	Apr. 10
Apr. 30	Vancouver, B. C.	Apr. 10
May 1	Wakefield, Minn.	Mar. 20
May 1	Virginia, Minn.	Mar. 27
May 1	St. Louis, Mo.	Apr. 3
May 15	Verona, N. J.	Apr. 10

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Apr. 12	Drilling Plant, etc.—Buffalo, N. Y. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 14	Cranes — Spec. 3477 — Boston, Mass.	Mar. 27
Apr. 14	Septic Tank, etc. — Spec. 3841—Chatham, Mass.	Apr. 3
Apr. 14	Building Addition — Spec. 3799—Portsmouth, N. H.	Apr. 3
Apr. 14	Gasoline Supply System—Spec. 3734 — Philadelphia, Pa.	Apr. 3
Apr. 14	Steel Tower — Washington, D. C.	Apr. 10
Apr. 14	Dredging and Filling—Spec. 3844—Norfolk, Va	Apr. 10
Apr. 14	Cranes—Spec. 3477—Boston, Mass.	Apr. 10
Apr. 15	Pumps, etc.—Omaha, Neb. Adv Feb. 27 and Mar. 6	Mar. 6
Apr. 15	Road Work—Washington, D. C.	Mar. 27
Apr. 15	Transits and levels—Washington, D. C.	Apr. 10
Apr. 16	Coal—Jacksonville, Fla. Adv. Mar. 20 to Apr. 10.	Mar. 27
Apr. 16	Removing wreck—Buffalo, N. Y. Adv. Mar. 20 to Apr. 3.	Mar. 27
Apr. 16	Drilling Plant, etc.—Buffalo, N. Y. Adv. Apr. 3 and Apr. 10.	Apr. 10

Bids Close		See Eng. News-Record
Apr. 17	Valve Jacks — Wheeling, W. Va. Adv. Mar. 20 to Apr. 10.	Mar. 27
Apr. 18	Post Office—Mt. Pleasant, Mich.	Mar. 13
Apr. 21	Post Office — Rhinelander, Wis.	Mar. 13
Apr. 21	Post Office and Court House —Erie, Pa. Adv. Mar. 27 to Apr. 10.	Apr. 3
Apr. 21	Sewage Disposal System—Washington, D. C.	Apr. 3
Apr. 21	Barracks, Mess Hall and Officers Quarters — Spec. 3831—Yorktown, Va.	Apr. 10
Apr. 21	Cranes—Spec. 3827— Norfolk, Va.	Apr. 10
Apr. 21	Officers Quarters — Spec. 3829 — South Charleston, W. Va.	Apr. 10
Apr. 21	Galvanizing Plant — Spec. 3772—Norfolk, Va.	Apr. 10
Apr. 21	Pump House—Spec. 3826—Rockaway, N. Y.	Apr. 10
Apr. 21	Roads—Spec. 3850—Indianhead, Md.	Apr. 10
Apr. 22	Lighthouse — Baltimore, Va.	Apr. 10
Apr. 23	Post Office—Gilmer, Tex.	Mar. 13
Apr. 23	Earth Work—St. Louis, Mo. **Adv. Apr. 3 and 10.**	Mar. 27
Apr. 23	Soil and Sod—Galveston, Texas	Apr. 3
Apr. 23	Levee Work — St. Louis, Mo. Adv. Apr. 3 and 10.	Apr. 10
Apr. 24	Lookout Gallery—Saginaw, Mich. Adv. Apr. 3 and Apr. 10.	Apr. 10
Apr. 24	Dredging — San Francisco, Cal.	Apr. 3
Apr. 25	Towboat—Memphis, Tenn. Adv. Mar. 27 to Apr. 10.	Apr. 3
Apr. 26	Dredging—Norfolk, Va. Adv. Apr. 10.	Apr. 10
Apr. 28	Dredging—New York, N. Y.	Apr. 3
Apr. 28	Officers Quarters — West Point, N. Y. Adv. Apr. 3 and 10.	Apr. 3
Apr. 28	Dormitory, Bismarck, N. D.	Apr. 10
Apr. 29	Dredging — New York, N. Y. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 29	Foundation—Pamlico Sound, N. C.	Apr. 10
Apr. 30	Levee Work—St. Louis, Mo. Adv. Apr. 3 and 10.	Apr. 3
Apr. 30	Accumulators, etc.—Louisville, Ky. Adv. Apr. 3 and 10.	Apr. 10
May 1	Wharf—Boston, Mass.	Apr. 3
May 3	Dredging — Jacksonville, Fla. Adv. Apr. 3.	Apr. 3
May 5	Dredging—Wilmington, Del. Adv. Apr. 10.	Apr. 10
May 6	Lock and abutment—Cincinnati, O. **Adv. Apr. 10.**	Apr. 10
May 8	Marine Railway — Ft. Mifflin, Pa. Adv. Apr. 10.	Apr. 10
May 8	Post Office—Mount Pleasant., Tex.	Apr. 10
May 8	Marine Railway — Ft. Mifflin, Pa.	Apr. 10
May 9	Rock Crusher — Florence, Ala.	Apr. 10
May 9	Dredging — New York, N. Y. **Adv. Apr. 10.**	Apr. 10
May 12	Dredging — New York, N. Y. **Adv. Apr. 10.**	Apr. 10

MISCELLANEOUS

Bids Close		See Eng. News-Record
Apr. 11	Culvert—Lockport, N. Y.	Apr. 3
Apr. 11	Paving Material — Maplewood, N. J.	Apr. 3
Apr. 11	Paving Material — Providence, R. I. Adv. Mar. 27 to Apr. 10.	Apr. 3
Apr. 11	Trestle—Trenton, N. J.	Apr. 3
Apr. 14	Trap Rock — East Orange, N. J.	Apr. 10
Apr. 14	**Tanks, etc. — Long Island City, N. Y.**	**Apr. 10**
Apr. 15	Pipe—Newark, N. J.	Apr. 10
Apr. 15	Asphalt Flux, etc.—Ottawa, Ont.	Apr. 10
Apr. 15	Pipes, Etc.—Detroit, Mich.	Apr. 3
Apr. 17	Stone, etc.—St. George, S. I., N. Y.	Apr. 10
Apr. 18	Steel Piping—Los Angeles, Cal.	Apr. 10
Apr. 21	Levee—Port Allen, La.	Apr. 3
Apr. 22	Road Oil—Fresno, Cal.	Apr. 10
Apr. 22	Steel—Philadelphia, Pa.	Apr. 10
Apr. 28	Repairing and Repainting Court House — Lancaster, Pa. Adv. Apr. 10.	Apr. 10
Apr. 29	Freight Shed—New York, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 29	Meter Pipes—Toledo, O.	Apr. 10
Apr. 30	Dam, etc.—Scituate, R. I. Adv. Apr. 10.	Apr. 10

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

La., Glenmora—City plans to build waterworks system. X. A. Kramer, Magnolia, Miss., engr.

Minn., Albert Lea—City receives bids about May 1, building 1,500,000 gal. rein.-con reservoir and 15,000 gal. rein.-con. pressure tank. About $50,000. J. H. A. Brahtz, 320 Commercial Bldg., St. Paul, consult. engr.

Tex., Stamford—City having plans and specifications made for waterwork improvements to include concrete dam with turbine engines, reservoir 200 ft. wide, 10 ft. deep and 1 mi. long. About $400,000.

Okla., Chandler—City plans election to vote on $10,000 bonds to repair, renew, extend and improve waterworks system and $5000 bonds to improve and extend mains and submains of sewerage system. D. D. Lanshaw, city clk.

Okla., Newkirk—City receives bids about May 20, rebuilding electric light and waterworks plants. Work involves 22,000 ft. 4-6 in. c. i. pipe, two 40 h. p. motors and three 165 h. p. oil engines. About $170,000. H. G. Olmsted, city engr. Noted Mar. 27.

Ariz., Flagstaff—J. Marshall, supt. water wks. comn., recommends that city build reservoir. About $150,000.

Cal., Hermosa Beach—City directed B. Brown, city clk., to communicate with engineers regarding construction of water system. About $100,000 may be expended for project.

BIDS DESIRED

N. J., Bayonne—Until Apr. 18, by Bd. Comrs., furnishing and laying 3100 ft. 30 in. water pipe upon pile and timber foundation on east and west banks of Hackensack River, double, 30 in. c.i. pipe with flexible joints in trench to be dredged under Hackensack River, valves, connections, etc. M. R. Sherrerd, 20 Clinton St., Newark, consult. engr. Noted Feb. 27; advertised in this issue.

N. C., Benson—Until Apr. 24, by Mayor and Bd. Comrs. for water-works, electric light plant and sewerage systems. Work involves deep well and pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, 5 mi. water pipe lines, 4 mi. sewers and sewage disposal plant; (no bids on electric distribution system). G. C. White, Durham, engr.; advertised in this issue.

O., Akron—Until Apr. 18, by H. S. Morse, dir. pub. serv. furnishing c. i. pipes as follows, 140 tons 36 in. Class (B), 11 tons 30 in. Class (C), 88 tons 12 in. Class (B), 70 tons 10 in. Class (B), 15 tons 8 in. Class (B), 30 tons 8 in. Class (C), 130 tons 6 in. Class (B), 60 tons 6 in. Class (C), 10 tons 4 in. Class (B), 20 tons 4 in. Class (C), and 124 tons special castings; advertised in this issue.

Mich., Dearborn—Until Apr. 18, by F. C. Reamer, village clk., building 4550 ft. 6 in. and 112 ft. 10 in. c.i. watermains, to include hydrants, valves, valve fittings and valve boxes. C. W. Hubbel, 2348 Penobscot Bldg., Detroit, engr. Noted Apr. 3.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

N. Y., New York—H. J. Hayes, comr. water supply, gas and electricity, Municipal Bldg., received bids Apr. 1, completing abandoned contract for furnishing, delivering and laying 12 in. water main across East River from East 140th St. to North Brother Island, and hauling and laying water mains in East 140th St. and on North Brother Island, Bronx Boro, from Masterson Constr. Corp., New York City, $6900; W. F. Crowley, 301 South 3rd St., Brooklyn, $7150; H. E. Fox, 81 East 125th St., $7800. Noted Mar. 27.

★N. D., Minot—City let contract building 3,000,000 gal. rein.-con. reservoir, to Bartelson & Ness, Minot. About $54,577. Noted Mar. 6.

★Okla., Poteau—City let contract building waterworks system, to Merkle Mchy. Co., 508 Interstate Bldg., Kansas City, Mo., $89,780. Noted Feb. 20.

Sewers

PROPOSED WORK

N. Y., Rochester—City plans to build sewer and pave Chili Ave. from Genesee Park Blvd. to Barge Canal. About $100,000. A. C. Poole, city engr.

N. J., Phillipsburg—City voted $65,000 bonds to build sewerage system and sewage disposal plant. C. E. Tildon, city engr.

Fla., Leesburg—See "Streets and Roads."

Ala., Florence—City plans to issue $100,000 bonds to build Sanitary Sewerage System No. 2. R. E. Mead, city engr.

Ind., Terre Haute—City plans to lay 6300 ft. vitr. sewer pipes in various streets. About $11,000. R. A. Koerner, city engr.

Wis., Oconto Falls—Village voted $20,000 bonds to build sewerage system.

Okla., Chandler—See "Waterworks."

Okla., Lindsay—City plans to build sewage disposal plant and sewers in various streets. About $65,000. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs.

Ariz., Clifton—City voted $150,000 bonds to build sanitary sewers and sewage treating plant. A. J. Kerr, town engr. Noted Feb. 27.

Cal., Fresno—City receives bids in April or May, building trunk line sewerage system in North Fresno Sanitary Sewer Dist. About $200,000. Bonds voted for project. C. Murray, city engr. Noted Dec. 26.

BIDS DESIRED

Mass., West Roxbury (Boston P. O.)—Until Apr. 30, by T. F. Sullivan, comr. pub. wks., Boston, for sewerage system in Center St. between South and Spring Sts., and outlets in Central, Guernsey and La Grange Sts.

N. J., Highland Park (New Brunswick P. O.)—Until Apr. 24, by Boro Council, Fire House, Raritan Ave., building storm sewers and drains. J. T. Hopkins, boro engr.; advertised in this issue.

Pa., Coatesville—Until Apr. 24, by W. S. G. Cook, city clk., building storm water drain, 5400 lin.ft. long varying in size from 36-87 in. Brick, segmental tile block, or rein. con. pipe in part or whole. Work involves 25 manholes and 80 storm water inlets with necessary vitr. pipe connections. C. A. Niles, city engr.; advertised in this issue.

Pa., Dormont—See "Streets and Roads."

Pa., Pittston—Until Apr. 14, by city, building lateral sewer on Dock St. from South Main St. westerly to the Lehigh Valley R.R. tracks. W. F. McHugh, city clk.

O., Akron—Until Apr. 21, by Coventry Land & Impvt. Co., 1115 South Main St., furnishing material, and completing various sanitary sewers, house branches and water services in Firestone Park. Work involves 2350 ft. 8 in., 910 ft. 10 in., and 440 ft. 6 in. vitr. pipe sewers, 200 water services, including 1500 ft. lead or galvanized iron pipe, etc. About $16,000. A. B. Murphy, 1115 South Main St., engr.

O., Akron—Until Apr. 22, by Comrs. Summit Co., building sewerage system to be known as Tallmadge Dist. No. 1. Work involves 2500 ft. 12 in. vitr. pipe. About $20,000.

O., Cleveland—City is receiving bids building sewer in East 76th St. from Woodland Ave. to East 75th St., involving 850 ft. 12-18 in. vitr. pipe; East 96th St. from Seminal to Lowell Aves., 300 ft. 12

Sewers (Continued)

in. vitr. pipe; East 19th St. from Prospect to Central Aves., 340 ft. 12-20 in. vitr. pipe, 65,000 ft. b.m. plank and timber, 330 ft. No. 3 C and 300 ft. No. 2 C brick sewer; Lowell Ave. from East 96th to 99th Sts., 340 ft. 12 in. vitr. pipe; East 61st St. from Quincy Ave. to north end of same, 105 ft. 12 in. vitr. pipe; St. Clair Ave. from East 88th to 93rd Sts., 1590 ft. 12-24 in. vitr. pipe; East 130th St. from Iroquois Ave. to city limits, 1280 ft. 12-20 in. vitr. pipe; Adelbert Rd. from Euclid Ave. to New York Central Ry., 40 ft. 12-24 in. vitr. pipe, 710 ft. No. 4 C and 950 ft. No. 3 C brick sewers; East 131st St. from Iroquois Ave. to city limits, 1280 ft. 12-20 in. vitr. pipe; Ada Ave. from Lynn Dr. to Lakeview Rd., 480 ft. 8-12 in. vitr. pipe; East 18th St. from Prospect to Central Aves., 30 ft. 12 in. vitr. pipe, 830 ft. No. 8 C brick sewer, 10 cu.yd. class B concrete, 25,000 ft. b.m. hardwood grillage, 60,000 ft. b.m. plank and timber. R. Hoffman, city engr.

O., Cleveland—Until May 6, by E. Shattuck, comr. purchases and supplies, 219 City Hall Bldg., building sewage treatment works at Westerly site. Work includes grit chambers, 2 story, settling tanks, outfall conduits, buildings and appurtenances, and involves 15,000 lin.ft. wooden piling, 30,000 cu.yd. excav., 15,000 cu.yd. concrete, 850 tons steel reinforcement, 60 tons c.i. piping, etc.; advertised in this issue.

Ill., Chicago—Until Apr. 24, by J. McGillen, clk. sanitary dist., Room 700, 910 South Michigan Ave., building Des Plaines River Sewage treatment works; consisting of Div. A, sewage treatment plant, including excav., concrete, reinforcing steel, c.i. piping, etc.; Div. C, structural steel; Div. N, traveling crane; Div. O, pumping machinery, including three 14 in. centrifugal pumps; Div. P, electrical equipment, including vertical shafts; Div. R, blowers; Div. V, sluice gates; Div. W, venturi meters.

Ariz., Flagstaff—Until Apr. 28, by A. A. Johnston, town clk., building and extending sanitary sewerage system. About $95,000 available. Olmested & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, Cal., engrs. Noted Jan. 30; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contracts laying 610 ft. 10 and 15 in. vitr. clay sewer pipes in Cameron and Tovar Sts., involving 600 cu.yd. earth trenching, to Daddario & Booth, Mattapan, $2133; 740 ft. 10-15 in. pipe in Levant and Tebro Sts., involving 700 cu.yd. earth trenching, to A. Cefalo, Roslindale, $3016; 500 ft. 10-12 in. pipe in Deer St., involving 500 cu.yd. earth trenching, to A. Baruffaldi, Somerville, $2977.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received lowest bids building sewer in Remsen and Utica Aves., from L. Kalischer, 1225 Myrtle Ave., $239,088; J. F. Cogan, 233 Bway., New York City, $259,000; Rogers & Haggerty, $272,000. Noted Mar. 27.

★N. Y., Buffalo—City will remove between 2 and 3 mi. deposit estimated at 4342 cu.yd. from 8 ft. trunk sewer without diverting flow. Work will be done by day labor. Noted Feb. 27.

N. J., Newark—Passaic Valley Sewerage Comn., 820 Essex Bldg., received bids building Sect. 30 of Newark Branch Sewer, tunnel method from North Eastern Constr. Co., 225 5th Ave., New York City, $251,001; open trench method, from Foundation Co., 233 Bway., New York City, $215,789. Noted Mar. 6

★Fla., Moore Haven—See "Streets and Roads."

★Miss., Pascagoula—City let contract building sewerage system, to J. C. Mishler, 105 Spruce St., Chattanooga, Tenn. About $64,415.

O., Cleveland—City received bids building sewer (1) in 9 mi. Creek from East 152nd St. to point westerly, (2) Nottingham Rd., from St. Clair Ave. to New York Central & St. Louis Ry., Plan "A," (3) Nottingham Rd., Plan "B," (4) Gifford Ave. from West 45th to West 55th Sts., (5) West 28th St. from Montclair to Natchez Aves., (6) Hood Ave. from West 21st to West 28th Sts., (7) West 21st St. from Saratoga St. to city limits, (8) West 47th St. from Clark to Oakley Aves., (9) West 18th St. from Forestdale to Willowdale Aves., (10) West 32nd St. from Barber Ave. to westerly end of same, (11) Joy Court from West 30th to West 32nd Sts., from W. P. Gibbons, 340 Leader-News Bldg., (1) $11,266, (3) $43,932, (5) $3244, (7) $1953, (9) $879; W. McDowell, 10,319 Miles Ave., (1) $12,237, (2) $44,002; M. Nichols & Son, 11,422 Fairchild Ave., (1) $13,168; D. Zulls, 10,501 Hudson Ave., (2) $39,593; Randell & Cooper, Lorain, (2) $44,946; J. Duff & Co., 603 Marshall Bldg., (3) $41,440; P. Ciraci, 11,811 Browning Ave., (3) $44,576; H. Hahn, 2973 East 78th St., (4) $4955; E. Cesa & Son, 2462 Baldwin Rd., (4) $5686; Brookside Constr. Co., 3905 West 20th St., (4) $5706, (5) $2064, (6) $4201, (7) $1329; George Bros., 1148 Bolivar Rd., (5) $2610, (6) $5072; Iannetta Bros., 2064 East 125th St., (6) $4987; Aftoon & Joseph, 887 The Arcade, (8) $1591; A. Mahmood, 9802 Enclid Ave., (8) $2050, (10) $1039, (11) $735; N. Salem, 237 Bradley Court, (8) $2052, (10) $957, (11) $884; Amata Contg. Co., 343 The Arcade, (9) $874; Frederick & Hosanic, 635 Bradley Court, (9) $880; Yahya Bros., 3539 Independence Rd., (10) $998, (11) $833. Noted Mar. 27.

Mich., Detroit—Dept. Pub. Wks. received bids trenching, backfilling, and laying (a) 2158 ft. 24 in. vitr. crock sewer arms in Livernois Ave.; (b) 4786 ft. 5 ft. 6 in. cylindrical sewer in Alter Road. and Mack Ave. from point 224 ft. north of Charlevoix to Bedford Aves., from R. D. Baker, 1415 Penobscot Bldg., (a) $6000; J. F. Affeld, Ford Bldg., (a) $6369; (b) $77,040; Western Constr. Co., Ford Bldg., (a) $6500; J. A. Mercier, 216 Hammond Bldg., (b) $78,016; Walker & Teitert, Winsdor, Ont., (b) $81,429. Noted Apr. 3.

Ill., Chicago—Bd. Local Impvts. received bids Mar. 28, building Augusta Ave. sewerage system from north branch of Chicago River to west line of block 1, Elstons Addition to Elstons Ave., Augusta St. to California Ave.; Noble St. from Augusta to Kinzie Sts.; North Leavitt St. from North Ave. to Kinzie St., (a) with permanent pavement, (b) without permanent pavement, from Ryan Co., 4500 West Division St., (a) $1,079,815; (b) $909,760; H. J. McNichols Co., 924 South Kilbourne Ave., (a) $1,173,970; (b) $997,907; J. W. Farley, 118 North La Salle St., (a) $1,147,790; (b) $974,865. Noted Mar. 20.

Minn., St. Paul—City received no bids furnishing labor and material building Portland Ave. outfall sewer from Mississippi River to point 808 ft. east and sewer in Sommerville Ave. from Mississippi River to point 1420 ft. northeasterly, $3229 and $41,773 respectively. Bids will probably be readvertised. O. Claussen, city engr. Noted Mar. 27.

★Tex., Dallas—City let contract building sewer in Jefferson Ave. from 10th to Marsalis Sts., to F. A. Eldridge, Dallas, $12,281. Work involves 1347 ft. 30-36 in. rein.-con. and 600 ft. 18-24 in. vitr. tile pipe. Noted Mar. 13.

Bridges

PROPOSED WORK

Ga., Valdosta—Comrs. Lowndes Co. plan to build bridge over Withalacoochee River on National Highway. About $50,000.

Wis., Menasha—City having plans prepared by E. B. Parsons, engr., Watertown, building 400 ft. rein.-con. bridge over Fox River, 24 ft. driveway and 2 walks. About $84,000. Noted Feb. 6.

Montana—See "Railways."

Ark., Fayettville—V. P. Knott, engr., Fayettville, and State Highway Dept., Little Rock, receives bids about Apr. 15, building steel bridge about 9 mi. from here, consisting of one 100-125 ft. span, 12-16 ft. roadway and 100 ft. approach, involving 50 yd. or more of concrete piers and abutments, also one near Woolsey and Brentwood Twps. 150-200 ft. long, consisting of 2 steel spans and approach, 12-16 roadway, pier and abutments of concrete.

Wash., Metaline—J. H. Sexsmith, Newport, has applied to Comrs. Pen d'Oreille Co. (Newport) for a franchise to build and operate toll bridge over Pen d'Oreille River here. About $35,000.

Que., Ste. Anna de la Perade—City plans to build concrete and steel bridge, 75 ft. long, 18 ft. wide, over Gendron River. About $15,000. A. Des Aulniers, mayor.

Ont., St. Mary's—Town council plans to build memorial bridge. About $20,000. I. S. Runee, Gordon Blk., Stratford, archt.

BIDS DESIRED

Pa., Franklin—Until Apr. 29, by Comrs. Venango Co. building following bridges: 1—bridge over Scrubgrass Creek, 1 mi. north of Clintonville, Clinton Twp., to be known as Crawford Bridge; bids will be accepted on following types of structure: (a) rein. con., consisting of 66 ft. arch span, 15 ft. rise with three 16 ft. approach spans, (b) stone arch, with 66 ft. span and 20 ft. rise, (c) Pony Warren truss, 102.5 ft. span, 16 ft. roadway with variety of floor types, both cut stone and concrete abutments. No. 2—bridge over North Sandy Creek in Polk Boss, either steel pony truss, 45 ft. span with 18 ft. roadway and creosoted wood block floor or through girder, rein. con. bridge of same span and roadway with concrete floor. Both types on rein. con. abutments. No. 3—repairing present concrete floor of Washington St. bridge with tarvia KP and laying thereon creosoted wood block floor on 1 in. sand cushion; advertised in this issue.

O., Akron—Until May 5, Comrs. Summit Co. furnishing materials and building North Hill Viaduct, rein.-con., 2790 ft. long, will have 16 arch spans from 116-191 ft. long, 12 short girder spans, 52 ft. roadway and two 10 ft. sidewalks. Certain piers will rest on sand and gravel, others on concrete piles, advertised in this issue.

Wis., Oshkosh—Until Apr 16, by Bd. Pub. Wks., building 470 ft. bridge over Fox River on Oregon and Jackson Sts., 38 ft. wide, W. F. Porath, comr. Scherzer Rolling Lift Bridge Co., 5454 Everett Ave., Chicago, engrs.

Minn., Wadena—See "Streets and Roads."

Ont., Ottawa—Until Apr. 29, by Bd. Control building bridge over Rideau River on St. Patrick St. Bids will be received on (a) 4 arch rein.-con., (b) steel half trough plate girder bridge, four 120 ft. spans, 43 ft. 8 in. between main girders, bracketted sidewalk on each side. About $190,000. A. F. McCallum, city engr.

Man., Ethelbert—City receiving bids building 3 rein.-con. bridges. About $20,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★S. C., Gaffney—Southern Ry. let contract building rein.-con. bridge, on Montgomery St., to M. M. Elkins, Gaffney, $60,000. Noted Oct. 10, 1918.

★Ga., Oglethorp—Comrs. Macon Co. let contract building steel and rein.-con. bridge over Flint river, between here and Montezuma Contr. No. 1 to Austin Bros. Bridge Co., 156 Greenwood Ave., Atlanta, $45,040; Contr. No. 2 and 3 to Nicholos Contg. Co., Trust Co. of Georgia Bldg., Atlanta, $81,464 and $27,558 respectively. Noted Jan. 30.

★Miss., Charleston—Lamb-Fish Lumber Co. let contract building sub- and superstructure of steel bridge over Tallahatchie River, 7 mi. west of here, to Gould Contg. Co., Ind. Bldg., Nashville, Tenn., about $23,000 (erection only, all materials furnished by owners). Noted Feb. 27.

Wis., Janesville—City received bids building 324 ft. rein.-con. bridge over Rock River on Jackson St., six 54 ft. spans, 55 ft. wide, from Wausau Iron Wks., Wausau, $78,400; Koss Constr. Co., 1st and Court Sts., Des Moines, Ia., $82,990; J. P. Cullen & Son, Janesville, $84,126. Noted Mar. 6.

★N. D., Williston—Comrs. Williams Co. let contract building concrete culverts and bridges on Federal Aid Project No. 3, to Independent Bridge Co., Minneapolis, Minn. Work involves 681 cu.yd. excav., 325 cu.yd. Class (A) concrete; 207 cu. yd. Class (B) concrete and 1252 lin. ft. piling. Total cost $26,248.

★Mo., Kansas City—City let contract building concrete and steel viaduct over Kaw River on 23rd St., 1600 ft. long, 60 ft. roadway, to A. S. Hecker Co., Union Ave., Cleveland, O. Cost plus percentage basis, subject to approval of council. Noted Jan. 23.

Structural Steel

PROPOSED WORK

Ont., Toronto—See "Miscellaneous."

Reinforced Concrete

PROPOSED WORK

N. Y., New York—See "Industrial Works."

Minn., Cloquet—See "Buildings."

BIDS DESIRED

Minn., Wadena—See "Streets and Roads."

Cal., Merced—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Phila.—See "Miscellaneous."

Streets and Roads

PROPOSED WORK

Massachusetts—State Highway Comn., Boston, plans to build 18 ft. highway between Osterville, Hyannis and Centerville Twps., Barnstable Co. About $25,000.

Streets and Roads (Continued)

Mass., Medford—(Boston P. O.)—City receives bids in summer widening Riverside Ave. to 60 ft.; readjusting intersection of Main, Salem and High Sts., bituminous macadam. About $100,000. Noted Jan. 23.

N. Y., Rochester—See "Sewers"

N. Y., Seneca Falls—Bd. Trustees approved petition to pave Rumsey and Clinton Sts. to village boundary, Fall St. to Black Brook Rd., Route No. 6.

N. J., Hackensack—Bd. Freeholders Bergen Co. plan to improve 4.63 mi. Paterson Plank Rd., either with 6 in. concrete base and granite block, cost, $145,000, recliffed granite block, $121,000 or lay 5 in. concrete base on present surface $61,000. A. McClare, c/o. engr.

N. J., Newton—Comrs. Sussex Co. plan to expend $56,205 to build roads during year.

N. J., Trenton—City plans to widen East Front St. from Willow to Montgomery Sts. About $450,000. Election will be held soon to vote on bonds for project.

N. J., Verona—Town soon lets contract building 19,000 ft. concrete curb on Bloomfield Ave. from Montclair line to North Caldwell Boro. line. About $30,000. F. W. Crane, 460 Bloomfield Ave., Montclair, engr. Noted Mar. 6.

Pa., Berks—City plans to pave and repair 2 mi. streets, asphalt, waterbound macadam or bituminous macadam. About $100,000.

Pa., Ellijay—City had surveys made building concrete road, ½ mi. long. About $10,000.

Pa., Wheatland—City election Apr. 29, to vote on $25,000 bonds to improve various streets.

W. Va., Keyser—Mineral Co., Elk. Dist. plans election Apr. 19, to vote on $137,000 bonds to build roads. E. Smith, Piedmont, W. Va., engr.

W. Va., Princeton—Mercer Co. having surveys made by E. E. Kunkle, co. engr., for hard surfacing 23 mi. Princeton-Flat-Top Rd. About $81,600.

N. C., Henderson—City plans to pave various streets. About $300,000.

S. C., Columbia—City plans to pave Harden and Divine Sts. with 6 in. concrete, also resurface Main St. T. K. Legare, city engr.

Ga., Waycross—Ware Co. plans election in May to vote on $750,000 bonds to build various roads.

Fla., Leesburg—City voted $150,000 bonds to pave various streets, install sewers, and purchase light and water plants. Noted Feb. 27.

Ala., Albertville—Town soon lets contract building 5 mi. cement sidewalk, 4 ft. wide. J. W. Baker, mayor.

Miss., Meadville—Franklin Co. plans election soon to vote on $400,000 bonds to build various roads. Federal Government will appropriate $100,000 toward project.

Miss., Pascagoula—City voted $165,000 bonds to pave streets.

Miss., Sardis—Panola Co. voted bonds to build 30 mi. link in Jefferson Davis Highway. Federal government will appropriate $50,000 toward cost.

Miss., Senotobin—Tate Co. voted $300,000 bonds to build 100 mi. gravel roads, 14 ft. wide. Noted Feb. 20.

La., Alexandria—Rapides Parish plans election to vote on $500,000 bonds to build various roads. Bonds for $500,000 previously voted.

La., Gretna—Jefferson Parish voted $150,000 bonds to build and improve roads. Noted Feb. 6.

La., Marksville—Avoyelles Parish plans election Apr. 26 to vote on $1,000,000 bonds to build 130 mi. Jefferson and Evangeline Highways.

Ky., Corbin—City soon receives bids, paving 3.08 mi. with rein.-con., waterbound macadam, Kentucky rock asphalt or other bituminous materials. H. E. Wentworth, city engr.

Ky., Paducah—City plans to improve 5 mi of streets. About $300,000. L. A. Washington, city engr.

Ohio—State Highway Comn., Columbus, soon lets contract grading, constructing bridges and culverts and paving with concrete 1 mi. Columbus-Portsmouth Rd., Sect. "L." Pike Co., cost $31,294; grading, constructing bridges and culverts and paving with monolithic brick, 1.51 mi. Ohio River Rd., Sects. "P-2, P-1," Sciota Co., $56,072; same work on 1.01 mi. Portsmouth-Lucasville Western Rd., Sect. "A-2," Sciota Co., $37,492.

O., Cleveland—Comrs. Cuyahoga Co. soon receive bids paving with brick over concrete, West Lake Rd. from Bay Village to Rocky River and Union Rd. in Bedford Village; also paving with brick and concrete Wooster Rd. and Euclid Ave. between Chardon Rd. and county line. W. A. Stinchcomb, co. engr.

O., East Liverpool—City plans to grade, repave and build sewers in Sophia, 8th, Bway., Market, Dresden, Pennsylvania and Race Sts., also in St. Clair Ave. from McKinnon St. to entrance of Riverview cemetery and in St. Clair Ave. from Horn Switch to Youngs Alley. J. C. Kelly, city engr.

O., Sylrania—City having plans prepared building 7000 ft. concrete or waterbound macadam road, 12-14 ft. wide. About $20,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Toledo—City plans to grade, drain, curb, and pave 868 ft. Mallett Ave. from Lewis to North Haven Aves., 24 ft. wide, involving 2600 sq.yd. vitr. brick, 1770 lin.ft. curbing and 919 cu.yd. earth excav., cost $12,673; 1560 ft. Kingston Ave. from Navarre Ave. to Earl St., 24 ft. wide, 4600 sq.yd. vitr. brick or concrete, and 3200 lin. ft. curbing; 1131 ft. Lawnview Dr. from Sylrania Ave. to north end of street, 24 ft. wide, 3300 sq.yd. vitr. brick, 2300 lin.ft. curbing, and 2295 cu.yd. earth excav., $14,561. H. C. McClure, 229 Valentine Bldg., Toledo, engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract improving (a) Leslie Ave. from Oakman to Wabash Aves., 26 ft. wide, involving 4213 cu. yd. excav., 4919 lin. ft. curbing, 6956 sq.yd. paving, 140 cu. yd. concrete, 376 lin. ft. retaining stone; (b) Waterloo Ave. from Connors to Drexel Aves., 26 ft. wide, 3682 cu. yd. excav., 3940 lin. ft. curbing, 6474 sq.yd. paving, 123 cu. yd. concrete, 714 lin. ft. retaining stone; (c) Buena Vista Ave. from Herman to Ellen Aves., 24 ft. wide, 3612 cu. yd. excav. 3569 lin. ft. curbing, 5087 sq. yd. paving, 104 cu.yd. concrete, 327 lin. ft. retaining stone; (d) Alexanderine Ave. from Duboise St. to McDougal Ave., 26 ft wide, 2380 cu.yd. excav., 3310 lin. ft. curbing, 5449 sq.yd. paving, 101 cu.yd. concrete, 494 lin. ft. retaining stone; (e) Fulton Ave. from Wabash R. R. to westerly end of street, 26 ft. wide, 1345 cu. yd. excav., 2311 lin. ft. curbing, 3482 sq. yd. paving, 66 cu.yd. concrete, 184 lin. ft. retaining stone; (f) Grand Ave. from Herman Ave. to 12th St., 24 ft. wide, 2233 cu. yd. excav., 2404 lin. ft. curbing, 3384 sq. yd. paving, 68 cu. yd. concrete, 168 lin. ft. retaining stone; (g) Waverly Ave. from Herman Ave. to 12th St., 26 ft. wide, 1799 cu. yd. excav., 2390 lin. ft. curbing, 3405 sq.yd. paving, 69 cu.yd. concrete, 208 lin. ft. retaining stone; (i) Tyler Ave. from Herman Ave. to 12th St., 24 ft. wide, 1592 cu. yd. excav., 2393 lin. ft. curbing, 3396 sq. yd. paving 69 cu. yd. concrete, 208 lin. ft. retaining stone; (i) Leland St., from St. Aubin Ave. to Chene St., 26 ft. wide, 1253 cu.yd. excav., 1807 lin. ft. curbing, 2988 sq. yd. paving, 53 cu. yd. concrete, 281 lin. ft. retaining stone; (j) Huron St. from Ottawa Ave. to Bagg St., 20 ft. wide, 1253 cu. yd. excav., 997 lin. ft. curbing, 2107 sq.yd. paving, 50 cu. yd. concrete, 923 lin. ft. retaining stone; all pavement asphaltic concrete on 6 in. concrete base. C. W. Hubbell, city engr. Noted Mar. 20, 27th and Apr. 3.

Wis., Sheboygan—City having plans prepared by C. U. Boley, engr., Sheboygan, grading, constructing curbs and gutter and paving with concrete 2½ in. Lighthouse Ct. to 2nd St., 16 ft. wide.

Minn., Albert Lea—Comrs. Freeborn Co. plan to grade and gravel 15 mi. road, Project No. 37, 24 ft. wide. About $60,000. E. V. H. Brown, Albert Lea, engr.

Minn., Anoka—Comrs. Anoka Co. plan to pave 20 mi. road, Project No. 16. About $233,000. H. H. Thurston, Anoka, engr.

Minn., Austin—Comrs. Mower Co. plan to grade and gravel 27 mi. Project No. 38. About $100,000. O. J. Simmons, Austin. engr.

Minn., Bemidji—Comrs. Beltrami Co. plan to grade, gravel and surface 37 mi. State Aid Rd., 24 ft. wide, involving 44,000 cu.yd. gravel surfacing and 200,000 cu.yd. excav. About $180,000. S. D. Snyder, Bemidji, engr.

Minn., Benson—Comrs. Swift Co. plan to pave 7 mi. road, cost $237,000; also gravel surface 12½ mi. road. L. R. Johnson, Benson, engr.

Minn., Blue Earth—Comrs. Faribault Co. plan to grade and gravel 50 mi. road, 24 ft. wide, involving 60,000 cu.yd. surfacing and 300,000 cu.yd. excav. About $250,000. J. R. Short, Blue Earth, engr.

Minn., Brainerd—Comrs. Crow Wing Co. plan to grade and gravel 22 mi. State Aid Rd., 24 ft. wide, involving 26,000 cu.yd. gravel surfacing and 130,000 cu.yd. excav. cost, $90,000; 5 mi. State Aid Rd., 18 ft. wide, 53,000 cu.yd. paving and 20,000 cu.yd. excav., $120,000. C. L. Motl, Brainerd, engr.

Minn., Caledonia—Houston Co. plans to grade and gravel 46 mi. road, 24 ft. wide, involving 55,000 cu.yd. gravel surfacing and 460,000 cu.yd. excav. About $500,000. C. D. Conzett, Caledonia, engr.

Minn., Cambridge—Comrs. Isanti Co. plan to grade and gravel 20 mi. road, 20 ft. wide, Project No. 41, cost $80,000; 20 mi. road, 24 ft. wide, involving 24,000 cu.yd. gravel surfacing and 100,000 cu.yd. excav., $104,000. P. M. Torell, Cambridge, engr.

Minn., Carlton—Comrs. Carlton Co. plan to grade and gravel 12 mi. road, Project No. 17. About $23,000. P. D. Mold, Carlton, engr.

Minn., Elbow Lake—Comrs. Grant Co. plan to grade and gravel 6 mi. road, 24 ft. wide, involving 7200 cu.yd. gravel surfacing and 72,000 cu.yd. excav. About $45,000. W. E Burgess, Elbow Lake, engr.

Minn., Elk River—Comrs. Sherburne Co. plan to pave 4 mi. road, 24 ft. wide. Project No. 44. About $100,000. F. W. Nickerson, co. engr.

Minn., Foley—Comrs. Benton Co. plan to grade and pave 19 mi. State Aid Rd., 18 ft. wide, involving 200,000 sq.yd. paving and 75,000 cu.yd. excav. About $475,000. I. L. Tierney, Foley, engr.

Minn., Grand Rapids—Comrs. Itasca Co. plan to grade and gravel 20 mi. road, 24 ft. wide. involving 24,000 cu.yd. gravel surfacing and 100,000 cu.yd. excav. About $100,000. O. J. Lidberg, Grand Rapids, engr.

Minn., Hastings—Comrs. Dakota Co. plan to improve 18 mi. road, 24 ft. wide, involving 19,000 cu.yd. gravel surfacing and 90,000 cu.yd. excav., cost, $80,000; 7 mi. road, 20 ft. wide, 80,000 sq.yd. paving, and 40,000 cu.yd. excav., $196,000. C. L. Methren, Hastings, engr.

Minn., Jackson—Comrs. Jackson Co. plan to grade and gravel 20 mi. road, 24 ft. wide involving 120,000 cu.yd. excav. and 24,000 cu.yd. gravel surfacing. About $100,000. W. M. Richmond, Jackson, engr.

Minn., Lesueur Center—Comrs. Lesueur Co. plan to pave 7 mi. road, 18 ft. wide, involving 74,000 cu.yd. paving and 50,000 cu.yd. excav. About $180,000. R. F. Nichols, Lesueur Center, engr.

Minn., Litchfield—Comrs. Meeker Co. plan to grade and gravel 15 mi. road, 20 ft. wide, Project No. 40. About $60,000. R. P. McNamara, Litchfield, engr.

Minn., Little Falls—Comrs. Morrison Co. soon receive bids grading, surfacing and paving 52 mi. road. About $300,000. A. J. Fenn, Little Falls, engr.

Minn., Long Prairie—Comrs. Todd Co. plan to grade and gravel 17 mi. road, 24 ft. wide, Project No. 26. About $20,000. A. N. Graves, co. engr.

Minn., Madison—Comrs. Lac Qui Parle Co. plan to grade and gravel 30 mi. Federal Aid Rd., 24 ft. wide. About $100,000. R. Frederik, Madison, engr.

Minn., Madison—Comrs. Lac Qui Parle Co. plan to improve 55 mi. road, 18 ft. wide, involving 66,000 cu.yd. gravel surfacing. About $100,000. R. Frederich, Madison. engr.

Minn., Mantorville—Comrs. Dodge Co. plan to grade and gravel 14 mi. road, 24 ft. wide, involving 11,000 cu.yd. surfacing and 80,000 cu.yd. excav. About $70,000. R. D. Jorgens, Hayfield, engr.

Minn., Marshall—Comrs. Lyon Co. plan to grade 20 mi. and gravel 30 mi. road, involving 140,000 cu.yd. excav. and 36,000 cu. yd. surfacing. About $120,000. D. W. Webster, Marshall, engr.

Minn., Montevideo—Comrs. Chippewa Co. plan to grade and surface 47 mi. road, 24 ft. wide, cost, $200,000; grade and gravel 4½ mi. road, 24 ft. wide, involving 1300 yd. excav. and 6000 yd. surfacing, $10,070. F. O. Nelson, Montevideo, engr.

Minn., Montevideo—Comrs. Chippewa Co. plan to grade and gravel 37 mi. State Aid Rd., 24 ft. wide, involving 44,000 cu.yd. gravel surfacing and 220,000 cu.yd. excav. About $200,000. F. O. Nelson, Montevideo, engr.

Streets and Roads (Continued)

Minn., Preston—Comrs. Fillmore Co. plan to grade and gravel 8 mi. road, 24 ft. wide. About $50,000. W. Dunbar, Preston, engr.

Minn., Redwood Falls—Comrs. Redwood Co. plan to build 4 mi. road, 24 ft. wide, involving 8635 yd. excav. About $35,096. H. Myron, Redwood Falls, engr.

Minn., St. Cloud—City receives bids in 3 weeks paving 25 blocks, 32-52 ft. wide. M. B. Lang, city engr.

Minn., St. Cloud—City having plans prepared by M. B. Lang, city engr., for 25 blocks paving.

Minn., St. Paul—Comrs. Ramsey Co. received no bids paving Como Ave. west from Snelling to Raymond Aves. About $99,227. Work will probably be re-advertised. Noted Mar. 27.

Minn., Stillwater—Comrs. Washington Co. plan to grade and gravel 5 mi. road, 24 ft. wide, Project No. 42. About $45,000. G. F. Barstow, co. engr.

Minn., Two Harbors—Comrs. Lake Co. plan to build 21 mi. hard surface road between Beaver Bay and Schrader. About $100,000. H. C. Hanson, Two Harbors, engr.

Minn., Wabasha—Comrs. Lake Co. plan to grade and gravel 22 mi. road, 24 ft. wide, Project No. 46. About $78,000. C. M. Mathias, co. engr.

Minn., Walker—Comrs. Cass Co. plan to grade and gravel 32 mi. road, 24 ft. wide, involving 38,000 cu.yd. grade surfacing and 160,000 cu.yd. excav. About $200,000. A. W. Moulster, Pine River, engr.

Minn., Warren—Comrs. Marshall Co. plan to improve 30 mi. road, involving 36,000 cu.yd. graveling surfacing. About $110,000. J. A. Lindsey, Warren, engr.

Minn., Willmar—Comrs. Kandiyohi Co. plan to pave 14 mi. road, 18 ft. wide, involving 148,000 cu.yd. paving. About $300,000. H. L. Wadell, Willmar, engr.

Minn., Winona—Comrs. Winona Co. plan to grade and gravel 9 mi. road, 24 ft. wide, Project No. 8. About $70,000. H. B. Childs, Winona, engr.

Minn., Worthington—Comrs. Nobles Co. plan to grade and gravel 16 mi. road, 24 ft. wide, Project No. 45. About $80,000. R. J. Boomer, co. engr.

Kan., Eldorado—City soon receives bids paving 25 blocks, asphalt and brick. About $100,000.

Kan., McPherson—Comrs. McPherson Co., plan to hard surface 112 mi. road.

Mont., Helena—City plans to pave and build retaining wall in alley west of Fuller St. between Placer Ave. and Lawrence St., also build new alley and retaining wall in alley from 7th to Helena Aves., east of Main St. About $11,000 and $13,500 respectively. J. D. McLeod, city engr.

Mont., Lewistown—City plans to grade, build sidewalks and curbs, etc., on 4th Ave. Boulevarding Dist. About $23,000. H. L. Fitton, city clk.

Arkansas—Comrs. Rd. Impvt. Dist. No. 1, at office of State Highway Comn., Little Rock, receive bids about May 1, building 37.18 mi. road, 22 ft. wide, 9 in. macadam surface, in Boone Co. About $175,000. Pritchett & Hight, Walnut Ridge, engrs.

Tex., Bastrop—Comrs. Bastrop Co., plan to build 30 mi. road in Elgin Precint, $250,000 available; 20 mi. road, McDade Precint, $35,000; various roads, Paige Precint, $35,000. Noted Apr. 8.

Tex., Bonham—Comrs. Fannin Co. receive bids about Apr. 15, building waterbound macadam road. About $165,000. M. A. Goode, co. engr.

Tex., Cameron—Milam Co. voted $35,000 bonds to build roads in Jones Prairie Dist. and $60,000 bonds for Marak Schoolhouse Dist.

Tex., Gilmer—City and Upsher Co. (Gilmer) plan election Apr. 26 to vote on $1,000,000 bonds to grade, gravel and pave roads.

Tex., Hillsboro—Hill Co. Itasco Dist. election April 25 to vote on $360,000 bonds to build hard-surfaced roads, No. 2.

Tex., Karnes—Karnes Co. election May 3 No. 2, election April 25 to vote on $360,000 bonds to build hard-surface roads.

Tex., Kingsville—Comrs. Kleberg Co. plan to build gravel type, bituminous surface road. About $350,000 available. Noted Apr. 3.

Tex., Olton—Lamb Co. voted $50,000 bonds to build highways in Rd. Dist. No. 1.

Tex., Woodville—Tyler Co. election Apr. 27, to vote on $800,000 bonds to build section of Hobby Highway No. 40.

Okla., Enid—City plans to pave and curb 28 streets with 8 in. concrete. About $11,000. B. F. Lewis, city engr.

Okla., Tulsa—City soon lets contract paving in Broadmoor Addition, asphalt. About $184,660. H. H. Wyss, city engr.

Colo., Pueblo—City plans to expend $93,000 to improve streets in South Main Dist. D. P. Gaymon, city engr.

Idaho, Twin Falls—Twin Falls Co. voted $1,250,000 bonds to pave 120 mi. and grade 100 mi. earth road. W. L. Johnson, Twin Falls, engr. Noted Feb. 13.

Wash., Spokane—City and Comrs. Spokane Co. soon receive bids grading and graveling Arterial Highway connecting city and Fort George Wright. About $50,000. County will build 2 mi. to cost $19,000.

Wash., Spokane—City had plans prepared grading and filling Trent Ave. between 2 Trent Ave. bridges. About $24,000. A. D. Butler, city engr.

Wash., Yakima—Yakima Co. election Apr. 26, to vote on $500,000 bonds to build 40 mi. hard surfaced road from Grandview to Yakima. Federal Government will appropriate $500,000 toward project.

Wash., Yakima—Comrs. Yakima Co. having plans prepared for grading and graveling feeder roads throughout county. About $75,000.

Ore., Dallas—City considering plans to lay several miles cement sidewalks and replace sewer pipes in Uglou Ave.

Ore., Klamath Falls—City had plans prepared improving Pine St., oil macadam, $19,177; cement pavement, $23,500; Canby St. bitulithic or concrete, $16,400; oil macadam or hard surface pavement, $10,925; 10th St., oil macadam, cement sidewalks, $18,697; cement pavement, $25,000.

Ore., Moro—Sherman Co. plans to improve 12 mi. Cottonwood Rd. from John Day bridge, thence past Monkland to intersection of main county road with Moro-Wasco Highway. About $50,000. M. L. Hoskinson, co. clk.

Ore., St. Helens—Columbia Co. soon lets contract for road work in Kappler Rd. Sta. 24-39, Rd. Dist. No. 3.

Cal., Brawley—City receives bids probably in May, grading, draining, curbing, guttering and paving 5 blocks Main St. and 4 blocks 8th St., 24 and 50 ft. wide, 7 in. concrete. Work may be done by force account. Noted Mar. 6.

Cal., Manteca—City plans election to vote on $31,500 bonds to pave streets to connect ends of county highways.

Quebec—Provincial Government, Quebec, plans to gravel 14,190 ft. road leading to C. N. R., in St. Barthelemi Parish, Berthier Co., 16 ft. wide, cost $13,271; 11,666 ft. road leading to Berthier, St. Cuthbert Parish, Berthier Co., 16 ft. wide, $17,774; 5.13 mi. roads St. Severe Parish, St. Maurice Co., 18 ft. wide, $42,243. A Lariviere, Parliament Bldgs., Quebec, engr.

BIDS DESIRED

R. I., East Providence—(Providence P. O.)—Until Apr. 15, by W. E. Smyth, town clk., building 4732 ft. granite or cement road with steel edge curbing and 22 corners.

R. I., Scituate (North Scituate P. O.)—See "Miscellaneous."

Conn., Hartford—Until Apr. 22, by Bd. Contr. & Supply, paving 2310 ft. Jewell, Trumbull, Wells and Morgan Sts., 40 ft. wide, involving 12,890 sq.yd. asphalt and 2097 cu.yd. concrete on 6 in. concrete base and 3480 cu.yd. excav.; also 1170 sq.yd. sheet asphalt resurfacing on existing concrete foundation, 3000 sq.yd. sheet asphalt on repairs and patching on other streets. C. M. Saville, city engr.

New York—Until Apr. 30, by State Highway Comn., Albany, building highways in following counties; Albany Co., 2 sections, 1.36 mi. and 4.10 mi.; Chemung Co., 40 mi.; Chenango Co., 3 sections, 4.78 mi., 5.57 mi., 5.87; Clinton Co., 3.34 mi.; Essex Co., 4.95 mi.; Fulton Co., 2.80 mi.; Hamilton Co., 6.82 mi.; Oneida Co., 2 sections, .97 mi. and 1.05 mi.; Onondaga Co., 5 sections, .96 mi., 7.45 mi., 2.37 mi., 1.76 mi., 3.75 mi.; Oswego Co., 5.44 mi.; Warren Co., 4.59 mi.; Wayne Co., 2 sections, 3.83 mi., 3.21 mi.; Westchester Co., 2 sections, 1.74 mi., 1.09 mi.; also reconstructing highway in Broome Co., and resurfacing highways in Hamilton, Jefferson, Onondaga and Oswego Counties. E. Duffey, comr.; advertised in this issue.

N. Y., Cohoes—Until Apr. 17, by city, paving Manor Ave. from intersection of North Mohawk St. to city line, brick, bitulithic, tarvia or concrete. E. M. Herbert, secy.; advertised in this issue.

N. Y., New York—Until Apr. 15, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving with granite block on concrete foundation Park Pl. roadway from Bway to West Bway; Beekman St. roadway from Nassau to William Sts.; roadway west of 155th St. from point 140 ft. west of Washington Heights line of Bway and Riverside Dr.; roadway of West 155th St. from Bway. to point 140 ft. west of Washington Heights Line of Bway., sheet asphalt on concrete foundation.

N. Y., S. I., St. George—Until Apr. 18, by C. D. Van Name, pres. Richmond Boro., regulating and repaving with concrete and granite block Richmond Pike roadway from Clove Lakes to Manor Rd., involving 4150 sq. yd. granite block, with cement grout joints complete, etc.

N. Y., S. I., St. George—Until Apr. 18, by C. D. Van Name, pres. Richmond Boro., building and repairing sidewalks on both sides of De Hart Ave. from Richmond Terrace to Walloon St.; on north side of Richmond Terrace between fence line and curb line, from Lake to Van Pelt Aves. and north side of Clifton Ave. between Anderson St. and Staten Island Rapid Transit R. R. tracks. Work involves 9830 sq. ft. concrete sidewalk, 100 sq. ft. special concrete sidewalk over driveways, etc.

N. J., Belleville—Until Apr. 22, by Town Bd. Comrs. furnishing labor and material grading, flagging, curbing and guttering streets and building sidewalks as per plans. F. I. Shepard, 601 Essex Bldg., Newark, engr.

N. J., Moorestown—Until May 7, by Bd. Freeholders Burlington Co. (Mt. Holly), rebuilding Main St., Chester Twp. Work involves 34,051 sq.yd. sheet asphalt pavement on concrete foundation. H. Hawkins, Jr., clk.; advertised in this issue.

N. J., Newark—Until Apr. 14, by city, furnishing labor and material for paving 2300 sq.yd. with 2 in. bitulithic pavement on 6 in. concrete foundation, 5000 lin ft. 5-16 in. 4 cut blue-stone curbing and nine 4 in. sewer connections, complete with iron marker.

N. J., Salem—Until Apr. 22, by Bd. Freeholders Salem Co., building 27,804 sq.yd., Sect. 7, Malaga-Penn Grove Rd., Pennsgrove Boro., Upper Penns Neck Twp., bituminous dressing (sheet asphalt), on macadam foundation. I. C. Smashey, clk.

N. J., West Orange—Until Apr. 15, by town, grading, laying concrete curb and paving with bituminous paving, Maple St. from Franklin Ave. to Valley Way. Work involves 4586 lin.ft. concrete curbing and 7619 sq.yd. bituminous concrete. C. A. Winston, Town Hall, engr.

Pennsylvania—Until May 2, by State Highway Comn., Harrisburg, building roads in counties, as follows:

Blair Co., 5443 ft. rein. con., Route 53, Duncansville Boro.

Cambria Co., 16,177 ft. vitr. brick, Route 53-276, Allegheny Twp.

Centre Co., 32,100 ft. bituminous on concrete foundation and hillside vitr. brick, Route 27, Spring Twp.

Chester Co., 21,626 ft. rein. con., Route 147, West Goshen and West Whiteland Twps.; 2334 ft. rein. con., Route 131, Kennett Sq. Boro.

Clarion Co., 1842 ft. vitr. brick, Route 65, Clarion Boro; 26,648 ft. rein. con. and Hillside vitr. brick, Route 65, Paint and Elk Twps.

Juanita Co., 8414 ft. rein. con. and Hillside vitr. brick, Route 31, Walker and Fermanagh Twps.

Luzerne Co., 22,452 ft. bituminous surface on concrete foundation, Route 4, Salem Twp.; 10,560 ft. rein.-con., Route 4, Union Twp.

Berks-Schuylkill Countes, 40,004 ft. rein. con. and Hillside vitr. brick, Route 141, Windsor and West Brunswick Twps.

Tioga Co., 26,310 ft. rein. con., Route 21, Charleston and Richmond Twps.

Streets and Roads (Continued)

Warren Co., 10,717 ft. rein. con., Route 88, Broken Straw Twp. L. S. Sadler, state highway comr.; advertised in this issue.

Pa., Dormont—Until Apr. 24, by boro., paving and curbing Crosby, Montpelier, Glenmore, Dormont, Delwood and East Montpelier Sts.; also grading and building sewers on Ocean Ave. About $75,000. Douglass & McKnight, Columbia Bank Bldg., Pittsburgh, boro. engrs.

Pa., Ebensburg—Until Apr. 25, by Comrs. Cambria Co., building 2.65 mi. Geistown-Elton Rd., Richland Twp., 16 ft. vitr. brick or rein.-con. roadway on concrete base and curb. F. T. Jones, controller.

Maryland—Until Apr. 22, by F. H. Zouck, chn. state rds. comn., Garret Bldg., Baltimore, building 2.01 mi. Littlestown Pike, concrete, from town limits of Westminister toward Union Hills, Carroll Co., Contr. C1-20; 3.51 mi. State Highway, concrete, from Knoxville to Harpers Ferry, Frederick and Washington Counties, Contr. W-16 A; 2.51 mi. Clarksville Pike, concrete, from Highland to Clarksville, Howard Co., Contr. H0-12; 3.03 mi. Rock Hall to Swan Creek Rd., concrete, near Edesville, Kent Co., Contr. K-12; advertised in this issue.

Md., Baltimore—Until Apr. 23, by Bd. Awards, City Hall, grading, curbing and paving Hughes St. from Sharp to Light Sts., old granite block with cement filler on 6 in. concrete base, Contr. 161; Carlton St. from Franklin St. to Harlem Ave., Rice St. from Carrollton to Fremont Aves., Stockton St. from Franklin St. to Lafayette Ave., and Woodyear St. from Franklin St. to a point north of Lanvale St., cement concrete, Contr. 162; Lovegrove Alley from Elizabeth Court to Franklin St., and from Hamilton Alley to Centre St., N. Alley from Lovegrove Alley to St. Paul St., Wise Alley from Little Sharp St. to Crooked Lane, and Wyoming Alley from Little Sharp St. to Crooked Lane, Contr. 163. R. K. Compton, 214 East Lexington Ave., ch. engr.

N. C., Rutherfordton—Until Apr. 25, by city, for granite and cement curbing. 10,000 sq.yd. concrete street paving and 1000 sq.yd. sidewalk paving. R. L. Greenlee, engr.

Ga., Savannah—Until Apr. 18, (change of date) by Comrs. Chatham Co., furnishing labor and material and building, draining and paving various public roads of county; advertised in this issue. Noted Apr. 3.

Louisiana—Until Apr. 14, by D. Buie, state highway engr., 736 Maison Blanche Bldg., New Orleans, building 15 mi. Orleans-Chef Menteur Highway, waterbound macadam.

Ohio—Until Apr. 17, by State Highway Comn., Columbus, paving, grading, draining, and building bridges on 4.18 mi. Sect. "I," Columbus-Millersburg Rd., waterbound macadam. About $46.057.

Ohio—Until April 10, by State Highway Comn., Columbus, grading, constructing bridges and culverts and paving with monolithic brick 7.71 mi. Cleveland-Buffalo Rd., Sect. "J," Lake Co., cost $281,082; same work on 5.43 mi. Sect. "Q," cost $195,878.

O., Akron—Until Apr. 16, by Coventry Land & Impvt. Co. 1115 South Main St., grading certain streets and lots in Firestone Park, 8000 to 10,000 ft. long, 45 ft. wide, involving 50,000 cu.yd. earth cut excav. A. B. Murphy, 1115 South Main St., engr.

O., Akron—Until Apr. 30, by H. S. Morse, dir. pub. serv. for repaving and building sewer in South Main St. from Thornton to Crosier Sts. Work involves removal of 6670 sq.yd. old pavement and concrete base, and 4500 sq.yd. of pavement only, laying 6670 sq.yd. concrete base, 11,175 sq.yd. stone block or brick pavement, 910 lin.ft. of 30-36 in. trunk sewer, 1680 lin.ft. 8-24 in. vitr. pipe sewer, 4800 lin.ft. 4 in. sub-drain, 13 manholes and 21 street inlets; advertised in this issue.

O., Toledo—Until Apr. 22, by city, tearing up existing stone block pavement, resetting curb and paving 5132 ft. Adams St., from Summit St. to Ashland Ave., 40 ft. wide, involving 14,345 sq.yd. vitr. brick, granite, or wood block, on 7 in. concrete base, cost $130,000; 1494 ft. Burnham Ave. from Sylvania to Maple Aves., 24 ft. wide, 4300 sq.yd. vitr. brick, asphalt block, concrete or bituminous concrete on 6 in. concrete base, 3000 lin.ft. curbing, 2345 cu. yd. earth excav., $22,815. H. C. McClure, 229 Valentine Bldg., engr.

Michigan—Until Apr. 15, by F. F. Roger, comr., state highway, Lansing, improving 3 mi. Federal Aid Project No. 18, Acme Twp., Grand Traverse Co., 15 ft. wide.

Mich., Port Huron—Until Apr. 14, by L. C. Elliott, city clk., grading and paving with brick or concrete, side drains, catch basins, sewer connections, etc., Pine St., from Military to 13th Sts., cost $35,000; alleys in block No. 58, White Plat, $2100; Stone St. from State to Garfield Sts., $31,000; Crescent Pl. from Water to 10th Sts., $7500; Jenkinson St. from Military to 7th Sts., $2000; 4th St. from Water to Wall Sts. and from Union to Griswold Sts., $15.000. E. R. Whitmore, city engr. Noted Apr. 3.

Ill., Danville—Until May 1, by J. R. Moore, clk. Vermilion Co., building concrete and brick roads, 10 ft. wide with 3 ft. macadam on gravel shoulders, together with all grading, draining, shaping, rein.-con. work etc. Former bids rejected; advertised in this issue. Noted Mar. 20.

Wis., Plymouth—Until May 15, by city, paving, curbing and guttering Milwaukee St. from Mill to Main Sts., and Reed St. from South to Vein Sts., 20 ft. wide concrete. About $35,000. W. O. Kerchoffer, Madison, engr. Noted Feb. 20.

Minn., Wadena—Until Apr. 21, by Comrs. Wadena Co., grading and graveling State Rd. No. 6, Job No. 1907, involving 6595 cu.yd earth excav.; Job No. 1906, 29 ft. slab span, rein.-con. abutment and slab, involving 4280 lbs. steel and 76 cu.yd. concrete; State Rd. No. 1, Job No. 1908, 6221 cu.yd. excav.; Job No. 1905, one 6 x 8 x 27 ft., rein.-con. abutment involving 3496 cu.yd. concrete; State Rd. No. 4, Job No. 1903, 4800 lin.ft. graveling and one 4 x 8 x 24 ft. rein.-con. culvert, involving 1761 lbs. steel; Job No. 1902, 2101 cu.yd. clay surfacing, 224 ft. culverts and 12,247 cu.yd. excav.; State Rd. No. 7, Job. No. 1908, 744 cu.yd. surfacing and 5668 cu.yd. excav. E. Ward, Wadena, engr.

Minn., Worthington—Until Apr. 14, by Comrs. Nobles Co., grading and surfacing 12½ mi. Job No. 1901. About $24,000. R. J. Boomer, Worthington, engr.

Minn., Worthington—Until May 5, by Comrs. Nobles Co. paving 2 mi. Job No. 1902, concrete, cost, $40,000; 3½ mi. Job No. 1903, $70,000; 19 mi. Job No. 1904, $95,000; 10 mi. Job No. 1905, $20,000. R. J. Boomer, Worthington, engr.

Neb., Lincoln—Until Apr. 19, by city, paving Starr and D. Sts. Work involves 7600 yd. asphaltic concrete on 5 in. base, 5800 ft. concrete curb and gutter and 1000 yd. excav. About $23,700. A Dobson, city engr.

S. D., Salem—Until Apr. 18, by City Aud., paving 15,000 sq.yd. Main St., 1 or 2 course concrete. Dakota Eng. Co., Mitchell, engrs.

North Dakota—Until May 5, by State Highway Comn., Bismarck, building Federal Aid Project No. 10, Traill Co., involving 24.87 mi., grading and culverts. About $29,162.

Arkansas—Until Apr. 15, by Comrs. Woodruff Prairie Impvt. Dist. No. 6 at office of State Highway Comn., Little Rock, building 21 mi. waterbound macadam road, asphalt carpet treatment, 14 ft. wide, in District. Work involves 125 acres clearing and grubbing, 1434 cu.yd. concrete, 640 lin.ft. corrugated pipe, 116,500 cu.yd. grading, 52,900 cu.yd. stone and 33,314 cu.yd. sand. E. E. Washburn, Cotton Plant, engr.

Oregon—Until Apr. 15 by State Highway Comn., Portland, improving roads in following counties:

Baker Co., 18.75 mi. Baker-Middle Bridge Rd., Post Rd. Project, involving 78,000 cu. yd. excav., 3500 cu. yd. gravel surfacing.

Columbia Co., 14.2 mi., Scapposse-Deer Island Rd., 70,000 cu. yd. excav., 20 mi. Deer Island-Ranier Rd.

Coos Co., 14 mi. Marshfield-Coquille Rd.

Douglas Co., 10.4 mi. Yoncalla Rd., 13 mi. Myrtle Creek-Dillard Rd., 30,000 cu. yd. excav., removal of slide.

Jackson Co., 8.9 mi. Central Pt.-Gold Hill Rd.

Josephine Co., 4.9 mi. Wolf Creek-Grave Creek Rd., 4.5 mi. Stage Rd. Pass-Wolf Creek Rd., 38,000 cu.yd. excav.

Lane Co., 3 mi. Walker-Cottage Grove Rd., 23,000 cu. yd. excav., 1 mi. Divide-Douglas Co. line, 9500 cu. yd. excav.

Marion Co., 7 mi. North Jefferson Rd.

Polk Co., 8.3 mi. Rickreall-Monmouth-Independence Rd.

Tillamook Co., 5 mi. Hemlock-Beaver Rd.

Yamhill Co., 8 mi. McMinnville-Sheridan Rd., Yamhill and Polk Counties, 8.3 mi. Amity-Holmes Gap Crossing.

Cal., Merced—Until May 19, by J. D. Wood, city clk., grading 4½ blocks K St., 4 in. concrete pavement with ½ in. asphalt and rock screenings surface, c.i. and concrete culverts, also paving alley in block B with 4 in. concrete. C. D. Martin, city engr.

Ont., Strathroy—Until Apr. 19, by F. W. Atkinson, town clk., building 10,800 ft. concrete, asphaltic concrete or bitulithic pavement on Frank, Front and Caradoc Sts., 28-40 ft. wide. About $50,000. James Loudon & Hertzberg, Excelsior Life Bldg., Toronto, consult. engrs. Noted Mar. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Mass., Boston—Comr. Pub. Wks. let contracts paving Mascot St., Dorchester Twp., involving 264 lin.ft. stone curbing and guttering, 2260 sq.ft. concrete sidewalk 400 sq.yd. bituminous macadam, and 300 cu.yd. earth excav., to M. De Matteo, 154 Dudley St., Roslindale, $4412; 2700 ft. Newbury St., 40 ft. wide 5900 lin.ft. stone curbing, 65,600 sq.yd. concrete sidewalk and 12,300 sq.yd. asphalt on 7 in. concrete base, to Warren Bros., Berkeley St., $42,733; Marble, Sterling, Warwick and Westminister Sts., 40-60 ft. wide, 7904 lin.ft. stone curbing, 56,554 sq.ft. concrete sidewalk and 18,825 Topeka asphalt on 6 in. concrete base, to Central Constr. Co., School St., $76,664.

★Rhode Island—State Bd. Pub. Rds., State House, Providence, let contract rebuilding 1.15 mi. Boston Neck Rd., 18 ft. wide, Narragansett Twp., to B. Perini, Ashland, Mass., $23,902. Noted Mar. 27.

Rhode Island—State Bd. Pub. Wks., Providence, received bids Apr. 2, building 2.24 mi. State Rd. in Smithfield and Gloucester Twps., 18 ft. wide, from T. F. Quinn, Ashton, $66,000; R. H. Newell & Sons, Uxbridge, Mass., $82,854; J. McCormick, East Providence, $84,522. Noted Mar. 27.

★Conn., New Britain— City let contracts for (a) concrete sidewalks; (b) concrete gutters; (c) concrete curbs; (d) curbs and gutters combined, to Nicola-Bellini, 48 Franklin St., (a) 22c. per sq.ft., (b) 32c. per sq.ft.; (c) 62c. per sq.ft.; (d) $1.45 per lin.ft.

★New York—E. Duffy, comr. state highway dept., 55 Lancaster St., Albany, let contracts repairing roads in following counties:

(a) Albany Co., River Rd., Contr. No. 1189;

(b) Broome Co., Fenton-Chenango- Loupath Rd., Contr. No. 1200;

(c) Delaware Co., Delhi-Middletown Rd., Contr. No. 1202;

(d) Erie Co., Akron-Tonawanda Creek Rd., Contr. No. 1186;

(e) Erie Co., Transit Rd., Part 2, Contr. No. 1199;

(f) Genesee Co., East Pembroke-Batavia Rd., Contr. No. 1188;

(g) Herkimer Co., Manheim Center-Salisbury Center Rd., Salisbury Center Burrells Rd., Burrells-Middleville Rd., Little Falls-Fairfield Rd., Richfield Springs-Warren-Springfield Rd., Little Falls-Montgomery Co. line Rd., Ilion-Cedarville Rd., Jordanville-Richfield Springs Rd., Mohawk-Paines Hollow Rd., Paines Hollow-Jordanville Rd., Contr. No. 1198;

(h) Monroe Co., Latta Rd., Contr. No. 1191;

(i) Monroe Co., Clifton Rd., Parts 1 and 2, Chili Rd., Part 2, Honeoye Falls-Rush Rd., West Henrietta-Valley Park Rd., Contr. No. 1196;

(j) Oneida Co., Utica-Bridgewater Rd., Contr. No. 1197;

(k) Onondaga Co., Baldwinsville-Cicero Rd., Contr. No. 1175;

(l) Onondaga Co., Cemetery Rd., Contr. No. 1176;

(m) Onondaga Co., Phoenix Syracuse Rd., Contr. No. 1177;

(n) Onondaga Co., Marietta-Marcellus Rd., Contr. No. 1178;

(o) Saratoga Co., Ballston-Ballston Lake Rd., Part 2, Contr. No. 1185, to

L. Maversohn, 175 Warren St., Albany, (a) $28,867;

Edgecomb Bros., Inc., Binghamton, (b) $41,699;

Kent Constr. Co., Inc., Albany, (c) $49,315;

Dale Eng. Co., Mann Bldg., Utica (d) $55,632;

Wing & Munger, Holley, (e) $48,015;

Ribstein-Holter Co., Inc., 16 State St., Rochester, (f) $49,625;

Pathfinder Constr. Co., Fulton, (g) $32,527;

G. W. Chambers, Powers Bldg., Rochester, (h) $24,220;

J. J. Crouch, Rochester, (i) $7453;

H. W. Roberts Co., 610 Lansing St., Utica, (j) $36,645; (n) $29,375;

G. B. Dickison, Union Bldg., Syracuse, (k) $15,686; (l) $9844;

Brayer Bros., Pearson Blk., Auburn, (m) $49,741;

J. B. Dower, Ballston Spa, (o) $74,800. Noted Mar. 13.

Streets and Roads (Continued)

★New York—State Highway Dept., 55 Lancaster St., Albany, let contracts improving roads in following counties:

(a) Allegany Co., Cuba-Friendship and Wellsville-Andover Rds., Contr. No. 1205;

(b) Cayuga Co., Cato-Meridian-Baldwinsville Rd., Contr. No. 1174;

(c) Fulton and Montgomery Counties, Gloversville-Meco-Phelps Rd., Old Plank Rd., Mayfield-Northville Rd., Part 2, Gloversville-West Perth Rd, Fultonville-Glen Rd., Glen-Charleston Rd. and Akin-Johnstown Rd., Part 1, Contr. No. 1194;

(d) Livingston Co., Kuders Corners-Springwater Town Line Rd., Livonia-Conesus Town Line Rd. and Nunda-Dalton Rd., Contr. No. 1195;

(e) Livingston Co., Mt. Morris-Genesee Rd. and Mt. Morris Village Rd., Contr. No. 1206;

(f) Livingston and Ontario Counties, Dansville-Mt. Morris Rd., Part 6, Geneva-Halls Corners Rd., Stanley-Geneva Rd., Wayland-Dansville Rd., Part 2, County Line-Dansville Rd., Cohocton-Naples Rd., Part 2 and Craig Colony Rd., Contr. No. 1192;

(g) Monroe and Orleans Counties, Five Corners-Kuckville Rd., Part 2, Clarendon-Holley Rd., Part 1, County Line Rd., Holley-Ridge Rd., Monroe-Orleans County Line Rd., Contr. No. 1193;

(h) Ontario Co., Victor-Mendon Rd., Part 1, and Canandaigua-Victor Rd., Contr. No. 1203;

(i) Otsego Co., Morris-Gilbertsville Rd., Part 2, and Gilbertsville Village Rd., Contr. No. 1172;

(j) Schenectady Co., Contr. No. 1184;

(k) Schuyler, Tioga and Tompkins Counties, Ithaca-Dryden Rd., Part 2, Newark Valley-Berkshire Rd., Part 2, Newark Valley-Berkshire Rd., Part 1, Spencer-Candor Rd., Part 2, Enfield Falls-Enfield Center Rd., Montour Falls-Alpine Rd., Part 1, Alpine-Cayuta Rd., Part 1, Mecklenburg-Perry City Rd., Ithaca-Esty Glen Rd., Waverly-Owego Rd., Part 2, Ithaca-Danby Rd., Part 3, Cayuta-Newfield Rd., Perry City-Trumansburg Rd., Contr. No. 1204;

(l) Steuben Co., Big Creek Rd., Parts 1 and 2, Contr. No. 1179;

(m) Steuben Co., Wayland-Dansville Rd., Part 1, Contr. No. 1180;

(n) Steuben Co., Bath-Hammondsport Rd., Part 1, Contr. No. 1181;

(o) Sullivan Co., Jeffersonville-Kenoza Lake-Fosterdale Rd., Contr. No. 1173;

(p) Ulster Co., Kingston-Ellenville Rd., Part 3, Contr. No. 1190, to McGreevey, McGuigan & Baum, Robinson Bldg., Elmira, (a) $25,781; (m) $29,638; (n) $37,971;

Brayer Bros., Pearson Blk., Auburn, (b) $35,558;

J. P. Dugan & Co., Inc., 32 James St., Amsterdam, (c) $15,240;

J. J. Crouch, Rochester, (d) $6170; (f) $7857; (g) $7736;

R. W. Corp., East Belle Isle Yard, Syracuse, (e) $44,647; (i) $35,045;

P. H. Murray, Cutler Bldg., Rochester, (h) $44,900; (l) $40,933;

J. J. Malloy, Schnectady, (j) $46,808;

W. Hazard, Ithaca, (k) $21,732;

S. B. Van Wagenen, Inc., Rondout, (o) $42,525; (p) $37,228. Noted Mar. 13.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., received lowest 3 bids regulating and grading sidewalk and gutter spaces, laying sidewalks, etc., (a) on Barclay St.; (b) Delaware Ave.; (c) 153rd St.; (d) Gates Ave.; (e) repairing sheet asphalt pavement in 1st and 2nd Wards, from R. A. Hess, Inc., (a) $598; (b) $300; (c) $1444; (d) $1230; Scott & Kurth, (a) $612; (b) $270; Peace Bros., 20 Main St., Flushing, (a) $644; (b) $370; (c) $1596; (d) $1275; Sicilian Asphalt Paving Co., Paidge Ave., (e) $13,325; Uvalde Asphalt Paving Co., Metropolitan Ave., (e) $14,612; Borough Asphalt Paving Co., 1301 Metropolitan Ave., (e) $14,481; T. F. Tuohy, 98 Main St., (b) $333, (c) $1573; T. Welsh, (d) $1072; C. A. Meyers, foot Stagg St., (d) $1010. Noted Mar. 27.

★N. Y., New York—H. Bruckner, pres. Bronx Boro., let contract building transverse road, regulating, grading, regrading, etc., paving and repaving East 161st St., Grant, Sherman and Walton Aves., granite block and sheet asphalt on concrete foundation, to F. Schneider, Westchester Ave. and Bronx River Rd., $638,327. Noted Apr. 3.

★N. Y., Rochester—City let contract paving Sect. 2 of City Blvd. from Brooks to Chili Aves., to Whitmore, Rauber & Vicinus, 279 South Ave. About $102,000.

★N. J., Newark—Bd. Freeholders Essex Co. let contract resurfacing with 2 in. Warrenite pavement, Watchung Ave. from Upper Mt. Ave., Montclair, through Glen Ridge to East Passaic Ave., Bloomfield, 13,200 ft. long, 20 ft. wide, to Osborne & Marsellis Co., Belvue Ave., Upper Montclair, $80,900. Noted Mar. 27.

★N. J., Newark—Dept. Streets & Pub. Impvts. let contract to Newark Paving Co., 133 1st St., paving with granite block, Wilson Ave. from Hyatt St. to Newark Bay, cost, $34,800; paving with new granite South Orange Ave. from Springfield Ave. to South 9th St., $127,841; Clinton Ave. from Pennsylvania R.R. to Chadwick Ave., $26,761; repaving with reclipped granite Springfield Ave. from Morris Ave to city line, $109,405. Noted Mar. 27.

Pa., Pittsburgh—Allegheny Co. received bids Apr. 1, grading, paving and improving 12,500 ft. Round Hill Rd., 20 ft. wide, in Forward Twp., from McLaughlin Contg. Co., Citizens Bank Bldg., $73,743; A. G. Rothey, R. F. D., Elizabeth, $75,191; A. Ancaroni, Portview, $93,704. Work involves 22,300 sq.yd. waterbound macadam and 23,020 sq.yd. Telford foundation, 8 in. thick. Noted Mar. 13.

Pa., Pittsburgh—J. P. Moore, co. controller Allegheny Co., received bids Mar. 25, widening and rebuilding 3400 ft. Brackenbridge Rd., (a) concrete (b) asphaltic concrete, from Martin Constr. Co., 1st Natl. Bank Bldg., (a) $47,175; McPherson Bros., 421 Chestnut St., (a) $58,563, (b) $53,823; M. O. Herron, 1st and McKean Sts., (a) $58,229; T. Cronin, 17th and Muriel Sts., (b) $58,742; Booth & Flynn, Forbes St., (b) $57,962. Noted Mar. 13.

★Md., Baltimore—Bd. Awards let contract paving Fairmount Ave., Lexington and St. Matthew Sts., sheet asphalt on concrete base, vitr. block and redressed granite block; Franklin St. from Howard to Charles Sts. and St. Paul St. from Lexington to Hamilton Sts., to P. Flannigan & Sons, Harford Rd. and Baltimore & Ohio R.R., $69,602 and $42,528 respectively; Pratt, Fayette, McHenry, Cole, Eagle and Bentalou Sts., to Baltimore Asphalt Block and Tile Co., Monroe and Morman Sts., $144,704. Noted Mar. 20.

★Va., Bristol—C. P. Moore, street comr., let contract paving 25,000 yd. State St. between 10th St. and Pennsylvania Ave., asphalt on concrete base, to Municipal Paving Co., Johnson City, Tenn., $2.61 per yd. Noted Feb. 27.

★W. Va., Parsons—Comrs. Tucker Co. let contract grading ⅓ mi. Parsons Hendricks Co., State Aid Project No. 25., 26 ft. wide, to J. B. Funkhouser, Hambleton. About $15,300. Work involves 9000 cu.yd. grading, 5000 cu.yd. rock excav. and 50 cu.yd. concrete in culvert.

★N. C., Durham—City let contract paving 30,000 sq.yd. Main St., from Fuller St. to Allston Ave., to R. G. Lassiter, Oxford, $229,904. Noted Mar. 20.

★N. C., Mount Olive—City let contract improving 25,000 sq.yd. various streets, to R. G. Lassiter & Co., Raleigh, $167,000. Noted Mar. 13.

Fla., Jacksonville—Duval Co. received bids paving 6500 sq.yd. Atlantic Blvd. from Kings Rd. to Hendrix Ave., 1 course concrete with vibrolithic method, from F. W. Long Co., 434 East Bay St., $3.12 per sq.yd.; Dawkins Constr. Co., $2.88 per sq.-yd. Noted Apr. 3.

★Fla., Moore Haven—City let contract paving various streets and installing sewers in same, to Freelund Constr. Co., 8th St. About $30,000 available. Noted Jan. 2.

★Ala., Tuscumbia—Comrs. Colbert Co., let contract graveling 7¾ mi. Jackson Highway. State Rd. No. 8. to Mitchell Bros., Oneonta. About $30,236. Noted Mar. 6.

★Miss., Charleston—Comrs. Tallahatchie Co. let contract graveling and surfacing 21.5 mi. road with bituminous material, to Newell Constr. Co., 2209 1st Ave., Birmingham, Ala. About $79,235. Noted Feb. 20.

La., Shreveport—Caddo Parish received lowest bid improving 9.11 mi. Vivian Arkansas Highway, from Vivian, northerly through Myrtis and Rodessa to Louisiana Arkansas state line, from A. D. Lambert. Noted Oct. 3.

★Ohio—State Highway Comn, Columbus, let contracts building roads as follows:

Columbiana Co., Sect. "Q" Cleveland-East Liverpool Rd., 98 mi., grading, constructing bridges and culverts and paving with concrete, Campbell Bros. Co., 609 Slambaugh Bldg., Youngstown, $35,935.

Hancock Co., Sect. "G," Findlay-Kenton Rd., 2.01 mi., grading, constructing bridges and culverts and paving with asphaltic concrete, Johnston Constr. Co., 418 South Clinton St., Chcago, $56,976.

Knox Co., Sect. "M," Columbus-Wooster Rd., 4.02 mi., grading, constructing bridges and culverts and paving with rein. con., H. P. Streicher Co., 319 Terminal Bldg., Toledo, $164,314.

Montgomery Co., Sect. "O-1" Cincinnati-Dayton Rd., 1.92 mi., grading, constructing bridges and culverts and paving with rein. con., Bigler Bros., Middletown, $58,140.

Sect. "O-2," Cincinnati-Dayton Rd., 1.34 mi., grading, constructing bridges and culverts and paving with rein. con., Williams & Little Co., 11810 Saywell St., Cleveland, $46,559.

Wayne Co., Sect. "E," Cleveland-Wooster Rd., 5 mi., grading, constructing bridges and culverts and paving with monolithic brick, Lee, Griggs & Anderson, Millersburg, $143,825.

Sect. "A," Ashland-Wooster Rd., 6.72 mi., grading, constructing bridges and culverts and paving with monolithic brick, Walter S. Newhall Co., Citizens Bldg., Cleveland, $203,221.

Sect. "M-1," Mansfield-Wooster Rd., 1.23 mi., grading, constructing bridges and culverts and paving with monolithic brick, D. A. Phillips & Son, Ashland, $33,301. Noted Apr. 3.

★O., Cleveland—City let contract paving (1) East 143rd St. from Lake Shore Blvd. to Westrop Ave.; (2) East 143rd St. from Westrop to Sylvia Aves.; (3) Aetna Rd. from East 103rd St. to point westerly; (4) Aetna Rd. from East 93rd St. to Erie R.R.; (5) Woodside Ave. from Eddy Rd. to point easterly; (9) Eliot Ave. from East 102nd to East 104th Sts.; (7) East 103rd St. from Union to Eliot Aves.; (8) East 104th St. from Union Ave. to Aetna Rd.; (9) East 102nd St. from Empire to Yale Aves.; (10) East 102nd St. from Kempton to Adams Sts.; (11) East 102nd St. from Empire to Kempton Aves.; (12) East 103rd St. from Union Ave. to Aetna Rd.; (13) Roehl Ave. from Fulton Rd. to West 33rd St., to Gould & Maybach, 823 East 150th St., (1) $14,415, (2) $10,147; Enterprise Paving Co., 8436 Bway. Ave., (3) $10,174, (4) $23,260; Cleveland Trinidad Paving Co., 3409 Trumbull Ave., (5) $30,110; A. M. Pejsa, 2359 East 93rd St., (6) $11,537, (7) $17,792, (8) $25,218; McHugh Bros., 527 Society Savings Bank Bldg., (9) $2000, (10) $2731, (11) $14,005; Baldwin Bros., 823 East 150th St., (12) $27,369; Roehl Bros., Clark and West 25th St., (13) $9210. Noted Apr. 3.

★O., Cleveland—City let contracts improving, (1) sidewalks in northerly section; (2) westerly section; (3) southerly section; (4) Altoona Rd. from Pearl Ave. to West 32nd St.; (5) East 128th St. from Penobscot to St. Clair Aves.; (6) Bway. Ave. from East 34th St. to point west; (7) westerly section; (8) northerly section; (9) southerly section, to Ohio Quarries Co., Citizens Bldg., (1) $12,638, (2) $11,209, (3) $15,273; Roehl Bros., West 25th St. and Clark Ave., (4) $9920; Gould & Maybach, 823 East 150th St., (5) $10,843; R. P. Burnett, Society Savings Bank Bldg., (6) $39,324; Schmeller-Franz, (7) $7682, (9) $6742; P. De Santis, (8) $9856. Noted Mar. 20.

O., Perrysburg—City received bids paving 1 mi. 5th St., 26 ft. wide, curbs, from Federal Asphalt Paving Co., 316 Rentschler Bldg., Hamilton, oil asphalt, concrete, $55,067; trinidad asphalt concrete curbs, $56,977, P. W. Breisach, Perrysburg, concrete, $56,955. Noted Mar. 27.

★O., Toledo—Lucas Co. let contract building 1.2 mi. Upton Ave., 16 ft. wide, to Warner & McKechnie, 320 Nasby Bldg., $34,327; 2 mi. Sylvania Ave., 16 ft., to R. A. Garrigan, 434 Valentine Bldg., $45,993; 1550 ft. Central Grove Ave., 27 ft. wide, to Harris & Tansey, 221 Nasby Bldg., $15,066; 1 mi. road 16 ft. wide, to Peter Bros., 237 Marion St., $34,228; 1.63 mi. Stickney Ave., 14 ft. wide, to A. M. Doan, 437 Spitzer Bldg., $22,660; 3.2 mi. Grace Rd., 10 ft. wide, to J. E. Coon, Swanton, $33,271; 3.56 mi. Dorr St., 18 ft. wide, to T. P. Garrigan Co., 129 St. Clair St., $96,602. Noted Apr. 3.

★Mich., Detroit—Dept. Pub. Wks. let contracts paving and grading with 1 course concrete, alley, (a) No. 967; (b) No. 968; (c) No. 969; (d) No. 970; (e) No. 971; (f) No. 972; (g) No. 973; (h) No. 974; (i) No. 975; (j) No. 976; (k) No. 977; (l) No. 978, to T. E. Currie, 20 McGraw Bldg., (a) $6295; R. J. Powelson Co., 1577 Iroquois Ave., (b) $5569; Lennane & McIlvenna, Union Trust Bldg., (c) $4974; (e) $2272; (k) $2848; Otis Cement Constr. Co., 806 Hammond Bldg., (d) $3388; (e) $3234; Oakwood Constr. Co. Ford St. and Wabash R.R., (f) $1756; (j) $3867; Talbot Co., Penobscot Bldg., (g) $1199; (h) $5090; Liberty Constr. Co., Penobscot Bldg., (i) $4696. Noted Apr. 3.

Streets and Roads (Continued)

★Mich., Grand Rapids—Comrs. Kent Co. let contract building 2 mi. Kalamazoo Ave. from red schoolhouse, south, concrete, to C. M. Blakeslee, Grand Haven, $40,335.

★Wis., Appleton—Comrs. Outagamie Co. let contract grading, draining and surfacing with concrete 2 mi. Black Creek Appleton Rd., 16 ft. wide, to Garvey & Weyenberg, 812 College St., cost, $48,102; grading and surfacing .84 mi. Brickyard Rd., 16 ft. wide, to C. A. Greinke, 833 Morrison St., $20,684. Noted Mar. 27.

★Wis., Appleton—Comrs. Outagamie Co. let contract grading, draining and surfacing with concrete (a) 1 mi. Askeaton Rd., 9 ft. wide, involving 5280 sq.yd. 8 in. concrete; (b) 1.75 mi. Appleton Block Creek Rd., 16 ft. wide, 14,044 sq.yd. 8 in. concrete; (c) 2.5 mi. Shriocton Stephensville Rd., 16 ft. wide, 21,900 sq.yd. 8 in. concrete; (d) 2½ mi. Greenville Hortonville Rd., 16 ft. wide, 21,690 sq.yd. 8 in. concrete; (e) 2.5 mi Seymour Oneida Rd., 9 ft. wide, 12,000 sq.yd. 8 in. concrete, to C. A. Greinke, 833 Morrison St., (a) $13,165, (b) $34,806; P. Wunderlich, Black Creek, (c) $57,250; G. M. Gross, Hortonville, (d) $55,140; Garvey & Weyenberg, 812 College St., (e) $31,830.

★Wis., River Falls—City let contract paving various streets, to Johnson & Drake, 905 Plymouth Bldg., Minneapolis, $30,644.

★Minn., Minneapolis—Comrs. Hennepin Co. let contract paving 6.6 mi. concrete road from Anoka to Sherburne Co. line, to Widell Paving Co., 1st Natl. Bank Bldg., Mankato, $22,500 per mile.

★Minn., St. Paul—Comrs. Ramsey Co. let contract to Fielding & Shepley, Inc., 216 University Ave., paving Avon St. from Laurel to Summit Aves., cost, $8900; Earl St. from Hastings Ave. to Thorne St., $13,050; Concord St. from Ada to Annapolis Sts., $68,000; Laurel Ave. from west line Syndicate Ave. to Lexington Ave., $18,477; East 6th St. from east end 6th St. bridge to west line Arcade St. and Arcade St. from south line East 6th St. to south line East 7th St., $53,300. Noted Mar. 27.

★N. D., Williston—Comrs. Williams Co. let contract grading 30.5 mi. Federal Aid Project No. 3, to Schultz Bros., Bowbells, $61,047. Work involves 135,826 cu.yd. earth excav. Noted Mar. 27.

★Tex., Dallas—City let contract to Texas Bitulithic Co., Praetorian Bldg., paving Peabody Ave. from Wall to Howard Sts., 30 ft. wide, involving 8232 sq.yd. asphalt on 5 in. concrete base, 1697 lin.ft. monolithic curbing and guttering, 142 sq.ft. sidewalk, 700 cu.yd. excav. and 1376 ft. wire fabric, cost $25,934; Englewood St. from Tilden to Bishop Sts., 25 ft. wide, 3285 sq.yd. bituminous on 5 in. concrete base, 2402 lin.ft. monolithic curbing and guttering, 5785 cu.yd. excav. and 5785 lin.ft. wire fabric. $16,617.

★Washington — State Highway Dept., Olympia, let contract clearing, grading, draining and surfacing 13 mi. Inland Empire Highway from Spokane Co. line to Springdale, Stevens Co., to Genl. Constr. Co., North 1324 Elm St., Spokane, $153,474. Noted Apr. 3.

★Wash., Seattle—Bd. Pub. Wks. let contract paving, grading, laying armored concrete curbs, etc., on 2½ mi. Leary Ave., 18 ft. wide, 8 in. concrete, to Kaiser Paving Co., Everett, $82,228; concrete walks on ½ mi. 1st Ave. S. from Atlantic to Horton Sts., 6 ft. wide, to F. McLellan, Seattle, $22,120. Noted Apr. 3.

Ore., Portland—City received bids improving and grading (a) Van Houten St. from north line Lombard St. to south line Columbia Slough Rd.; (b) improving Hedge, Herefore and Gloucester Sts., from Alaska Heating & Plumbing Co., 413 East Morrison St., (a) $11,842; (b) $6276; Jacobsen-Jensen Co., 407 Stanton St., (a) $12,180; Cochran Bros., (a) $12,127; (b) $6,508; C. P. Archer and E. Myers, (b) $6,363. Noted Apr. 3.

Cal., Los Angeles—Bd. Pub. Wks. received bids grading and oiling and building cement curbs, walks and concrete gutters, also rein. con. bridge over railway tracks in Sherman Dr. and West Blvd. Impvt. Dist., from F. W. Young, Manhattan Beach, $32,000; W. M. Ledbetter, Pacific Electric Bldg., $34,475; L. F. Hendricks, Los Angeles, $34,953.

★Cal., Los Angeles—City let contract grading, oiling, rolling, curbing and guttering, Carillo St. from Kinsington Rd. to Bellevue Ave., to J. A. Hill, 695 Westmoreland Ave., $16,473. Work involves 46,464 sq.ft. rough grading at $0.19 per sq.ft., 46,464 sq.ft. oiling and rolling at $0.055 per sq.ft., 2891 lin.ft. cement curbs at $0.45 per lin.ft., 15,897 sq.ft. cement walks at $0.15 per sq.ft. and 6101 sq.ft. concrete gutter at $0.23 per sq.ft.

Railways

PROPOSED WORK

Montana—Great Northern Ry., St. Paul, Minn., plans to build double-track line west of Whitefish, also replace bridge over Whitefish River with new steel span and fill in Beaver Bay trestle. About $300,000. A. H. Hogeland, ch. engr.

Idaho—Caldwell Traction Co., Caldwell, having surveys made extending electric line 3 mi. to Nampa Ferry. W. R. Sebree, pres., treas. and genl. mgr.

California—Minkler Southern Ry., Visalia, received authorization to build line along Walnut and other streets to connect with Atchison, Topeka & Santa Fe Ry.

Canada—Dominion Government, Ottawa, Ont., plans to expend $11,121,681 for building and improving Canadian Government Railways during 1919 and 1920; $100,000 improving Port Nelson Terminals, Hudson Bay Ry., Man.; $35,000,000 on railway equipment and materials. W. A. Bowden, Ottawa, ch. engr.

BIDS DESIRED

Pennsylvania—Until Apr. 15, (change of date) by W. S. Twining, dir. dept. city transit, Mershon Bldg., building first 4 sections of Frankford, Bustleton, and Byberry Surface Passenger Railway from Frankford to Bustleton, 6 mi. long, Contr. No. 701; advertised in this issue. Noted Mar. 27.

Ontario—Until Apr. 15, by W. H. Maund, secy. treas., Temiskaming & Northern Ry. Comn., Imperial Oil Bldg., Toronto, for complete roadbed ballasting, fencing and laying tracks on 6 mi. line from Swastika to Kirkland Lake, and on 2 mi. line from Timmins to Mattagami River. Total cost about $400,000. S. B. Clement, ch. engr.

Excavation and Dredging

PROPOSED WORK

N. Y., Rome—Drainage—Bldg. Com., Chamber of Commerce, having plans prepared building drainage system to dewater 3000 acres land in southern section of city. W. J. Mullin, chn.

Ia., Sioux City—Channel—City plans to confine stream to conduit from 9th St. to mouth of Missouri River, cost, $700,000; improve open channel from mouth of Missouri River to 36th St., $400,000; widen and straighten channel from mouth for length of 4 mi.; new channel must be cut in many places and old channel filled in. Cost between $500,000 and $800,000. C. M. Finley, Sioux City, engr.

Minn., Bemidji—Excavation—See "Streets and Roads."

Minn., Blue Earth — Excavation — See "Streets and Roads."

Minn., Brainerd — Excavation — See "Streets and Roads."

Minn., Caledonia — Excavation — See "Streets and Roads."

Minn., Cambridge — Excavation — See "Streets and Roads."

Minn., Elbow Lake—Excavation—See "Streets and Roads."

Minn., Foley—Excavation—See "Streets and Roads."

Minn., Grand Rapids—Excavation—See "Streets and Roads."

Minn., Hastings — Excavation — See "Streets and Roads."

Minn., Jackson—Excavation—See "Streets and Roads."

Minn., Lesueur Center—Excavation—See "Streets and Roads."

Minn., Mantorville — Excavation — See "Streets and Roads."

Minn., Marshall — Excavation — See "Streets and Roads."

Minn., Montevide — Excavation — See "Streets and Roads."

Minn., Moorhead — Excavation — See "Streets and Roads."

Minn., Walker—Excavation—See "Streets and Roads."

Ore., Portland—Dredging—Port of Portland soon lets contract dredging area in front of Albina dock. J. P. Doyle, asst. secy. Noted Mar. 13.

Canada—Canals, etc.—Dominion Government, Ottawa, plans to build and improve following canals during 1919 and 1920: Welland Ship Canal, Ont., $3,500,000; Trent Canal, Ont., $1,000,000; Chambly Canal, Ont., $40,000; Carillon and Grenville Canal, Ont., $17,000; Lachine Canal, Que., $25,000; Soulanges Canal, Que., $152,000; Ontario—St. Lawrence Canal, Ont., $54,000; also dredge Detroit River, Fighting Island, Ont., $60,000; dredging Maritime Provinces, $350,000; Ontario and Quebec Dists., $350,000; Manitoba, Alberta and Saskatchewan Dists., $45,000; British Columbia Dist., $300,000.

BIDS DESIRED

R. I., Pawtucket—Excavation—Until Apr. 15, by I. Gill, city engr., excavating and grading 19,000 cu.yd.

N. Y., Albany—Barge Canal Work—Until Apr. 20, by L. Nixon, supt. pub. wks., Capitol for paving parts of terminal sites at Mott Haven, Greenpoint and Gowanus Bay; Contr. No. 44-P; dredging at Barge Canal terminals at piers 5 and 6, East River, at Greenpoint and Long Island City, Contr. No. 77; building Barge canal terminal freight-shed on Pier 93, West 53rd St., North River, New York City, Contr. No. 218; advertised in this issue.

N. C., New Holland—Canal—Until Apr. 24, by Mattamuskeet D. D. of Hyde Co., cleaning about 30 mi. canal involving 850,000 cu.yd. material. K. L. Ponzer, engr.; advertised in this issue. Noted Mar. 13.

Ala., Mobile—Dredging—Until May 15, by Bd. City Comrs., dredging a minimum of 1,000,000 cu.yd. material at Arlington Pier on Mobile Bay. W. Smith, city engr.; advertised in this issue.

Minn., Wadena — Excavation — See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Miss., Water Valley—Canal—Yalobusha Co. Drainage Bd. (Coffeeville) let contract building canal, involving 946,000 cu.yd. excav., to N. C. McGinnis Co., 1704 Exch. Bldg., Memphis, Tenn.

★Minn., Willmar—Ditches—Comrs. Kandiyohi Co. let contract building Ditches No. 42 and 45, to Minnesota Constr. Co., 616 Plymouth Bldg., Minneapolis, $11,974 and $10,098 respectively.

Industrial Works

PROPOSED WORK

Mass., Springfield—J. D. Cokkinias, 69 Patton St., plans to build 5 story, 50 x 150 ft. candy factory, on North Main and Waverly Sts. About $60,000.

Mass., Springfield—Springfield Coal & Wood Co., 155 Main St., plans to build rein.-con. plant and coal pocket near Armory St. About $50,000.

Conn., Hartford—H. I. Brightman, 82 Wooster St., plans to build 2 story, 82 x 82 ft. brick and steel storehouse, (first floor to have rein.-con. flooring), concrete foundation, on Windsor Ave. About $40,000. Berenson & Moses, 26 State St., archts.

Conn., Hartford—F. C. Walz, archt., 348 Trumbull St., soon receives bids building 4 story, 64 x 90 x 128 ft. brick and steel garage, machine and paint shop, concrete foundation, on Main St., for Rosenberg & Older, 222 Collins St. About $80,000.

Conn., New London—Bilderbeck & Langdon, Inc., archts., 253 State St., soon receive bids building 2 story, 80 x 101 ft. rein.-con. garage, rein.-con. flooring, concrete foundation, on Main St., for M. A. Avery, 176 Main St. About $60,000.

Conn., Stamford — Thompson - Binger, engrs., 280 Madison Ave., New York City, soon let contract building 3 story, 128 x 150 ft. rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, on Canal St., for C. E. Slawson, Canal St. About $150,000.

N. Y., Brooklyn—W. Bauer, c/o Shampan & Shampan, archts., 772 Bway., having plans prepared building 3 story, 60 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Vanderbilt and De Kalb Aves. About $50,000.

N. Y., Brooklyn—Diana Chocolate Co., 382 Jefferson Ave., having preliminary plans prepared by C. L. Otto, archt., 15 Park Row, New York City, building 5 story, 84 x 200 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Wyckoff and Willoughby Aves. About $100,000.

Industrial Works (Continued)

N. Y., Brooklyn—C. Marcusci, 135 West 3rd St., having plans prepared by F. Savignano, archt., 6005 14th Ave., for 2-story, 25 x 150 ft., brick and steel factory, rein.-con. flooring, concrete foundation. About $30,000.

N. Y., Brooklyn—Pirika Chocolate Co., 972 Dean St., soon receives bids building 3 story, 78 x 120 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Dean St. and Carlton Ave. About $130,000. Timmis & Chapman, 515 5th Ave., New York City, archts.

N. Y., Buffalo—Mentholatum Co., 146 Seneca St., soon let contract building 5 story, 100 x 160 ft. rein.-con. factory on Niagara and Brace Sts. Cost between $150,000 and $200,000.

N. Y., Gloversville—Geisler & Lehr Co. plan to build addition to plant to cover 40,000 sq.ft. floor space. About $50,000.

N. Y., Long Island City—Amer. Chicle Co., Harris Ave., plans to build 5 story rein.-con. and steel factory, rein-con. flooring, concrete foundation, on Harris Ave. Ballinger & Perrot, 1328 Bway., New York City, engrs.

N. Y., New York—G. Keister, archt., 56 West 45th St., soon lets contract building 4 story, 42x98 ft. brick and steel warehouse, rein.-con. flooring, concrete foundation, at 233-235 West 35th St., for W. H. Hussey & Son, 150 West 35th St. About $75,000. Noted Feb. 27.

N. Y., New York—B. Levitan, archt., 7 West 45th St., receives bids about April 18 (change of date), building 2 story, 100x171 ft brick and steel garage, rein.-con. flooring concrete foundation, on Lenox Ave., between 110th and 111th Sts., for Stalwart Realty Co., c/o Ames & Co., 26 West 31st St. About $200,000. Noted Mar. 13.

N. Y., Rochester—Gleason Wks., 1000 University Ave., plan to build 148 x 148 ft. rein.-con. pattern building, 12-21 ft. high. About $26,000.

N. J., Jersey City—M. W. Kellogg Co., West Side Ave., purchased 40 acre site on Hackensack Meadows and plans to build rein. con. and steel plant. About $3,000,000.

N. J., Newark—Amer. Food Co., 392 Plane St., having plans prepared by W. E. Lehman, archt., 738 Broad St., building 4 story, 50x80 ft., rein. con. and brick warehouse, rein. con. flooring, concrete foundation, on Badger Ave. south of Alpine St. About $100,000.

N. J., Newark—Baker & Co., Inc., 54 Austin St., having plans prepared by F. A. Phelps, archt., Union Bldg., building 5 story, 50x188 ft., rein. con. and brick addition to factory, rein. con. flooring, concrete foundation, on Murray and Austin Sts.

N. J., Newark—Detroit Cadillac Motor Co., 534 Broad St., having plans prepared by W. E. Lehman, archt., 738 Broad St., building 3 story, 60 x 120 ft., brick and concrete addition to auto service station, rein. con. flooring, concrete foundation.

N. J., Newark—Nickelsburg Bros. Co., Meadow St. and Lincoln Highway, having plans prepared by O'Rourke & Briscoe, archts., 45 Clinton St., building 3 story, 50 x 100 ft., concrete and brick plant, rein.-con. flooring, concrete foundation. About $30,000. Miller & Moran Chemical Wks., lessees.

N. J., Newark—E. V. Warren, archt., Essex Bldg., receives bids about Apr. 15, building 3 story, 40 x 140 x 300 ft., rein.-con. and brick garage, rein.-con. flooring, concrete foundation on Broad and Spring Sts., for State Garage Inc., c/o archts. About $150,000.

N. J., Toms River—New Jersey Pub. Utility Comn. ordered Ocean Co. Gas Co. to build additions to plant here. Order calls for installation of gas holder with 100,000 cu.ft. capacity, arrangement of present holder as relief holder, and additional generating unit and larger steam boiler.

Pa., Phila.—A. Colburn & Co., 2228 North 10th St., plans to build 4 story, 60 x 242 ft., brick and timber factory, on 10th and Nevada Sts. About $80,000.

Md., Baltimore—J. M. Curran, 501 North Pulaski St., plans to build 1 story, 208 x 286 ft., brick and mill construction garage, cement flooring, brick and concrete foundation, on Butchers Lane, Franklin and Calverton Sts. About $50,000. F. J. Beall, 1335 North Gilmor St., archt

Md., Baltimore — Mangels — Herold Co., 1620 Gough St., plans to build 3 story, 50 x 168 ft., brick and steel syrup factory, rein.-con. flooring, stone and concrete foundation, on Key Highway and Harvey St. About $55,000. O. Kublitz, 1004 Emerson Tower, archt.

Va., Richmond—Spotless Co., 1017-27 East Canal St., plans to build 7 story, 130 x 140 ft., warehouse and office on 10th and Canal Sts. About $225,000. Carneal & Johnston, 707 Chamber of Commerce Bldg., archts.

Fla., Miami—Miami Electric Co. receives bids in summer for enlarging plant, thereby increasing capacity 150%. About $20,000. C. W. Murray, city engr.

La., De Ridder—City election Apr. 22, to vote on $90,000 bonds to install pumping, light and power plant. X. A. Kramer, Magnolia, Miss., engr.

Tenn., Memphis—Belmont Candy Co., 88 West Virginia St., plans to build 3 story brick and stone factory on Colorado and Kansas Sts. About $100,000.

O., Cleveland—Aluminum Castings Co., 2800 Howard Ave., plans to build brick, steel and concrete power house, on Havard Ave. and East 28th St. About $50,000. G. S. Rider Co., 612 Century Bldg., archts.

O., Cleveland—Kaplan & Shamman, 502 Sweatland Bldg., having plans prepared by Fulton & Taylor, archts., 631 Hippodrome Bldg., building 4 story, 65x131 ft. brick, steel and concrete, at 1260 Riverbed St. About $75,000.

O., Cleveland—C. F. Narwold, 2202 East 4th St., plans to build 5 story, 81 x 91 x 100 ft. brick, steel and rein.-con. factory, concrete foundation, at 522 Eagle Ave. About $150,000. Allen Osborne Co., 702 Rose Bldg., engrs.

O., Cleveland—J. M. and L. A. Osborne Co., Superior Viaduct, having plans prepared by G. S. Rider Co., archts., 612 Century Bldg., for 2 story, brick, steel and rein.-con. warehouse, on Superior Ave. and East 39th St. About $300,000.

O., Dayton—Dayton Buick Co., 2nd and Ludlow Sts., had preliminary sketches made by G. W. Drach, archt., Union Trust Bldg., Cincinnati, constructing 3 story, 78x178 ft. fireproof warehouse, repair shop and auto sales building on Main St.

O., Toledo—Toledo Factories Co., Southard and 12th Sts., plans to build machine shop. About $150,000. I. B. Hiett, pres.

Ind., Michigan City—Smith Bros., North Hamilton St., Poughkeepsie, N. Y., having plans prepared by W. P. Field, archt., 763 Broad St., Newark, N. J., for brick and rein.-con. plant, rein.-con. flooring and concrete foundation, here.

Ind., South Bend — Studebaker Corp., Detroit, Mich., plans to build additions to plant here, to include 4 story, concrete factory, also foundry, machine shop and power plant. About $1,650,000. Work will be done under supervision of W. F. Wollering, Detroit, 1st vice pres.

Ill., Chicago—W. J. Hirsh Co., 360 West Superior St., having plans prepared by A. S. Alschuler, archt., 28 East Jackson St., for 3 story, 200 x 200 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Diversy Ave. About $100,000.

Ill., Chicago—Kling Bros. & Co., 411 South Wells St., having plans prepared by A. S. Alschuler, archt., 28 East Jackson St., building 3 story, 125 x 300 ft. brick and timber factory, concrete foundation, on Wabansie and Milwaukee Aves. About $225,000.

Ill., Chicago—W. P. Whitney, archt., 38 South Dearborn St., preparing plans for three 1 story, 110 x 350 ft. brick and steel factories, concrete foundation. About $100,000. Owner's name withheld.

Ill., East Peoria (Peoria P. O.)—Conover-McHenry Elevator Co., recently incorporated, had plans prepared for grain elevator with 500,000 bushel capacity. About $250,000. E. B. Conover of E. B. Conover Grain Co., 322 South Washington St., and others, incorporators.

Ill., Peoria—Ideal Troy Laundry, 214 South Jefferson St., having plans prepared by B. L. Hulsebus, archt., Jefferson Bldg., for 1 and 2 story, 43 x 130 ft. brick and concrete laundry, on Glen Oak and Main Sts. About $35,000.

Ill., Peoria—Lehmann-Stern Knitting Co., 529-31 Fulton St., having plans prepared building 4 story, 78 x 160 ft. brick, concrete and steel factory, on Adams and Persiommon Sts. About $100,000. J. L. Stern, secy. and treas.

Wis., Manitowoc—Wisconsin Textile Mfg. Co., c/o O. B. Albert, Manitowoc, receives bids about Apr. 20, building 1 story, 90 x 200 ft., rein.-con., brick and steel factory, brick foundation. About $70,000.

Wis., North Freedom — North Freedom Canning Co., plans to build plant to include 1 story, 38 x 40 ft. boiler house and steam generating plant. About $50,000. G. Shore, mgr.

Wis., Plymouth—Wisconsin Cheese Produce Federation having plans prepared by B. E. Mehner, archt., 66 Main St., Fond du Lac, building 2 story, concrete and brick warehouse.

Ia., Mason City—J. E. Decker & Sons Packing Co., 15th St., N. E., soon receives bids building 2 story, 60 x 120 ft. concrete and brick addition to packing plant. About $60,000. J. E. Decker, pres.

Minn., St. Paul—North Amer. Casket Co. having plans prepared by H. Firminger, archt., 408 Oppenheim Bldg., for 1 story, 50 x 230 ft. brick factory, brick foundation. About $50,000.

Minn., St. Paul—W. H. Schmelzel Co., Inc., 117 University Ave., W., receives bids in May, building 1 story, 150x300 ft., warehouse on Atwater and Kent Sts. About $50,000. C. H. Johnston, 715 Capital Bank Bldg., engr.

Neb., Omaha—Am. Transfer & Fireproof Storage Co., had preliminary plans prepared by J. and A. McDonald, archts., 911 Omaha Natl. Bank Bldg., for 8 story, 100 x 132 ft., rein.-con. storage and transfer buildings on 14th and Pacific Sts. About $250,000. F. Busch, 1110 Douglas St., pres.

Neb., Omaha—Farrell & Co., 10th and Dodge Sts., plan to build 7 story, 60 x 100 ft., factory on 9th and Dodge Sts. About $100,000. D. H. Farrell, pres.

Tex., De Leon—W. C. Steety and associates purchased 40 acre site near here and plan to build oil refinery, 3000 bbl. daily capacity.

Tex., Houston—Burkhardt Laundry Co., 1704 Congress Ave., plans to build 2 story laundry on Congress and Jackson Aves. About $40,000.

Tex., Houston—Gurney Refrigerator Co., 64 South Brooke St., Fond du Lac, Wis., plans to build plant here. About $250,000. E. G. Vail, pres.

Tex., Longview—Texas Leasing & Development Co., Wichita Falls, plans to build oil refinery, 10,000 bbl. daily capacity, here.

Texas, Ranger—G. V. Taylor, Cushing, Okla. and H. A. Stroud, Electra, Cal., purchased site here and plan to build 2000 bbl. refinery.

Ariz., Phoenix—High School Trustees plan election to vote on $45,000 bonds to build machine shop and $25,000 for heating plant, in connection with improvements to high school.

Wash., Seattle—Seattle Warehouse Co., 107 Jackson St., plans to build 1 story, 250 x 750 ft., concrete and steel warehouse, rein.-con. flooring, to cover 250,000 sq.ft. floor space, on Duwamish Waterway. Plans include depressed railroad tracks and 135 ft. pier. About $250,000. H. Bittman, Securities Bldg., engr.

Wash., Yakima—Richey-Gilbert Co. plans to build 2 story, 100 x 180 ft. timber warehouse. About $100,000. W. Devereaux, Yakima, archt.

Cal., Los Angeles—Sun Drug Co., Los Angeles and Commercial Sts., plans to build 5 story, 140 x 150 ft., rein.-con., brick and steel plant, rein.-con. flooring, concrete foundation on Los Angeles St. near 11th St. About $200,000. I. Eisner, pres.

Que., Joliette—J. Dufresne receives bids in May building 50 x 119 ft. addition to biscuit factory. About $60,000. R. Gariepy, 54 Notre Dame St., Montreal, archt.

Que., Montreal—St. Henry Shoe Co., 1581 Notre Dame St., plans to build 50 x 75 ft., steel and brick shoe factory, concrete foundation, on Workman St. About $50,000.

Industrial Works (Continued)

Ont., Winsdor—Auto Specialty Mfg. Co., McDougal Ave., soon lets contract building 1 story, concrete and brick factory. About $50,000. Davidson & Weiss, 53 West Jackson Blvd., Chicago, Ill., archts.

BIDS DESIRED

R. I., Providence—Until Apr. 16, by F. A. Decker & Co., 290 Smith St., building 2 story, 70 x 90 ft. mill construction garage, rein.-con. flooring, concrete foundation, on Smith and Orm Sts. About $30,000. B. S. D. Martin, 86 Weybosset St., archt. Noted Mar. 27.

Conn., New Haven — Marlin - Rockwell Corp., Whitney Ave., receiving bids building 1 story, 160 x 180 ft. brick and concrete foundry, rein.-con. flooring, concrete foundation. About $100,000.

N. Y., New York—Until Apr. 15, by J. M. Felson, archt., 1133 Bway., building 2 story, 100 x 125 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 400 East 91st St. About $100,000. Owner's name withheld.

La., New Orleans—Until Apr. 16, by Bd. Levee Comrs. of Orleans Levee Dist., New Orleans Court Bldg., building 2 story, brick garage and warehouse on square bounded by Canal, Water, Gravier and Delta, 1st dist. T. Killeen, pres.

O., Columbus—Amer. Rolling Mills Co. is receiving bids for extensive remodeling and new construction work at its plant along tracks of Toledo & Ohio Central R.R. on Parsons Ave. Work includes relining 2 furnaces, putting in 8 hot blast stoves, raising number of former stoves and building gas dry cleaning plant. Cost between $300,000 and $400,000. J. C. Miller, Middletown, local mgr.

Ill., Decatur—Consumers Refining Co. receiving bids building 40 x 75 ft. mill construction warehouse, 25 x 80 ft. brick garage and 25 x 40 ft. brick filling station, on Main and North Sts. Riddle & Riddle, 122 South Michigan Ave., Chicago, archts.

Wis., Chippewa Falls—Until Apr. 22, by State Bd. Control, Madison, rebuilding laundry at home for feeble minded here. J. O. Davidson, pres.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Ashland—United States Color Co. let contract building 2 story, 50 x 84 ft. concrete factory, concrete foundation, to Penn Tile & Constr. Co., 45 Milk St., Boston. About $50,000.

★Mass., New Bedford—W. A. Robinson Oil Co., 144 South Water St., let contract rebuilding 4 story brick, steel and rein.-con. storage plant, concrete foundation, recently destoryed by fire, to J. W. Bishop Co., Times Bldg. About $60,000. Noted Mar. 13.

★Conn., Southington—Peck, Stow & Wilcox Co., Railroad Sq., let contract building 6 story, 55 x 112 ft. and 22 x 43 ft. brick and steel factory, (first floor to have rein.-con. flooring), concrete foundation, on Center St., to Torrington Bldg. Co., 197 Water St., Torrington. About $125,000.

★Conn., Stratford (Bridgeport P. O.)—Raybestos Co., Bostwick Ave., Bridgeport, let contract building 1 story, 160 x 170 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on East Main St., here, to J. R. Sheehan, 211 State St., Bridgeport. About $100,000. Noted Mar. 27.

★N. Y., Brooklyn—S. Ageloff, 126 Reid Ave., will build 1 story, 81 x 115 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on DeKalb and Tompkins Aves. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—M. F. Finnegan, 44 Court St., will build 1 story, 50 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Coney Island and Greenwood Aves. About $35,000. Work will be done by day labor. Noted Jan. 30.

★N. Y., Brooklyn—F. Savignano, archt., prepared plans for 1 story, 60 x 100 ft., brick and steel foundry, rein.-con. flooring, concrete foundation, on 60th St. and 12th Ave. Work will be done by day labor. Owner's name withheld. Noted Mar. 20.

★N. Y., New York—D. Auerbach & Co., 638 11th Ave., let contract building 11 story brick and steel factory, rein.-con. flooring, concrete foundation, at 642-11th Ave., to M. Eidlitz & Son, 30 East 42nd St. Noted Feb. 20.

★N. Y., Rochester—Beechnut Packing Co., Canajoharie, let contract building 2 story, 120 x 180 ft., rein.-con. addition to plant on Main St., E., here, to Aberthaw Constr. Co., 27 School St., Boston. About $70,000. Noted Mar. 20.

★N. Y., Tarrytown—General Motors Corp., Chevrolet Div., let contract building 3 story, 80 x 220 ft. rein.-con. addition to factory, rein.-con. flooring, concrete foundation, on Kingsland Pt., to White Fireproof Constr. Co., 286 5th Ave. About $500,000.

★N. Y., Watertown—P. W. Devendorf, 145 Arsenal St., let contract building 2 story, 72 x 150 ft. brick and tile garage and repair shop, concrete flooring, to N. B. Hayes. About $40,000. Noted Mar. 6.

★N. J., Newark—Amer. Metal Bed Co., 42 Clifton St., let contract building 1 story, 125 x 200 ft., concrete and brick factory, concrete foundation, at 16 Clifton St., to H. M. Doremus, 36 Orange St. About $30,000.

★N. J., Newark—Amer. Oil & Supply Co., 52 Lafayette St., let contract building 1 and 2 story, fireproof oil plant at 236 Wilson Ave., consisting of storage and office buildings, power house, etc., rein.-con. flooring, concrete foundation, to C. R. Hedden Co., 763 Broad St., about $70,000. Noted Mar. 18.

★N. J., Newark—Lewis Bros., 133 Monroe St., let contract building 4 story, mill construction factory, concrete foundation, on Monroe and Lafayette Sts., to Essex Constr. Co., 85 Academy St., $75,000.

★N. J., Newark—Warner Bros., 270 Jelliff Ave., let contract building 4 story, 40 x 96 ft., rein.-con. and brick addition to warehouse, rein.-con. flooring, concrete foundation, to Pellecchia, 21 Mt. Prospect Ave. About $25,000. Noted Feb. 20.

★Ala., Dothan—Dothan Milling & Mfg. Co. let contract constructing 120 x 120 ft. and 25 x 25 ft. mill construction buildings, to H. H. Brown, Dothan. About $50,000.

★La., Alexandria—Alexandria Veneer Co. will build 100 x 150 ft. frame and brick plant. About $25,000. Work will be done by day labor.

★O., Akron— McNeil Boiler Co., Crosier and Swietzer Sts., let steel contract building 1 story, 80 x 340 ft. factory, to Burger Iron Wks., South Main and Cole Sts., on cost plus basis.

★O., Cleveland — Reflex Ignition Co., Superior Bldg., let contract building 2 story, 80 x 160 ft. brick, steel and rein.-con., rein.-con. flooring and concrete foundation, on West 110th St. and New York Central R.R., to S. W. Emerson Co., 1900 Euclid Bldg. About $65,000.

★Mich., Detroit—Burkhardt Bldg. Co., 85-87 Congress St., let contract building 5 story, 75 x 75 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation on 2nd Ave. and Larned St., to Cooper-Widenmann Constr. Co., 854 Penobscot Bldg. About $60,000. Noted Mar. 20.

★Mich., Detroit—Liberty Starter Co., 702 West Jefferson Ave., let contract building 2 story, 112 x 114 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on West Jefferson Ave., to O. Misch Co., 725 Chamber Commerce Bldg.

★Mich., Highland Park (Detroit P. O.)—Maxwell Motor Car Co., Oakland Ave., let contract building 1 story, 78 x 140 ft. brick and steel heat treating shop and 1 story, 120 x 372 ft. brick and steel forge shop, concrete foundation, on Oakland Ave., to Walbridge Aldinger Co., 2356 Penobscot Bldg., Detroit. Total cost $51,000.

★Ill., Chicago—Illinois Packing Co., 3940 Normal Ave., let contract building 4 story, 70 x 147 ft. packing plant, 1 story, 50 x 60 ft. power plant, 1 story, 25x55 ft. office, rein.-con., rein.-con. flooring, concrete foundation, on Auburn and 38th Sts., to J. Rodatz, 209 South La Salle St. About $225,000. Noted Feb. 13.

★Ill., Chicago—Industrial Bldg. Co., 38 South Dearborn St., will build 1 story, 110 x 286 ft. rein.-con. machine shop, rein.-con. flooring, concrete foundation. About $70,000. Owners name withheld.

★Ill., Chicago—Western Packing & Provision Co., 3854 South Morgan St., let contract building 1 story, 75 x 175 ft. brick and timber garage, brick foundation, at 3822 South Morgan St., to J. Rodatz, 209 South La Salle St. About $28,000.

★Ill., Chicago—Western Stoneware Co., 2911 South La Salle St., let contract building 2 story, 100 x 135 ft. brick and timber warehouse, wood and cement flooring, concrete foundation, at 124 West 46th St., to Industrial Bldg. Co., 38 South Dearborn St. About $45,000.

★Wis., Fond du Lac—Natl Drop Head Projector Co. let contract building 2 story, 48 x 80 ft brick factory, to Rosenbaum Constr. Co., 13 East 1st St.

★Wis., Tripoli — Bissell Lumber Co. Marshfield, let contract for doubling capacity of saw and planing mills here, to Rhinelander Iron Wks., Rhinelander. About $40,000.

★Wis., Valders — Wisconsin Condensed Milk Co. let contract building 2 story, 30 x 125 ft., rein.-con., brick and steel condensery, rein.-con. flooring, brick foundation, to A. Hogaseen, Valders, $78,500.

★Ia., Dubuque — Brunswick - Balke - Collender Co. let contract constructing factory motor building and dry kilns, to A. Zwack, 13th and Clay Sts. About $100,000.

★Minn., Hibbing—Hibbing Power & Light Dept. let contract building 3 story, 100 x 160 ft., rein.-con. and brick power house, rein.-con. flooring, concrete foundation, on 6th Ave. and Wilson St., to Natl. Electric Constr. Co., St. Paul, $700,959. Noted Jan. 9.

★Neb., Omaha—J. P. Jerpe Comn. Co., 1108-10 Howard St., let contract building 3 story, 110 x 132 ft. rein.-con. and brick warehouse, to J. Lof & Sons, 600 Barker Blk., $80,000. Noted Dec. 5.

★Okla., Newkirk—Arkansas Valley Tractor Co. let contract building 1 and 2 story, 50 x 200 ft., rein.-con. and steel factory, to J. W. Nidway, Newkirk, $31,000.

★Cal., Atascadero—Colony Holding Corp. let contract building and equipping 100 x 416 ft. timber dehydrating plant, cement flooring, concrete foundation, to H. Clarke Co., 1101 East 5th St., Los Angeles. About $125,000.

★Cal., Hanford—California Packing Corp., 101 California St., San Francisco, let contract building 1 story, 110 x 250 ft., brick and frame factory and 100 x 250 ft. frame warehouse, power house and number of cottages here, to R. F. Felchin, Rowell Bldg., Frenso. About $50,000. Noted Mar. 6.

★Cal., Los Angeles—Angeles Furniture Co. will build 2 story, 13 x 80 ft., brick and concrete warehouse, 2 story, 40 x 138 ft. timber and corrugated iron mill, on East Pico St. Work will be done by day labor.

★Cal., Los Angeles—Hollywood Studios, Inc., 6980 Hollywood Blvd., let contract building steel and timber moving picture plant, rein.-con. flooring, concrete foundation on Santa Monica Blvd., to include administration service and other buildings, to Milwaukee Bldg. Co., Wright and Callender Bldg. About $250,000.

★Cal., San Jose—Richmond-Chase Co. let contract building 3 story, 40 x 250 ft., rein.-con. warehouse, 1 story, 120 x 210 ft. frame fruit cannery, 2 story, 41 x 120 ft. fruit packing building, power house and cafeteria, to Z. O. Field, 167 South 14th St.; cost plus percentage.

Buildings

PROPOSED WORK

Mass., Brookline (Boston P. O.)—Bank—Brookline Trust Co. having plans prepared by T. M. James, archt., 185 Devonshire St., Boston, for 2 story, 60 x 113 ft. concrete and steel, rein.-con. flooring, concrete foundation, on Beacon St.

Mass., Brookline (Boston P. O.)—Hospital—W. A. Brooks, 167 Beacon St., Boston, having plans prepared for 2 story hospital on Summit Ave., here. About $175,000.

Mass., Dorchester (Boston P. O.)—Market—W. M. Bacon, archt., 27 Kilby St., Boston, soon lets contract building 2 story, 84x117 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, on Ramsey St., for Upham Market Co. About $100,000. Noted Feb. 27.

Buildings (Continued)

Mass., Springfield—Business—M. L. Cooley, 607 Main St., soon receives bids remodelling brick and steel building, concrete foundation. About $50,000.

Mass., Springfield—Theatre—Fox Amusement Co., 130 West 46th St., New York City, plans to build 2 story, 115 x 200 ft., brick, steel and stone, stone flooring, concrete foundation, on Main St., here. About $500,000. T. Lamb, 644 8th Ave., New York City, archt.

Mass., Worcester—Hotel—Higgins & Fitzgerald, 840 Main St., plan to build 3 story, 40 x 125 ft. concrete and brick, concrete fonudation on West and Elm Sts. About $125,000.

R. I., Barrington—School—Town receives bids about Apr. 19, building 2 story, brick and steel, concrete foundation. About $50,000. F. S. Peck, chn. com. W. R. Walker & Son, Custom House St., Providence, archts.

R. I., East Providence (Providence P. O.)—Club House—Metacomet Golf Club, Union Trust Bldg., receives bids about May 1, building 2 story brick. About $50,000. W. R. Walker & Son, 17 Custom House St., Providence, archts.

R. I., Pawtucket—Business—Bellows & Aldrich, archts., 8 Beacon St., Boston, soon receive bids building 2 story, 60 x 160 ft. rein.-con. addition to plant, rein.-con. flooring, concrete foundation, on North Union St., for Times Publishing Co., Exchange St. About $60,000.

Conn., Bridgeport—Business—F. Jacoby, 1083 Broad St., plans to build 3 story, 52 x 150 ft. brick and steel, rein.-con. flooring, concrete foundation, on Main St. opposite Lumber St. About $65,000. F. A. Cooper, 1024 Main St., archt.

Conn., Bridgeport—Club House, etc.—Bridgeport Aerie of Eagles, 67 Madison Ave., plans to build club house and auditorium, on Main St. and East Washington Ave. About $150,000.

Conn., Bridgeport—Memorial—F. Crosby Memorial Assn., c/o O. H. Brothwell, treas., 888 Main St., plans to build memorial to Fanny Crosby. About $50,000.

Conn., Bridgeport—Parish Hall—Olivet congregation, 2140 Main St., plans to build 2 story hall on Main St. opposite Tom Thumb St. About $60,000. Address H. S. Brown, pastor.

Conn., Hartford—Bath House—City voted $50,000 bonds to build bath house on Front St. Address P. A. Mason, supt. pub. bldgs. com.

Conn., Hartford—Theater—J. Glassman, 241 Franklin St., receives bids about May 1, building brick and concrete on Franklin Ave. and Barker St. About $50,000.

Conn., Stratford (Bridgeport P. O.)—Business—H. C. Lorell, 2419 Main St., plans to construct business building on Main St. About $60,000.

N. Y., Brooklyn—Bank-Ludlow & Peabody, archts., 181 Montague St., soon let contract building 4 story, brick and steel concrete foundation, at 230-232 Flatbush Ave., for Peoples Trust Co., 181 Montague St. About $75,000.

N. Y., Brooklyn—Theatre—A. Stockhammer, 1368 St. Johns Pl., having plans prepared by Carlson & Wiseman, archts., 226 Henry St., for 2 story, 100 x 120 ft., brick and steel, rein.-con. flooring, concrete foundation, on St. Johns Pl. and Schenectady Ave. About $150,000.

N. Y., Garretson (Staten Island P. O.)—School—Bd. Educ. had plans prepared by C. B. J. Snyder, archt., Municipal Bldg., New York City, for P. S. 11, 1 story, 103 x 140 ft. steel and brick, concrete foundation. About $90,000. Noted Dec. 5, 1918.

N. Y., New York—Nurses Home—St. Marys Free Hospital, 407 West 34th St., having plans prepared by C. P. H. Gilbert, archt., 1123 Bway., for 5 story, 45 x 50 x 100 ft., brick and steel, concrete foundation. About $75,000.

N. Y., New York—Office—Lehn & Fink, 120 William St., having preliminary sketches made by Buchman & Kahn, archts., 56 West 45th St., for 15 or 20 story, brick and steel, concrete foundation, on Greenwich and Morton Sts. About $1,000,000.

N. Y., New York—Synagogue—Temple Gate of Hope, 130 Madison Ave., having plans prepared by J. M. Felson, archt., 1133 Bway., for 3 story, 50 x 100 ft., brick and steel, concrete foundation, 177th St. and Bway. About $50,000.

N. Y., Salisbury Center—Hospital—Bd. Supervs., Herkimer Co. (Herkimer), soon receives bids building brick and concrete tuberculosis hospital on Heller Farm, here. Bonds for $150,000 sold for project. Noted Mar. 13.

N. J., Newark—Hotel—R. Treat Hotel Co., c/o Guilbert & Betelle, archts., 665 Broad St., having plans prepared for 14-story, 86 x 160 ft., concrete, brick and steel, addition to hotel at 54 Park Pl., rein-con. flooring, concrete foundation. About $1,000,000.

N. J., Westfield—Church and Sunday School—First Baptist congregation soon receives bids building 1 story, brick, steel and stone, concrete foundation on Elm St. About $50,000. Ludlow & Peabody, 101 Park Ave., New York City, archts.

Pa., Phila.—Bank—Germantown Trust Co., Germantown and Chelton Ave., having sketches prepared by A. H. Brockie, archt., 1713 Sansom St., altering and building addition to existing bank. About $50,000.

Pa., Phila.—Bank—Tenth Natl. Bank, 1645 North Broad St., having sketches prepared for 54 x 64 ft. addition. About $50,000.

Pa., Pittsburgh—Y. M. C. A. having plans prepared by E. B. Lee, archt., Chamber Commerce Bldg., constructing 4 story, 81 x 120 ft., steel and brick building, concrete foundation, on Center and Francis St. About $100,000.

Md., Baltimore—Bank—Merchants-Mechanics 1st Natl. Bank purchased site on South St. and plans to build 2 story, 20 x 110 ft., steel and concrete addition. Cost between $60,000 and $70,000. J. B. Ramsey, chn. bd. dirs.

Md., Baltimore—Theater—F. O. Singer, 600 Equitable Bldg., plans to build 2 story, brick, steel and concrete, on Howard St. About $400,000. W. O. Sharklin, 802 Law Bldg., archt.

Va., Richmond—Auditorium—Calvary Baptist congregation plans to build 1-story, 82 x 97 ft. brick, addition to Sunday school, rein.-con. foundation, on Grove Ave. and Blvd. About $50,000. Address R. A. Gary, 2316 Stuart Ave. H. L. Cain, 2311 Grove Ave., archt.

Va., Richmond—Office—See "Industrial Works."

Va., Richmond—Sunday School and Church—Grace Covenant Presbyterian congregation having plans prepared by Peebles & Ferguson, archts., Norfolk, for Sunday school and church on Monument Ave. About $50,000 and $90,000 respectively. J. S. Parrish, c/o Richmond Cedar Wks., chn. bldg. com.

W. Va., Morgantown—Bank and Office—Bank of Morgantown plans to build 7 story, 26 x 70 ft. steel and concrete. T. E. Hodges, pres.

N. C., Asheville—Schools—City election May 6, to vote on $110,000 bonds to complete high school, $40,000 to build colored school and $50,000 to improve present structures.

N. C., High Point—Hospital—City election May 6, to vote on $100,000 bonds to build and maintain memorial hospital.

N. C., High Point—School—City election May 6, to vote on $50,000 bonds to improve and enlarge school.

S. C., Florence—School—City plans to issue $100,000 bonds to improve schools.

S. C., Rock Hill—School—City election about May 15, to vote on $75,000 bonds to build school in Rock Hill School Dist.

Ga., Atlanta—Hospital—Davis-Fischer Sanitorium, East Linden St., having plans prepared by E. C. Wachendorff, archt., 408 Chamber Commerce Bldg., for 8 story, 50 x 125 ft. addition. About $140,000.

Ga., Atlanta—Theatre—C. B. Howard, Atlanta, and T. Howard, Macon, having plans prepared by Hentz, Reed & Adler, archts., Candler Bldg., for 90x406 ft. theater and garage, on Peachtree St. About $500,000.

Ga., Gainesville—High School—City plans election to vote on $100,000 bonds to build and equip high school.

Fla., West Palm Beach—Hospital—Good Samaritan Hospital soon receives bids building hospital. About $50,000.

Miss., Charleston—Schools—Town plans to issue $75,000 bonds to build and repair schools. W. D. Brown, clk.

Tenn., Memphis—Hospital—City and Shelby Co. plan to issue $300,000 bonds to build 2 story on Pigeon Roost Rd. Jones & Furbringer, Porter Blk., archts. Noted Feb. 27.

O., Akron—Hotel—Para Co., c/o C. P. McCready, vice pres., plans to build 11 or 12 story, 88 x 122 ft., on site of present Buchtel Hotel, South Main and Mill Sts. About $750,000.

O., Cleveland—Hospital—St. Lukes Hospital Assn., 6606 Carnegie Ave., plans to build brick, steed and rein.-con. addition, concrete foundation. About $500,000.

O., Cleveland—Mercantile—O. P. Brown, 304 East St., New Castle, Pa., plans to build 10 story brick, steel and rein.-con., concrete foundation, at 1110 Superior Ave., here. About $100,000.

O., Cleveland Heights (Cleveland P. O. School—Bd. Educ. and F. C. Warner, archt., 768 Hippodrome Annex Bldg., receives bids in May building 2 story, brick, steel and rein.-con., rock and concrete foundation, on Roxboro Ave. About $225,000. Noted Jan. 2.

O., Dayton—Office—See "Industrial Works."

O., Troy—Salesroom, etc.—Dayton & Troy Auto Co. plans to build 2 story, 50 x 120 ft. brick and rein.-con. salesroom and garage, rein.-con. flooring, concrete foundation, on South Market St. About $50,000.

Ind., Gary—Theater—Eagle Theater Co. having plans prepared by D. S. Klafter, archt., 64 West Randolph St., Chicago, Ill.; building 1 story, 75 x 125 ft. brick and steel, rein.-con. flooring, concrete foundation, at 16th St. and Bway. About $125,000.

Mich., Detroit—Bank and Office—First and Old Detroit Natl. Bank, Ford Bldg., had plans prepared by A. Kahn, archt., Marquette Bldg., for 15 story, 180 x 187 ft. steel and brick, on Woodward Ave. and Cadillac Sq.

Mich., Detroit—Mercantile-Crowley-Milner Co., Farmer St., soon lets contract building 3 story, 97 x 216 ft. steel and brick addition. Smith, Hinchman & Grylls, 710 Washington Arcade, archts.

Mich., Detroit—Mercantile—W. H. Turner, 512 Moffat Bldg., having plans prepared by A. Kahn, archt., Marquette Bldg., building 4 or 6 story, 40 x 100 ft. ell shaped brick and rein.-con., rein.-con. flooring, concrete foundation, on Michigan Ave. and Washington Blvd., Finsterwald Furniture Co., lessee. About $125,000.

Mich., Flint—Armory, etc.—City plans to build memorial armory to cost $140,000. State appropriated $60,000 toward cost.

Mich., Flint—Bank and Office—Natl. Bank of Flint and Genesee Co. Savings Bank had plans prepared by Hoggson Bros., archts., 485 5th Ave., New York City, for 10 story, 44 x 120 ft. brick, steel and stone, concrete foundation, on Kearsley and Saginaw Sts. Address A. G. Bishop, Flint.

Mich., Howell—High School—Bd. Educ. soon receives bids building 2 story high school. About $100,000. R. A. Le Roy, Prat Bldg., Kalamazoo, archt.

Ill., Austin (Chicago P. O.)—Church—W. C. Jones, archt., 30 North La Salle St., Chicago, receives bids about Apr. 15, building 1 story, 66 x 106 ft. brick and timber, concrete foundation, at 120 North Central Ave., for Kloeckner Memorial Evangelical congregation, c/o archt. About $75,000.

Ill., Chicago—Office, Bank and Store—South Chicago Savings Bank, 3017 East 92nd St., having plans prepared by Ivar Viehe-Naess, archt., 64 East Van Buren St., for 4 story, 55 x 160 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on 92nd St. and Commercial Ave. About $200,000. Noted May 30.

Ill., Le Roy—Bank—Keenan Natl. Bank having plans prepared by A. L. Pillsbury, archt., Peoples Bank Bldg., Bloomington, remodeling and building addition to bank. About $50,000. J. Keenan, pres.

Ill., Villa Grove—High School—J. W. Royer, archt., Flat Iron Bldg., Urbana, receives bids about April 15, for 3 story, 85 x 200 ft., for Bd. Educ. About $100,000. W. E. Irwin, chn. Noted Mar. 6.

Wis., Chippewa Falls—School—City plans to build junior high and vocational school here. Cost, including equipment, between $190,000 and $200,000. L. M. Newman, chn.

Buildings (Continued)

Wis., Manitowoc—Depot—Chicago, North Western R.R., Jackson Blvd. and Franklin St., Chicago, plans to build depot on Leland Ave. here. About $500,000. W. H. Finley, ch. engr.

Wis., Sheboygan — High School — City plans to build high school on Jefferson and 9th Sts. About $300,000. C. M. Boley, city engr.

Wis., Two Rivers—Memorial—City had preliminary plans prepared by Childs & Smith, engrs., 64 East Van Buren St., Chicago, for memorial building. About $50,000.

Minn., Austin—Theater—Cozy Theater Co. receives bids about May 1, building 60 x 135 ft. rein.-con., brick and steel. About $55,000. S. Jacobson, 601 Capital Bank Bldg., St. Paul, archt.

Minn., Cloquet—High School—Bd. Educ. soon lets contract building 3 story, 65x190 ft., rein. con., brick and steel, rein. con. flooring, concrete foundation on Main St. About $140,000. Croft & Boerner, Lonsdale Bldg. Duluth, archts. Noted Jan. 30.

Minn., Cloquet—High School—Bd. Educ. soon lets contract building 3 story, rein.-con., concrete foundation. Croft & Boerner, Lonsdale Bldg. Duluth, archts. Noted Jan. 30

Minn., Minneapolis—Bank and Office—H E. Pence, 800 Hennepin St., having plans prepared for 10 or 12 story on Hennepin Ave. and 8th St

Minn., St. Paul—Dispensary—A. H. Wilder Charity, 404 Wilder Bldg., plans to build 3 story, 51x96 ft., rein. con. and brick on Rice St. between College and Summit Aves. About $100,000. C. H. Johnston, 715 Capital Bldg. engr.

Mont., Wolf Point—Bank and Office—Security State Bank plans to build 2 story, 58 x 80 ft. brick, concrete foundation, on Assinniboine Ave. and 3rd St. About $50,000.

Mo., St. Louis—Community—Union Ave. Christian, Westminster Presbyterian, Pilgrim Congregational and Central Presbyterian congregations, plan to build community center. About $50,000. Address G. A. Campbell, 5411 Vernon Ave.

Mo., St. Louis—Hotel—J. Helm, archt., 4006 Castleman Ave., receives bids about Apr. 15, building 4 story, 66 x 120 ft., concrete and brick, rein.-con. flooring, concrete foundation at 3516 Washington Ave., for A. Fox, 3518 Washington Ave. About $60,000.

Mo., St. Louis—Temple—Masonic Lodges of St. Louis, 5330 Pershing Ave., plan to build temple to include 6 lodge rooms, library, banquet halls, dance hall and chapel. About $700,000. D. A. Jamison, chn. bldg. com.

Mo., St. Louis—Theater and Office—F. Tate, 402 Central Natl. Bank Bldg., soon receives bids for 4 story, 110 x 150 ft. About $500,000. G. A. Lansburgh, 2122 Pacific Ave., San Francisco, archt.

Tex., Abilene—Science—Simmons College had plans prepared for science building. Cost between $50,000 and $75,000.

Tex., Amarillo — School — Independent School Dist. voted $80,000 bonds to purchase site and build school. E. P. Works, pres. bd. trustees.

Tex., Fairfield—Courthouse—Coms. Freestone Co. plan to build courthouse. About $125,000.

Tex., Polytechnic—School—City election Apr. 26 to vote on $52,000 bonds to build school and 3 story addition to McRae School. S. S. Ogilvie, chn. school board.

Tex., Ranger—Club—Benevolent Protective Order of Elks plans to build clubhouse. About $50,000.

Tex., San Antonio — Church — Orthodox Jewish congregation, 115 Newton St., having plans prepared by C. W. Adams, archt., Gibbs Bldg., for 85 x 100 ft., rein.-con. and brick on Main Ave. and Quincy St. Cost between $50,000 and $60,000. A. Gerstein, rabbi.

Tex., Waco—Schools—City plans election to vote on $150,000 bonds to build schools. B. B. Cobb, supt.

Okla., Durant—High School—City voted $120,000 bonds to build high school. Noted Mar. 13.

Okla., Holdenville—School—Bd. Educ. having plans prepared by Tonini & Bramblett, archts., 301 Terminal Bldg., Oklahoma, building 2 story, rein.-con. brick and stone. Bonds for $75,000 voted for project.

Okla., Miami—Mining School—State Legislature, capitol, Oklahoma, appropriated $125,000 to build and maintain State School of Mines here.

Okla., Sapulpa—Hospital—City plans to build 2 story, brick and stone. Bonds for $50,000 voted for project. G. B. Steck, city clk.

Colo., Montrose—Hotel—C. O. Earnest, 702 2nd St., receives bids in about 2 months, building 3 story, 50 x 125 ft. brick, steel and concrete. About $65,000. W. N. Bowman, Central Savings Bank Bldg., Denver, archt.

Colo., Sterling—Hospital—City soon receives bids building hospital. About $60,000. Money to be raised by public subscription. Wilson & Wilson, Commonwealth Bldg., Denver, archts.

Idaho, Rexburg—Court House—Comrs. Madison Co. plan election soon to vote on $100,000 bonds to build court house.

Nev., Elko—School—Bd. Educ. having plans prepared by F. J. De Longchamps, archt., Reno, for 2 story, brick and concrete. About $100,000.

Ariz., Phoenix—Arts—High School Trustees plan election to vote on $100,000 bonds to build 20 room Liberal Arts Building and $40,000 for gynasium, in connection with improvements to high school.

Ore., Pendleton—Lodge—Pendleton Lodge No. 288, B. P. O. E. plans to build 3 story on Court and Cottonwood Sts. About $60,000. G. W. Phelps, Court House, trustee.

Ore., Portland—Temple—Labor Temple Assn., 162 2nd St., plans to build on 4th and Jefferson Sts. About $120,000. H. Anderson, pres.

Cal., Covina—Schools—Trustees C School Dist. plan election Apr. 14 to vote on $150,000 bonds to build 1 story concrete school, rein.-con. flooring, concrete foundation. W. W. Nash, trustee.

Cal., Fowler — High School — Trustees Union High School Dist. plan election to vote $100,000 bonds to build high school.

Cal., Fresno—High School—High School Trustees purchased 30 acre site and plan election to vote between $600,000 and $700,000 bonds to build high school on Palm Ave.

Cal., Porterville—Auditorium—City plans to vote on bond issue to build auditorium. Cost between $50,000 and $100,000. G. C. Murphy and E. L. Lindsay appointed to secure plans. E. F. Halbert, city clk.

Cal., San Bernardino—Schools—Bd. Educ. considering election to vote on $150,000 bonds to build 3 schools. W. C. Seccombe, pres.

Canada—Post Offices, Hospitals, etc.—Dominion Government, Ottawa, Ont., plans to expend $60,000 for building postal station at Maisonneauve, Que.; $400,000 for post office at Calgary, Alta.; $100,000 for additions to post office at Edmonton, Alta.; $62,000 for improvements and alterations to Receiver Generals Building, at Toronto, Ont.; $400,000 for new buildings, hospitals, etc., at Grosse Isle, Que., R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

Que., Notre Dame de Grace — School — Roman Catholic School Comn., 87 St. Catherine St., Montreal, purchased site here and plans to build 3 story, 60 x 75 ft., steel and brick, for St. Augustine Parish. About $100,000. A Lafontaine, 87 St. Catherine St., Montreal, archt.

Que., Verdun—School—J. E. A. Benoit, archt., 1200 Wellington St., soon receives bids building 3 story, 31 x 52 ft., stone and brick, concrete foundation, on Galt Ave., for Roman Catholic School Comn. About $60,000.

Ontario — Hospital — Schools, etc.—Provincial Government, Ottawa, plans to improve and enlarge hospitals, schools, etc., in following cities: Eastern Hospital, Brockville, $77,000; Provincial Normal School, Belleville, $50,000; Rockwood Hospital, Kingston, $110,000; Hamilton, $70,000; London, $105,000; Mimico, $90,000; also new institution at Whitby, $483,000. F. R. Heakes, c/o Dept. Pub. Wks., Toronto, archt.

Ont., Guelph—Dormitory, etc.—Ontario Agricultural College, College Heights, receives bids in about 5 weeks building boy's dormitory, cost $150,000; addition to McDonald Hall, $25,000; new apiary, $15,000; and memorial hall, $40,000. F. R. Heakes, Parliament Bldgs., Toronto, archt.

Ont., Kitchener—Station—Canadian Pacific Ry., Windsor St., Montreal, Que., soon receives bids for station. About $75,000. J. M. R. Fairbairn, Montreal, asst. ch. engr.

Ont., Toronto—Women's Christian Temperance Union plans campaign to raise $100,000 bonds to construct 3 story, brick building at 20 Gerrard St., E.

Ont., Toronto—Theater—Loew Syndicate, 189 Yonge St., having plans prepared by T Lamb, archt., 644 8th Ave., New York City, building brick on Yonge St. About $300,000.

Ont., Toronto—Theater—Waverly Theater Corp., Ltd., 95 King St. E., had plans prepared by E. F. Sangster, archt., 65 Homewood Ave., building brick theater. About $100,000.

BIDS DESIRED

Mass., Springfield—School—Until Apr. 24, by Com. on City Property, for 1 story brick and timber addition to Chestnut St. school. About $96,000. E. C. and G. C. Gardner, 33 Lyman St., archts. Noted Jan. 23.

Conn., New Haven—Parish—Until Apr. 16, by W. S. Cady, archt., 40 West 32nd St., New York City, building 2 story, 76 x 132 ft. brick and steel, stone flooring, concrete foundation, on Whitney Ave., for Chapel Street Ecclesiastical Society, Whitney Ave. About $100,000.

N. J., Verona (Montclair P. O.)—Sanatorium—Until May 15, by Bd. Freeholders Essex Co., (Newark), building 2, 3 and 4 story, rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Fairview Ave. About $500,000. J. Green, Essex Bldg., Newark, archt. Noted Feb. 6.

La., New Orleans—Trade School—Until Apr. 15, by city, building 4 story, 337 x 400 ft. on City Park Ave. E. A. Christy, city archt.

Tenn., Memphis—Hospital—Until Apr. 15, by Baptist Hospital, Madison Ave., building 8 story, 92 x 101 ft. brick and concrete. About $250,000. C. O. Pfeil, Union & Planters Bank Bldg., archt.

Ind., Huntington—Theater and Store—Until Apr. 10, by H. L. Newhouse, archt., 4630 Prairie Ave., Chicago, Ill., building 44 x 135 ft. brick and rein.-con., rein.-con. flooring, concrete foundation, here, for A. Perfect, c/o architect.

Ill., Chicago—Theater and Offices—Until Apr. 15, by A. L. Levy, archt., 28 North Clark St., building 2 story, 100 x 160 ft., brick and steel, concrete foundation, on Archer Ave. and Sacramento Blvd., for Brighton Theater Co., c/o archt. About $235,000.

Ill., Elmhurst — High School — J. C. Llewellyn, archt., 38 South Dearborn St., Chicago, receiving bids for 2 story, 152 x 168 ft. brick, steel and concrete, concrete foundation, for Bd. Educ. About $125,000.

Ill., Rockford—Church—W. P. Whitney, archt., 38 South Dearborn St., Chicago, receiving bids building 1 story, 72 x 117 ft. brick, concrete and steel, rein.-con. flooring, concrete foundation, for 1st Baptist Church, c/o archt. About $60,000.

Wis., Cameron—Bank and Office—Until Apr. 25, by Bank of Cameron, building 2 story bank and office. W. L. Alban, 347 Endicott Bldg., St. Paul, Minn., archt.

Minn., Lancaster—School—Until Apr. 22, by city building 2 story, 57 x 91 ft., brick and tile. About $50,000. Sund & Dunham, 512 Essex Bldg., Minneapolis, archts.

Minn., Moorhead—City Hall, etc.—Until Apr. 21, by city, building brick city hall and fire station. R. G. Price, city clk. Rosetti & Braseth, 105½ Bway, Fargo, N. D., archts.

S. D., Hurley—School—Until Apr. 20, by Bd. Educ., building 2 story, 60 x 134 ft. brick and steel, concrete foundation. About $85,000. Perkins & McWayne, 322-324 Paulton Bldg., Sioux Falls, archts. Noted Feb. 27.

Mo., Columbia—Dormitory—Until Apr. 16, by P. J. Bradshaw, archt., International Life Bldg., St. Louis, building 3 story, 45 x 125 ft., rein.-con., steel and brick, rein.-con. flooring, rock foundation, near University of Missouri Campus, for Knights of Columbus, 3549 Olive St., St. Louis. About $65,000. L. Hart, member bldg. com. Noted Mar. 13.

Buildings **(Continued)**

Mo., St. Louis—Fire Houses—Until Apr. 22, by Bd. Pub. Serv. building 2 story, 36x 76 ft. and 28 x 65 ft. brick and timber firehouses Nos. 3 and 32 on 20th and St. Charles Sts. About $53,000. L. R. Bowen, city engr. Noted Jan. 30.

Ont., Ottawa—School—Until Apr. 15, by School Bd., building 3 story, brick and timber, rock foundation, on Creighton St. About $120,000. W. C. Beattie, Elgin St., bldg. supt. Noted Mar 20.

Ont., Weston—School—Until Apr. 17, by S. B. Coon & Sons, archts., Excelsior Life Bldg., Toronto, building 2 story, brick, for School Bd. About $60,000. D. Campbell, chn. Noted Mar 20.

B. C., Vancouver—Hospital—Until Apr. 30, by Dept. Pub. Wks., Ottawa, Ont., building 2 story, 40 x 235 ft. neurological ward at Military Hospital here, rein.-con., steel and brick, concrete foundation. About $60,000. R. C. Wright, c/o Dept. Pub. Wks., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**R. I., Providence**—Dormitory—Womens College of Brown University, College St., let contract building 4 story, 138 x 145 ft. brick, steel and concrete, rein.-con. flooring, concrete foundation, to C. B. Maguire Co., 1208 Turk Head Bldg. About $150,000. Noted Mar. 13.

★**Conn., Bridgeport**—Home, etc.—Salavation Army, 82 Elm St., will build 4 story, 50 x 100 ft. brick and concrete, concrete foundation, on Elm and Main Sts. About $100,000. Work will be done by day labor. Noted Jan. 2.

★**N. Y., Bath**—Barracks—Bd. Dirs., Soldiers & Sailers Home, let contract building 2 story, 44 x 151 ft., with rear wing, 44 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation, at State Institution, to T. H. McHale & Son, 604 Cahill Bldg., Syracuse. About $71,500. Noted Apr. 3.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York City, received bids building P. S. 100, 4 story, 100 x 144 ft., brick and steel, concrete foundation, on West 1st St.; P. S. 80, 4 story, 100 x 144 ft., brick and steel, concrete foundation, on West Nineteenth St., from P. A. Clark Co., Brooklyn, $523.,000; Nugent Constr. Corp., 507 5th Ave., New York City, $534,313; Emerson Bldg. Co., 103 Park Ave., New York City, $537,700. Noted Mar. 27.

★**N. Y., New York**—Office—Natl. Aniline & Chemical Co., 21 Burling Slip, let contract for interior and exterior alterations to 4 story, 60 x 100 ft. brick and steel, at 15-19 Burling Slip, to Gillies Campbell Co., 101 Park Ave. About $50,000, cost plus percentage basis.

N. J., New Brunswick—School—Bd. Freeholders, Middlesex Co. received bids building 3 story vocational school on Easton Ave., from Niewenhous Bros., 369 East 163rd St., New York City, $60,340; Hughes, Foulkrod Co., Commonwealth Bldg., Phila., Pa., $63,300; J. Lowry, Jr., 8 East 40th St., New York City, $67,590.

★**Pa., Johnstown**—School—Bd. Dir. School Dist. let contract building main school and boiler house for group of 6 buildings known as William A. Cochran School, in 8th Ward, to Gilpatrick Dawson Co., Empire Bldg., Pittsburgh, $169,635. Noted Feb. 20.

★**Md., Baltimore**—Store—The Hub, Baltimore and Charles Sts., let contract building 2 story, 40 x 85 ft., steel brick and concrete addition and altering store front, to C. L. Stockhausen Co., Gay and Water St., $50,000. Noted Apr. 3.

★**O., Barberton**—Theater—Park Theater Co., 156 Columbus St., let contract building 2 story, 48 x 100 ft. brick and steel, rein.-con. flooring, concrete foundation, on West Tuscarawas St., to W. Bernard, Barberton, O. About $54,000.

O., Toledo—School—Bd. Educ. received bids building 2 story, brick, steel and rein.-con., concrete foundation, at Point Pl., from H. E. Welling, 441 Main St., $94,270, J. Compute, Nasby Bldg., $99,558, Bentley & Sons, 201 Belmont St., $102,215.

O., Toledo—School—Bd. Educ. received bids building 2 story, brick, steel and rein.-con., concrete foundation, at Wernerts Corners, from Hallaway & Berkabile, Delta, $66,958, E. H. Welling, 441 Main St., $72,720, J. Compte, 149 Michigan St., $74,586.

★**Ill., Chicago**—Bank—Douglas Park State Bank let contract building 2 story, 35 x 95 ft. brick and timber, concrete foundation, on 12th and Crawford Sts., to C. E. Brockhausen, 111 West Monroe St. About $75,000.

★**Ill., Chicago**—Library—Chicago Pub. Library, Michigan Ave. and Washington St., let contract building 2 story, 97 x 122 ft. brick and timber, rein.-con. flooring, concrete foundation, on Crawford Ave. and Monroe St., to Dahl-Stedman Co., 11 South La Salle St. About $75,000. Noted Feb. 27.

★**Ill., Chicago**—School—St. Philip Neri School, c/o A. Foster, archt., 155 North Clark St., let contract for 2 story, 60 x 70 ft. brick and timber, concrete foundation, on 72nd St. and Merrill Ave., to F. Burke, 155 North Clark St. About $50,000

★**Wis., Sheboygan**—School—School Dist. No. 6, let contract building 2 story, 28x80 ft., rein.-con. and brick, brick foundation, Wilson Twp., to A. Mollman, Sheboyan Falls.

★**Minn., Bovey**—High School—City let contract building brick and tile addition to high school, to Evenson & Nutterberg, 748 Builders Exch., Minneapolis, $134,690.

★**Minn., Mountain Iron** — School — Bd. Educ. let contract building 3 story, 145x173 ft., rein.-con., brick and steel, rein.-con. flooring, concrete, brick and rock foundation, to A. C. Thomson-Guthrie Co., St. Paul, $209,997. Noted Jan. 30.

★**Minn., Mountain Iron** — School — Bd. Educ. let contract building 3 story, 134x156 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, Leonidas twp., to J. and W. A. Elliott, 906 Liberty Exch., Minneapolis, $109,688. Noted Jan. 30.

★**Neb., Norfolk** — Hotel — North Amer. Hotel Co., c/o F. Fitzpatrick, Bee Bldg., Omaha, will build 8 story, 75 x 176 ft., here. About $100,000. Work will be done by day labor.

★**Tex., Wichita Falls**—Bank and Office—City Natl. Bank let contract building 10 story, to Westlake Constr. Co., 717 Locust St., St. Louis, Mo.

★**Idaho, Caldwell**—High School—School Dist. let contract building 2 story, concrete and brick, rein. con. flooring, concrete foundation, to W. Reed, Twin Falls, $53,000. Noted Feb. 20.

★**Wash., Vancouver**—School—Bd. Educ. let contract building 3 story, 43 x 121 ft., brick and terra cotta, cement flooring, to G. Isackson, Portland, Ore., $52,741.

★**Que., Montreal**—Office—McDougall & Cowans, 95 Notre Dame St., let contract building 1 story, 54x98 ft. brick and stone, concrete foundation, on St. James and St. Francis Xavier Sts., to Purdy & Henderson, 10 Cathcart St. About $55,000.

★**Alta., Edmonton** — Theater — Alberta British Cinematograph Co. let contract building marble theater, to Pheasey & Batson, 203 Alexander Blk. About $250,000.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Heating Funnel—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build heating funnel to connect buildings "C" and "F" at Naval Hospital, here; Spec. 3853. Bids will be opened at local yard.

Pa., Phila. — Elevator Shop — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here. Spec. 3851. About $14,000.

Pa., Phila.—Heating and Humidifying Apparatus—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install in building "D," here; Spec. 3854. About $75,000.

S. C., Charleston—Dry Dock—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build dry dock No. 2, here; Spec. 3858. Work involves 700,000 cu. yd. excav., 250,000 cu. yd. dredging, preparation of site, piping, bulkhead, cofferdam and other temporary structures together with building dry dock proper consisting of 180,000 cu. yd. concrete, pump well, suction chamber, railroad tracks, crane tracks, with supportng concrete construction, culverts and sluices, with hydraulically operated valves, keel blocks, docking keel blocks and bilge blocks, including slides with fitting capstans, pits, docks fitting, conduits, embedded piping, etc. About $3,500,000.

S. C., Paris Island—Buildings—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build additional buildings, here; Spec. 3855.

Mich., Detroit—Harbor Improvements—U. S. Eng. Office, Sault Ste. Marie, plans to widen Livingston Channel, Detroit River, 150 ft. on west side of present improved channel. Project involves removing silt and making rock cut. About $700,000 available.

Mich., Harbor Beach—Harbor Improvements—U. S. Eng. Office, Sault Ste. Marie, plans to deepen entrance of harbor to 23 ft. and harbor to 21 ft., involving 360,000 cu.yd. earth and 15,500 cu.yd. rock excav. L. C. Sabin, engr.

Mich., Port Huron—Harbor Improvements—U. S. Eng. Office, Sault Ste. Marie, plans to deepen channel to 21 ft. for width of 400 ft. on west side of St. Clair River, south of here. Project involves floating dredge work. About $83,000 available.

Montana — Roads — L. I. Hewes, dist. engr., bur. pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., Portland, Ore., plans to grade 7 mi. Lola Pass Rd., Missoula Co., about $40,000; 41 mi. Yaak Valley Rd., Lincoln Co., $32,703; 5 mi. East Fork Bitter Root project, Ravalli Co., $17,600 (county to pay $8800 toward cost), 5 mi. Mill Creek Rd., Park Co., $10,000.

Wash., Newport—Road Work—L. I. Hewes, dist. engr., bur. pub. rds., U. S. Dept. Agriculture, 628 Post Office Bldg., Portland, Ore., plans to grade 13 mi. Metaline Falls Project, Kanisku National Forest, Pend Oreille Co. About $90,000.

Ore., Portland — Road Work—L. I. Hewes, dist. engr., bur. pub. rds., U. S. Dept. of Agriculture, soon lets contract building 22 mi. Crater Lake-Prospect Sect. of Medford-Klamath Falls National Forest Rd., Klamath and Jackson Counties, involving 200 acres clearing and grubbing, 87,000 cu.yd. excav., 9000 cu.yd. rock excav., 3800 lin.ft. concrete pipe culverts and 600 cu.yd. concrete in bridges; 3.5 mi. Anna Creek Sect. of Medford-Klamath Falls National Forest Rd., Crater National Forest, Klamath Co., 14 acres clearing and grubbing, 6000 cu.yd. excav., 150 lin.ft. log and concrete pipe culverts, etc.

H. T., Pearl Harbor—Power Plant Improvements—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3856. About $80,000.

BIDS DESIRED

Mass., Boston—Cranes—Until Apr. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing 6 electric traveling bridge cranes for extension to shop and foundry, here. Spec. 3477. About $175,000.

N. Y., New York—Dredging—Until May 9, by U. S. Eng. Office, 39 Whitehall St., dredging and removing rocks in East River; advertised in this issue.

N. Y., New York—Dredging—Until May 12, by U. S. Eng. Office, 710 Army Bldg., 39 Whitehall St., dredging in narrows of Lake Champlain, N. Y. and Vermont; advertised in this issue.

N. Y., Rockaway—Pump House—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building pump house for gasolene system; Spec. 3836. About $1700.

Pa., Ft. Mifflin—Marine Railway—Until May 8, by U. S. Eng. Office, Witherspoon Bldg., Phila., constructing 192 ft. marine railway, 52 ft. wide, on Delaware River here. Noted Apr. 3 under "Phila."; advertised in this issue.

Del., Wilmington—Dredging—Until May 5, by U. S. Eng. Office, Old Federal Bldg., dredging waterway between Rehoboth Bay and Delaware Bay (Lewes Canal); advertised in this issue.

Md., Indianhead—Roads—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building roads in naval reservation, Spec. 3850. About $70,000. Noted Apr. 3.

D. C., Wash.—Steel Towers—Until Apr. 14, by Constr. Div., Wash., furnishing one 250,000 gal. steel tank erected on steel tower 125 ft. high, equipped with 48 in. riser pipe.

D. C., Wash.—Transits and Levels—Until Apr. 15, by R. M. Reese, chn. bd. awards, Dept. Agriculture, furnishing 60

Federal Government Work (Continued)

No. 27-A Gurley transits complete, or equal, 24 Buff and Buff 16½ in. telescope, also erecting engineer's dumpy levels, complete or equal; advertised in this issue.

Va., Norfolk—Cranes—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing one 6 ton electric traveling crane and two 1 ton pillar cranes; Spec. 3827. About $20,000. Noted Mar. 13.

Va., Norfolk—Dredging—Until Apr. 26, by U. S. Eng. Office, Custom House, dredging for widening channel to Newport News; advertised in this issue.

Va., Norfolk—Dredging and Filling—Until Apr. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging and filling at Navy Yard here; Spec. 3844. About $200,000.

Va., Norfolk—Galvanizing and Oxy-Acetylene Plants—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Navy Yard, here; Spec. 3772. About $108,000. Noted Jan. 23.

Va., Yorktown—Barracks, Mess Hall and Officers' Quarters—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3831. About $177,500. Noted Mar. 20.

W. Va., South Charleston—Officers' Quarters—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C. building 4 officers' quarters; Spec. 3829. About $60,000. Noted Mar. 13.

Ala., Florence—Rock Crushers—Until May 9, by U. S. Eng. Office, Florence, furnishing rock crushers; advertised in this issue.

Ky., Louisville — Accumulators, etc.— Until Apr. 30, by U. S. Eng. Office, Louisville, furnishing and delivering accumulators for Lock No. 41, and operating machinery for Lock No. 43, Ohio River; advertised in this issue.

O., Cincinnati—Lock and Abutment—Until May 6, by U. S. Eng. Office, Cincinnati, building lock and abutment for Dam No. 32, Ohio River, about 5 mi. from Vanceburg, Ky.; advertised in this issue.

Mich., Saginaw—Lookout Gallery—Until Apr. 24, by J. A. Wetmore, superv. arch., treas. dept., Wash., D. C., building lookout gallery in post office, here; advertised in this issue.

Mo., St. Louis—Levee Work—Until Apr. 23, by Secy., Mississippi River Comr., 1311 International Life Bldg., for 290,000 cu.-yd. earth work, (210,000 cu.yd. hydraulic fill in old borrow pits and 80,000 cu.yd. levee enlargement) in Lima Lake D. D., Ill.; advertised in this issue.

Mo., St. Louis—Levee Work—Until Apr. 23, by Secy-Mississippi River Comm., 1311 International Life Bldg., for 110,000 cu. yd. earthwork (75,000 cu. yd. hydraulic fill in old borrow pits and 35,000 cu. yd. levee enlargement), in Hunt D.D., Ill.

Tex., Mount Pleasant—Post Office—Until May 8. by J. A. Wetmore, superv. arch., treas. dept., Wash., D. C., building here.

N. D., Bismarck—Dormitory—Until Apr. 28, by C. Sells, comr. Indian Affairs, Washington, D. C., building dormitory at Bismarck School.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Chelsea—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 7, building roads at Naval Hospital Reservation, from Coleman Bros., 1 Marginal St., $8900 (30 days); Rowe Contg. Co., 45 Milk St., Boston, $13,280 (40 days); C. S. Cunningham & Sons Constr. Co., 7 Water St., Boston, $18,973 (30 days). Noted Mar. 20.

★R. I. Newport—Water Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract erecting one 3,300,000 gal., steel water tank at Naval Training Sta., to Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $11,760, (45 days). Noted Apr. 3

N. Y., New York—Sprinkler System—Pub. Wks. Officer, Navy Yard, New York. received lowest bids installing sprinkler system, from Lasette & Murphy. 238 West 108th St., $38,639; C. Meads & Co. 38 Park Row, $43,114; H. G. Bogel Co., $45,444, (60 days).

N. Y., Stapleton—Sewer and Water Supply—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 2, installing sewer and water supply connections in U. S. Marine Hospital, (1) sewer connections; (2) water supply connections, from F. N. Lewis Co., Herkimer, N. Y., (2) $2750, (60 days); C. E. Eng. Co., Inc., 417 Canal St., New York City, (1) $2390; (2) $2990 (75 days); H. E. Cox Constr. Co., 81 East 125th St., New York City, (1) $2770; (2) $2975, (60 days). Noted Mar. 13.

N. Y., Wards Island—Electrical Conduit and Switchboard—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 7, extending underground electric system and installing additon to switchboard at U. S. Naval Hospital.

(1) net price for entire work, complete, in accordance with drawings and specifications, based on time of completion of 30 calendar days from date of the award of contract.

(2) net price for entire work, complete in accordance with drawings and specfications, based on time of completion of 50 calendar days from date of award of contract, from

G. E. Eng. Co., 417 Canal St., New York City (1) $4290 (30 days); (2), $3790, (50 days).

W. G. Cornell Co. 45 East 7th St., New York City, (1) $4300, (30 days); (2) $4300, (50 days).

Reese & O'Donovan. 213 West 28th St., New York City, (1) $5440, (30 days); (2) $4940, (50 days).

E. S. Downs Co. 9 Campbell St., Newark, N. J., (2) $3639, (50 days).

E. J. Electric Installation Co. 221 W. 33rd St., New York City, (2) $3997, (50 days) noted Apr. 3.

★Md., Indianhead—Incinerator—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Proving Ground to C. F. Walthers. 624 West 134th St., New York city, $6985, (90 days). Noted Apr. 3.

★D. C., Wash.—Forced Induced Draft Fans—Bureau Yards & Docks, Navy Dept., Wash., let contract installing in Norfolk, Va. and Phila., Pa. Navy Yards, to B. F. Sturtevant Co., 900 F St., N. W., $39,024, (120 days). Noted Mar. 20.

★Va., Norfolk—Dredging—U. S. Eng. Office, Norfolk, let contract dredging inland waterway from here to Beaufort Inlet, N. C., to Atlantic, Gulf & Pacific Co., 13 Park Row, New York City, $326,000. Noted Feb. 6.

★Va., Norfolk—Dredging—U. S. Eng. Office, Norfolk, let contract dredging Norfolk channel from Hampton Roads to Norfolk & Western Ry. bridge, to F. E. Jones, Norfolk, $1,026,000. Noted Mar. 6.

Va., Norfolk—Timber Wharf—Bureau Yards & Docks, Navy Dept., received bids building timber wharf at Navy Yard, here.

(1) net price and time for entire work, complete, in accordance with drawings and specification.

(2) net price per linear foot for additional length of piles over 70 ft. provided additional length of pile is spliced on point and uncreosoted.

(3) net price per linear foot to be deducted from price bid under (1) for each linear foot decrease from stated length of 70 ft.

(4) net price per linear foot to be deducted from price bid under (1) for each linear foot decrease from the stated length of 40 ft. for 12 in. sheet pile.

(5) net price per linear foot to be deducted from the price bid under (1) for each linear foot decrease from stated length of 40 ft. for 12 in. sheet pile. from

Sanford & Brooks Co. 24 Commerce St., Baltimore, Md., (1) $67,750, (100 days); (2) $1.50; (3) $0.60; (4) $0.50; (5) $1.00.

Alsop & Pierce, Newport News, (1) $76,000; (2) $1.75; (3) $0.55; (4) $0.50; (5) $1.00 (110 days).

Raymond Concrete Pile Co., 140 Cedar St., New York City, (1) $77,440, (75 days); (2) $2.00; (3) $0.20; (4) $0.20; (5) $0.25.

Aberthaw Constr. Co., 27 School St., Boston, Mass., (1) $74,460 (180 days); (2) $0.75; (3) $0.12; (4) $0.20; (5) $0.22. Noted Feb. 13.

Fla., Pensacola—Electrical Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 7. installing in central power plant at Navy Yard, here.

(1) net price and time for entire work, complete, in accordance with drawings and specification.

(2) net price and time to be added to (1) for furnishing and installing additional feeder panels, equipped similar to panels 21 to 26.

(3) net price and time to be added to (1) for furnishing and installing an auto transformer for 225 H. P. 2200 volt, 3 phase, 60 cycle synchronous meter.

(4) net price and time to be added to (1) for furnishing and installing two induction type definte time limit single phase relays for panel 15 and 2 induction type inverse time limit single phase relays for each of panels 20 to 26 inclusive, from

United Electric Co. 1727 Sansom St. Phila., (1) $19,300 (120 days); (2) $1460; (3) $250; (4) $696.

Carroll Electric Co., 714 12th St., Wash., D. C., (1) $19,850 (150 days); (2) add $1245; (3) add $215; (4) add $605.

G. E. Eng. Co. 417 Canal St., New York City, (1) $19,990, (120 days); (2) $1469; (3) $464; (4) $100. Noted Mar. 27.

Fla., Pensacola—Warheads and Detonator Storehouses—Bureau Yards & Docks, Navy Dept., Wash., D. C., received only bid building at Naval Air Sta., from C. H. Turner Co., 30 East Garden St., $5594 (80 days).

★Ala., Decatur—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building post office, here, to S. M. Plato, Marion, Ind., $44,493. Noted Mar. 27.

Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 4, building post office, here, limestone, from C. E. Goodland, Chadron, Neb., $54,750; W. O'Neil & Son Co., Faribault, Minn., $57,762; Henry & Hatfield Constr. Co., Indianapolis, Ind. $60,372. Noted Mar. 6.

Tex., Honey Grove—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 2, building post office, (1) limestone; (2) sandstone, from Cooper & Lund, 142 Market St., Newark, N. J., (1) $48,983; (2) $50,583; Henry & Hatfield Constr. Co., Indianapolis, Ind., (1) $49,817; (2) $50,817; R. P. Farnsworth & Co., New Orleans, La., (1) $52,900. Noted Mar. 6.

★Tex., North Ft. Worth—Argon Production Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to Dawson Constr. Co., 810 Union Trust Bldg., Wash., D. C., $431,000 (180 days). Noted Mar. 27.

★Tex., Point Isabel—Radio Buildings—Pub. Wks. Officer let contract building at St. Joseph, to J. McCoy, Monroe and 10th Sts., Brownsville, $16,844 (100 days). Noted Apr. 3.

★Tex., Sabine Pass—Jetty Works—U. S. Eng. Office, Dallas, let contract building east jetty, here, to D. M. Pickton, Galveston, $251,185. Noted Jan. 23.

★Idaho, Boise—Irrigation Project—U. S. Recl. Serv. let contract building portion of Notus Canal, to Idaho Constr. Co., Boise, $19,426; building sections of Feeder Canal No. 2 and Notus Canal, to S. C. Comerford, R. F. D. 1, $39,131.

Cal., Mare Island—Steel—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 7, furnishing steel for structural shop at Navy Yard, here.

(1) 6120 tons structural steel and crane rails, (a) structural steel, (b), 85 tons crane rails.

(2) steel and c.i. stairs and landings, (a) 53,300 lb. steel stair framing, (b) 70,000 lb. c.i. treads and landings, (c) 450 sq. ft. safety treads.

(3) 1000 lin. ft. pipe railing.

McClintic Marshall Co. 1144 Munsey Bldg., Wash., D. C., (1a) $92.40; (1b) $92.40; (2a) $0.068; (2b) $0.087; (2c) $2.80; (3) $1.50; (210 days).

Amer. Bridge Co., Wilkins Bldg., Wash., D. C, (1a) $93; (1b) $93; (2a) $6.09; (2b) $0.095; (2c) $2.23; (3) $2.47; (170 days).

Bethlehem Steel Co. Bridge Corp. Bethlehem, Pa., (1a) $93.40; (1b) $69.60; (2a) $6.22 (2b) $8.81; (2c) $1.80; (3) $1.50; (210 days). Noted Apr. 3.

★Alaska, Nome—Dredging, etc.—U. S. Eng. Office, Seattle, Wash., let contract building bank revetment and jetties and dredging in Nome Harbor, to W. J. Rowe, Nome, dredging, $26,950; Guinan & Ames, Selah, Wash., bank revetment, $40,824. Noted Feb. 27.

Miscellaneous

PROPOSED WORK

Bulkhead—New Bedford, Mass.—City soon lets contract building 89 x 140 ft., pile, timber and riprap bulkhead, platform and cofferdam at Howland and Gifford Sts., involving yellow pine (No. 1 common) 6 in. white oak piles, 3 in. sheet piling and ¾ in. bolts. G. H. Nye, city engr.

Coal Pocket—Springfield, Mass.—See "Industrial Works."

Gate—Providence, R. I.—Brown University, College St., plans to build limestone memorial gate on Thayer St. About $25,000.

Miscellaneous (Continued)

Coal Pocket — Bridgeport, Conn. — H. Schurr, 1119 Stratford Ave., soon receives bids building concrete coal pocket on Housatonic Ave. near Congress St. About $12,000.

Transmission Line—Clark Mills, N. Y.— Adirondack Electric Power Corp., Union Sta., Utica, plans to build 16 mi. transmission line from its substation here to one at Oneida; thereby connecting company's Oneida and Canastota plants with high tension line.

Ballast—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., rejected bids furnishing ballast for use in building rapid transit railroads, "Sect. M." Noted Mar. 20.

Retaining Wall—Rochester, N. Y.—City having surveys made for concrete retaining wall along westerly side of Carrol-Fitzhugh raceway; also tunnel from Erie Canal to Court St. A. C. Poole, city engr.

Water Meters—Magnolia, Miss.—X. A. Kramer, engr., plans to purchase 2000 water meters.

Park, etc.—Alton, Ill.—City plans to build $\frac{3}{4}$ mi. park and driveway on river front. About $100,000. W. M. Sauvage, mayor.

Sluice Gates—Milltown, Mont.—Missoula Light & Water Co., Missoula, having plans prepared for sluice gates in company's power dam near here. About $60,000. C. H. Christensen, mgr.

Swimming Pool—Missoula, Mont.—City had plans prepared by O. Bakke, archt., Missoula, for 40 x 120 ft., concrete, inclosed swimming pool. About $15,000.

Balustrade—St. Louis, Mo.—Bd. Pub. Serv. plans to build stone balustrade, 39-45 in. high, around lagoon in Forest Park. About $90,000. N. Cunliff, comr. park dept.

Dike—Coupeville, Wash.—Island Co. soon lets contract building dike at head of Useless Bay. About $15,000.

Dry Dock—Seattle, Wash.—Ames Shipbuilding & Dry Dock Co., 26th St., S. W. and West Hanford St., plans to build frame dry dock capable of lifting 12,000 ton ship. Work involves 3,000,000 ft. timber. About $90,000.

Pier—Portland, Ore.—City soon lets contract building Pier No. 1, 300 ft. long, 120 ft. wide; Pier No. 2, 1500 ft. long, 125 ft. wide, timber foundation, involving 5000 piles; wharf 100 ft. wide at east end of slip No. 1 at St. Johns Terminal, North St. Johns Dist., east side of Williamette River. G. B. Hegardt, engr. comr. pub. docks. Noted Mar. 13.

Pipe—Portland, Ore.—City soon lets contract furnishing 50 tons 12 in. c.i. water pipe. P. McIntosh, asst. purch. agt.

Pipe Lines—Santa Barbara, Cal.—City plans election to vote on $100,000 bonds, $40,000 being needed to complete Gibraltar dam under contract now held by Bent Bros., 825 Central Bldg., Los Angeles and $54,000 for building pipe lines; 24 in redwood stave pipe line will probably be built to carry water from Gibraltar dam to Mission Reservoir. Noted Feb. 20.

Monument—Hull, Que.—Notre Dame Parish receives bids in May building monument on City Hall Sq. Cost between $15,000 and $20,000.

Refrigerating Equipment—Ottawa, Ont.—J. A. Pearson, archt., Centre Blk., Parliament Hill, soon lets contract installing refrigerating equipment in Parliament Buildings.

Portland Cement and Structural Steel—Toronto, Ont.—R. Miller & Sons, Ltd., Lumsden Bldg., soon let contract furnishing 138,000 sacks portland cement, 828 steel angles and 166 twelve in. channels fabricated.

Harbor Improvements, Breakwaters, etc.—Canada—Dominion Government, Ottawa, Ont., plans following improvements during 1919 and 1920: Harbor and river at Port Arthur, Ont., cost $300,000; harbor at St. John, N. B., $750,000; harbor at Toronto, Ont., $500,000; harbor at Inverness, N. S., $18,000; harbor at Rimouski, Que., $69,000; repairing and strengthening Souris breakwater, P. E. I., $35,000; Devils Island breakwater, N. S., $10,000; Negro Point breakwater, N. B., $15,000; Port Colborne, Ont., breakwater, $52,000; new wharfs at Anse aux Gascous, Que., $36,000; Stewart, B. C., $34,000; Kagawong, Ont., $10,000; repairing wharfs at Berthier (en bas) Que., $18,600; Magog, Que., $22,000; Sillery Wharf, Pointe Pizeau, Que., $16,000; Ste. Anne de Beaupre, Que., $39,000; Ste. Famille, Que., $17,000; St. Laurent, Island of Orleans, Que., $15,000; St. Michel de Bellechase, Que., $53,600; Vercheres, Que., $10,000; Burlington Channel, Ont., $23,900; Comax, B. C., $20,300; New Masset, B. C., $10,500; Thessalon, Ont., $11,500; building addition to wharf and dredging Powell River, B. C., $16,500; repairing piers at Cobourg, Ont., $26,000; Port Hope, Ont., $11,500; rebuilding Ft. Dufferin breastwork, N B., $18,000; rebuilding ice breakers at Richmond, Que., $13,300; monument at Ottawa, Ont., $25,000; diversion of Pelican Lake, Little Pembinia River, Man., $19,500. E. D. Lafleur, c/o Dept. Pub. Wks., Ottawa, ch. engr.

PIPE LINE—JERSEY CITY, N. J.

Bids were received by city, March 25th, for furnishing and laying 39,590 ft. 72 in. riveted steel pipe line between Boonton Reservoir and west entrance of Watchung Tunnel, (1) total computed by contractor, (2) total computed by Clyde Potts, engineer, from (A) Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, Pa.; (B) Patrick McGovern, 50 East 42nd St., New York City; (C) Liberty Constr. Co., New York City; (D) Snare & Triest Co., 8 West 40th St., New York City, (1) $1,321,557; (E) J. W. Brody & Co., New York City, (1) $1,346,685; (F) J. L. Sigretto & Co., South Curtis Ave., Woodhaven, N. Y., (1) $1,405,606, (2) $1,380,606; (G) H. E. Fox Constr. Co., 81 East 125th St., New York City, (1) $1,382,431; (H) T. Curtis, New York City, (1) $1,421,209; (I) Beaver Eng. & Constr. Co., 51 Chambers St., New York City, (1) $1,419,158, (2) $1,421,702; (J) Norton Eng. & Contg. Co., 103 Park Ave., New York City (1) $1,429,094; (K) Constr. Co. of New Jersey, 665 Newark Ave., Jersey City, (1) $1,464,006, (2) $1,462,666; (L) Albert Decker, East Orange, $1,465,700; (M) Frank Pano, Brooklyn, N. Y., (1) $1,510,525, (2) $1,511,180; (N) Hugh Nawn Constr. Co., 82 Savin St., Boston, Mass., (1) $1,531,403; (O) W. H. Gahagan, Inc., 147 Remsen St., Brooklyn, N. Y., (1) $1,78[illegible] 977. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
100,000 cu.yd. trench excavation—earth	$2.80	$2.95	$4.00
10,000 cu.yd. trench excavation—rock	6.00	4.95	6.00
34,125 lin.ft. 72-in. steel pipe $\frac{5}{32}$-in. thick	20.15	22.00	22.00
465 lin.ft. 72-in. steel pipe $\frac{7}{32}$-in. thick	25.75	25.95	40.00
1,000 cu.yd. concrete	21.00	25.00	15.00
10,000 lb. reinforcing steel	0[illegible]	08	.10
35 cu.yd. brick masonry	35.00	25.00	25.00
66 cu.yd. rubble masonry	7.50	8.00	12.00
50 sq.yd. stone paving	5.50	6.00	5.00
11 M.H. heads and covers	75.00	50.00	45.00
20,000 ft.b.m. lumber	110.00	95.00	150.00
2,500 linft. piles	1.00	1.00	1.70
20 lin.ft. 6 in. cast iron pipe	2.75	2.00	4.50
19[illegible] lin.ft., 8-in. cast iron pipe	3.25	3.00	5.00
20 lin.ft., 10-in. cast iron pipe	4.25	4.00	6.00
120 lin.ft., 12-in. cast iron pipe	4.75	5.00	7.00
120 lin.ft., 16-in. cast iron pipe	6.50	6.00	8.00
6-in. air valve	275.00	250.00	300.00
5 8-in. air valves	615.00	550.00	600.00
10-in. air valve	875.00	800.00	800.00
11 8-in. gate valves	55.00	80.00	80.00
10-in. gate valve	75.00	100.00	100.00
8 12-in. gate valves	97.00	125.00	140.00
8 16-in. gate valves	205.00	200.00	250.00
36-in. gate valve	1,625.00	1,500.00	1,500.00
5 48-in. gate valves	3,275.00	3,000.00	3,500.00
100 lin.ft. 6-in. vitrified sewer pipe	3.60	1.75	1.00
100 lin.ft. 8-in. vitrified sewer pipe	3.75	2.00	1.60
100 lin.ft., 12-in. vitrified sewer pipe	4.00	3.25	2.20
100 lin.ft., 18-in. vitrified sewer pipe	6.00	4.50	3.50
Extended totals	$1,098,076	$1,166,810	$1,286,002

Bids for this same work were opened Aug. 13, 1918, but the contract was not awarded on account of the Priorities Board withholding their approval to the use of the steel plates. The lowest bid at that time was $2,578,921, while the present lowest bid is $1,098,076, a reduction of $480,845 as against the war conditions which were prevailing at that time, and a consequent saving to the city.

BIDS DESIRED

Dam, etc.—Scituate (North Scituate P. O.), R. I.—Until Apr. 30, by Water Supply Bd., City Hall, Providence, building portions of main dam of Scituate reservoir, Contract 11, involving 132,000 cu.yd. earth excav. and borrow, 3500 cu.yd. rock excav., 1500 cu.yd. concrete masonry; also building 3.5 mi. earth road, 10 mi. westerly of Providence, Contr. 10, involving 24,000 cu.yd. earth excav. and borrow, 800 cu.yd. rock excav. and 400 cu.yd. concrete masonry. F. E. Winsor, ch. engr.; advertised in this issue.

Tanks, etc.—Long Island City, N. Y.—Until Apr. 14, by M. E. Connolly, pres. Queens Boro., furnishing and delivering to Bur. of Highways, four 5000 gal. storage tanks, 350,000 gal. road oil; 100,000 gal. bituminous road surfacing material, 75,000 gal. road oil in tank cars, 65,000 asphalt paving blocks.

Stone, etc.—St. George, S. I., N. Y.—Until Apr. 17, by C. D. Van Name, pres. Richmond Boro, furnishing and delivering 800 cu. yd. $1\frac{1}{2}$ in. broken stone, 300 cu. yd. screenings and 100 cu. yd. $\frac{3}{4}$ in. broken stone of trap rock in Dist. No. 1; 1900 cu. yd. $1\frac{1}{2}$ in. broken stone, 750 cu. yd. screenings and 100 cu. yd. $\frac{3}{4}$ in. broken stone of trap rock in Dist. No. 2; 1250 cu. yd. $1\frac{1}{2}$ in. broken stone, 550 cu. yd. screenings and 60 cu. yd. $\frac{3}{4}$ in. broken stone of trap rock in Dist. No. 3. Former bids rejected. Noted Apr. 3 under New York.

Traprock—East Orange, N. J.—Until Apr. 14, by City Council, furnishing 7000 tons $1\frac{1}{2}$ i. and 3000 tons $\frac{3}{4}$ in. trap rock, also 3000 tons trap rock screenings. W. D. Willigerad, City Hall, engr.

Pipe—Newark, N. J.—Until Apr. 15, by T. L. Raymond, dir. dept. streets & pub. impvts., furnishing and delivering at store room of Bureau Water, 100,000 lb. $\frac{5}{8}$ in., and 20,000 lb. 1 in. A. A. lead pipe, also 100,000 lb. pig lead. M. Sherrerd, City Hall, engr.

Repairing and Repainting—Lancaster, Pa.—Until Apr. 28, by Comrs. Lancaster Co., repairing and repainting outside of county court house. E. E. Mowrer, co. controller; advertised in this issue.

Steel—Phila., Pa.—Until Apr. 22, by W. S. Twining, dir. dept. city transit, Mershon Bldg., 1211 Chestnut St., furnishing and erecting in place 1500 tons steel for Frankford Elevated Ry.

Heater—Akron, O.—Until Apr. 18, by H. S. Morse, dir. pub. serv., Delaware Bldg., furnishing 1 vertical open metering feed water heater, meter to be equipped with indicating, recording and integrating device, exhaust steam to be supplied to heater at about 3 lb. back pressure, Contr. No. 140; advertised in this issue.

Miscellaneous (Continued)

Meter Pipes, etc.—Toledo, O.—Until Apr. 29, by dir. pub. serv. furnishing and delivery at Bway. Pumping Sta. one 36 in. venturi meter, 53 tons c.i. pipe and fittings, one 36 in. check valve, two 36 in. hydraulic gate valves, one 42 in. geared gate valve and one 42 in. hydraulic gate valve. D. H. Goodwillie, Valentine Bldg., Toledo, engr.

Road Material—St. Paul, Minn.—City is receiving bids furnishing 1000 bbls. Portland cement, 419 ft. sewer pipe and 14,885 sewer brick for paving Prior Ave. from University Ave. to Minnehaha St.; and 9200 sewer brick to be used in paving Como Ave. from Rice St. to Great Northern Bridge. Former contract rescinded.

Road Oil—Fresno, Cal.—Until Apr. 22, by Bd. Supervs. furnishing 90,000 to 110,000 bbl. road oil.

Steel Piling — Los Angeles, Cal. — Until Apr. 18 by Bd. Pub. Serv., 645 South Olive St., furnishing steel piling.

Asphalt Flux, Road Oil, etc.—Ottawa, Ont.—Until Apr. 15, by Bd. Control, furnishing 15,000 gals. asphalt flux oil, 150,000 gals. road oil and 25,000 gals. fuel oil. (light, medium and heavy oil will be required). A. F. McCallum, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Asphalt and Oil—Fall River, Mass.—Street Dept. received bids furnishing (a) asphalt, (b) road oil, (for year's requirements) from Standard Oil Co., foot of Birch St., (a) $23.80 per ton; (b) $.064; $.075; $.089 and $.101 per gal.; Texas Co., 24 Slade St., (a) $24.40 per ton; United States Asphalt Refining Co., 90 West St., New York City, (a) $26.75; J. J. Galvin, Fall River, (b) $.0675; $.0685; $.079; $.0875; $.099 per gal.; Amer. Oil Products Co., (b) $.0645; $.0875; $.0845; $.099; $.125 per gal.

Sand, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro., received bids Apr. 3, furnishing and delivering (a) 6500 cu.yd. sand; (b) 2500 cu.yd. broken stone or grits; (c) 2 automobile pressure distributors, from C. A. Myers, foot of Stagg St., (a) $10,335; (b) $6500; E. W. Fitzpatrick, 128 3rd Ave., (a) $12,190; Welsh Bros., 14 Queen St., (a) $12,610; T. F. Tuohy, 98 Main St., (a) $14.495; (b) $5975; Peace Bros., 20 Main St., (b) $7375; Harold Motor Car Co., (c) $16,138. Noted Mar. 27.

★Ballast—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., let contract furnishing ballast for use in building rapid transit railroads, Secs. "K" and "L," to New York Trap Rock Co., 17 Battery Pl., $85,500 and $24,050 respectively. Noted Mar. 20.

★Paving Blocks—New York, N. Y.—J. H. Delaney, comr. plant and structures, Municipal Bldg., let contract furnishing and delivering 200,000 wood paving blocks, 3 x 8 in., and 200,000 blocks 2 x 6 in., to Amer. Creosoting Co., 17 Battery Pl., $7816 and $3196 respectively. Noted Mar. 27.

Road Oil—New York, N. Y.—Dept. of Parks, received bid Apr. 3, furnishing and delivering 80,000 gal. tar road oil (Bronx Boro.), from Barrett Co., 17 Battery Pl., $10,000. Noted Mar. 27.

★Treated Ties—New York, N. Y.—City let contract furnishing 442,000 ft. b.m. treated ties, to Amer. Creosoting Co., 17 Battery Pl., $42,412.

★Truck and Paving Material—Schenectady, N. Y.—Bd. Contr. and Supply, let contract furnishing and delivering 3 ton truck for Water Bureau, to N. L. Schupp & Sons, 316 Central Ave., Albany, $3750; asphalt mixture, to Good Rd. Co., 26 South 15th St., Phila. Noted Mar. 20.

★Road Roller—Newark, N. J.—Bd. Freeholders Essex Co. let contract furnishing 12 ton single cylinder gasoline road roller, to Austin-Western Rd. Mchy. Co., 50 Church St., New York City, $3800. Noted Mar. 27.

★Column Foundations—Phila., Pa.—W. S. Twining, dir. dept. city transit, Mershon Bldg., 1211 Chestnut St., let contract building 68 concrete column foundations in Front St., from above Arch St. to Callowhill St., on Frankford Elevated line, to Brown-King Constr. Co., Coml. Trust Bldg., about $29,800 (with some additions). Noted Mar. 13.

FOUNDATIONS—PHILADELPHIA, PA.

Bids were received by W. S. Twining, dir. dept. city transit, for building 68 concrete column foundations in Front St. from above Arch St., to Callowhill St., Frankford Elevated Ry., Contr. 500, from (A) Brown-King Constr. Co., 1632 Commercial Trust Bldg.; (awarded contract); (B) I. K. Davis Co., 20th and Spencer Sts.; (C) Keystone State Construction Co., Franklin Bank Bldg. The unit bids were as follows:

	A	B	C
For whole work as shown on the plans (lump sum)	$29,800.00	$32,900.00	$36,900.00
100 cu.yd. excavation	3.75	6.00	3.50
10 cu.yd. concrete masonry	12.00	15.00	16.00
100 lin.ft. rolled steel channels for sheathing	1.00	1.25	.50
1,000 lb. steel work, miscellaneous	.06	.10	.10
1,000 lb. iron castings	.06	.08	.05½
10 cu.yd. brick masonry	22.00	22.00	28.00
10 cu.yd. rubble stone masonry	8.00	10.00	9.00
1,000 ft.b.m. yellow pine lumber	80.00	110.00	50.00
10 lin.ft. 5 in. or 6 in. extra heavy c.-i. soil pipe	1.50	2.50	1.00
10 lin.ft. 5 in. or 6 in. vitrified clay pipe	.50	.80	.40
10 lin.ft. 8 in. or 10 in. vitrified clay pipe	.75	1.10	.75
10 lin.ft 12 in. vitrified clay pipe	1.10	1.50	1.00
10 lin.ft. 15 in. or 18 in. vitrified clay pipe	1.70	2.00	1.50
New inlets—any size	150.00	250.00	150.00
100 lin.ft. steel bound granolithic curb	.80	1.50	1.50
10 lin.ft. furnishing and setting bluestone curb	1.50	1.50	1.25
10 lin. ft. furnishing and setting granite curb	3.25	3.00	2.50
100 linft. resetting stone curb	.50	.60	.50
100 sq.yd. new brick or flagstone sidewalk paving	1.25	2.25	1.50
100 sq.yd. relaying brick or flagstone sidewalk	.55	1.25	.80
100 sq.yd. granolithic sidewalk paving	2.70	2.50	2.25
100 sq.yd. granite block repaving on gravel base	1.40	1.75	1.00
100 lin.ft. of single duct. terra-cotta conduits	.40	.50	.30
10 boxes new curb stop boxes or vent boxes	5.00	10.00	2.50
Force account (per cent added)	10%	15%	20%
Extended totals	$32,058	$36,044	$39,279

DAM—LOS ANGELES, CAL.

Bids were received by Board of Supervisors of Los Angeles Co. for building concrete masonry arch dam, northwest of Pasadena, from (A) Bent Bros., Central Bldg.; (B) McPeak & Dillon, Los Angeles; (C) W. C. Crowell, 440 Chember of Commerce Bldg., Pasadena; (D) Edenger & Stoner, $232,083; (E) Fred Hoffman, $239,915; (F) Sharp & Fellows ontg. Co., Central Bldg., $245,313; (G) F. S. Somers, $248,575. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
3000 cu.yd. dry earth excavation	$1.80	$0.85	$1.20
2000 cu.yd. wet earth excavation	1.80	1.25	1.75
3000 cu.yd. dry solid rock excavation	3.85	2.75	3.50
3000 cu.yd. wet solid earth excavation	3.85	2.75	4.50
28,350 cu.yd. concrete which may have large stones embedded	2.55	3.85	3.96
4000 cu.yd. plain concrete	2.55	4.85	4.58
1000 cu.yd. re-enforced concrete	11.60	17.00	8.50
620 lin.ft. precast hand rail, lamp posts, etc	7.50	3.50	3.00
620 lin.ft. of 2 in. fibre conduit with No. 6 copper wire as per paragraph 54 of specifications, pulled into conduit and lamp posts set in place	1.00	.80	1.20
300 lin.ft. of concrete lined tunnel	71.00	74.00	124.00
10,000 lb. steel re-enforcement	.06	.10	.06
6300 sq.ft. road surfacing	.15	.22	.20
300 lin.ft. 2½-in. drilled grout holes	5.00	1.50	4.00
1000 sacks cement placed in grouting	.60	.75	1.00
Extended totals	$169,908	$224,850	$232,083

★Pier—Phila., Pa.—Dept. Wharves, Docks and Ferries, Bourse Bldg., let contract building Pier No. 82 and 84, South Delaware Wharves, at foot of Wolf and Porter Sts., to A. McMullen Co., 149 Bway New York City, $1,356,700 and $1,309,700 respectively, Noted Mar. 13.

★Culverts — Baltimore, Md. — City will build two 10 ft. concrete culverts, one 30 ft. wide, other 36 ft. wide, on Annapolis Ave. About $10,000. Work will be done by day labor.

★Dams, etc.—Plymouth, Mich.—H. Ford & Son, Dearborn, let contract building rein.-con. dam and intake over River Rouge, to Walbridge Aldinger Co., 2346 Penobscot Bldg., Detroit. Work involves 50 ft. rein.-con. spillway, 100 ft. earth dam with rein.-con. core wall and 225 wood piles in foundation of spillway.

★Pumps, etc.—Wyandotte, Mich.—City let contract furnishing 2 low lift motor driven centrifugal pumps, 21,000 and 42,000 gal. per minute; also steam driven unit with 5,000,000 gal. daily capacity, to Platt Iron Wks., Arrott Bldg., Pittsburg. About $12,000.

★Ice Machine—East St. Louis, Ill.—Swift & Co., Natl. Stockyards, will build 500 ton, 22 x 48 ft. ice machine, concrete foundation, to contain 700 cu.yd. concrete. About $114,000. Work will be done by day labor.

★Trimming and Lining Reservoir — El Segundo, Cal.—Standard Oil Co. let contract trimming and lining with cement and wire mesh, 1,000,000 gal. circular oil reservoir, to Bent Bros., Central Bldg., Los Angeles.

★Dam—Los Angeles, Cal.—Bd. Supervs. Los Angeles, let contract building concrete masonry arch dam, 125 ft. high, northwest of Pasadena, to Bent Bros., Central Bldg., $169,907. Work involves 3000 cu. yd. dry excav., $1.80 per cu. yd.; 200 cu. yd. wet excav., $1.80 per cu. yd.; 3000 cu. yd. dry rock excav., $3.85; 3000 cu. yd. wet rock excav., $3.85; 28,350 cu. yd. concrete, $2.55; 4000 cu. yd. plain concrete, $2.55; 1000 cu. yd. rein.-con., $11.60; 620 lin. ft. concrete handrail, $7.50; 620 lin. ft. concrete conduit, $1.50; 300 lin. ft. concrete tunnel, $71; 10,000 lb. rein. steel, $.06 per lb.; 6300 sq. ft. road surfacing, $.15; 3000 lin. ft. 2 in. grout holes, $5; 1000 sacks cement for grouting, $.60. County will furnish 42,000 bbl. cement. Noted Feb. 6.

★Incinerator—Pasadena, Cal.—City let contract building garbage incinerator and installing equipment to manufacture stock food, to R. C. Deveraux and F. P. Smith, Pasadena. About $21,333.

★Tower — Montreal, Que. — Dominion Flour Co., 300 St. Ambrose St., let contract building steel marine tower, concrete foundation, and c.i. columns, to J. M. Robertson, Ltd., Coristine Bldg. About $45,000.

Bids Close		See Eng. News-Record
Apr. 21	Cranes—Spec. 3827— Norfolk, Va.	Apr. 10
Apr. 21	Officers Quarters — Spec. 3829 — South Charleston, W. Va.	Apr. 10
Apr. 21	Galvanizing Plant — Spec. 3772—Norfolk, Va.	Apr. 10
Apr. 21	Pumphouse—Spec. 3826—Rockaway, N. Y.	Apr. 10
Apr. 21	Roads—Spec. 3850—Indianhead, Md.	Apr. 10
Apr. 21	Grading — Spec. 3830 — Washington, D. C.	Apr. 17
Apr. 21	Galvanizing Plant—Spec. 3722—Washington, D. C.	Apr. 17
Apr. 22	Post Office — Sand Point, Idaho	Apr. 17
Apr. 22	Lighthouse — Baltimore, Va.	Apr. 10
Apr. 22	Lighthouse — Baltimore, Md.	Apr. 17
Apr. 23	Post Office—Gilmer, Tex.	Mar. 13
Apr. 23	Earth Work—St. Louis, Mo. Adv. Apr. 3 to 17.	Mar. 27
Apr. 23	Soil and Sod—Galveston, Tex. Adv. Apr. 10 and 17.	Apr. 3
Apr. 23	Levee Work — St. Louis, Mo. Adv. Apr. 3 to 17.	Apr. 10
Apr. 23	Dam, etc.—Scituate, R. I.	Apr. 17
Apr. 24	Lookout Gallery—Saginaw, Mich. Adv. Apr. 3 and 10.	Apr. 10
Apr. 24	Dredging — San Francisco, Cal.	Apr. 3
Apr. 24	Asphalt and tar—Columbus, Ohio Adv. Apr. 17.	Apr. 17
Apr. 25	Towboat—Memphis, Tenn. Adv. Mar. 27 to Apr. 17.	Apr. 3
Apr. 26	Dredging—Norfolk, Va. Adv. Apr. 10.	Apr. 10
Apr. 28	Hangars — Spec. 3792 — Brunswick, Ga.	Apr. 17
Apr. 28	Dredging—New York, N. Y.	Apr. 3
Apr. 28	Cold Storage Building — Spec. 3685 — Cape May, N. J.	Apr. 17
Apr. 28	Officers Quarters — West Point, N. Y. Adv. Apr. 3 and 10.	Apr. 3
Apr. 28	Dormitory — Bismarck, N. D.	Apr. 10
Apr. 29	Dredging — New York, N. Y. Adv. Apr. 10 and 17.	Apr. 3
Apr. 29	Foundation—Pamlico Sound, N. C.	Apr. 10
Apr. 30	Levee Work—St. Louis, Mo. Adv. Apr. 3 to 17.	Apr. 3
Apr. 30	Accumulators, etc.—Louisville, Ky. Adv. Apr. 3 to 17.	Apr. 10
May 1	Wharf—Boston, Mass.	Apr. 3
May 1	Removing Wreck — New York, N. Y.	Apr. 17
May 3	Dredging — Jacksonville, Fla. Adv. Apr. 3 to 17.	Apr. 3
May 5	Dredging—Wilmington, Del. Adv. Apr. 10 and 17.	Apr. 10
May 5	Sewer Discharge Pipe — Spec. 3267 — Pensacola, Fla.	Apr. 17
May 5	Fence — Spec. 3789 — Charleston, W. Va.	Apr. 17
May 6	Lock and Abutment—Cincinnati, O. Adv. Apr. 10 and 17.	Apr. 10
May 6	Alteration to Post Office—Bridgeport, Conn.	Apr. 17
May 8	Marine Railway — Ft. Mifflin, Pa. Adv. Apr. 10 and 17.	Apr. 10
May 8	Post Office—Mount Pleasant, Tex.	Apr. 10
May 9	Rock Crusher — Florence, Ala. Adv. Apr. 10 and 17.	Apr. 10
May 9	Dredging — New York, N. Y. Adv. Apr. 10 and 17.	Apr. 10
May 12	Dredging — New York, N. Y. Adv. Apr. 10.	Apr. 10
May 15	Rip Rap—Baltimore, Md. Adv. Apr. 17.	Apr. 17
May 15	Dredging — New Bedford, Mass. Adv. Apr. 17.	Apr. 17

MISCELLANEOUS

Bids Close		See Eng. News-Record
Apr. 21	Breakwater — Sheboygan, Wis.	Apr. 17
Apr. 21	Levee—Port Allen, La.	Apr. 3
Apr. 22	Steel—Philadelphia, Pa.	Apr. 10
Apr. 22	Paving Material — New York, N. Y.	Apr. 17
Apr. 23	Road Oil—Baltimore, Maryland Adv. Apr. 17.	Apr. 17
Apr. 28	Cranes—Providence, R. I.	Apr. 17
Apr. 28	River Protection—Washington	Apr. 17
Apr. 28	Repairing and Repainting Courthouse — Lancaster, Pa. Adv. Apr. 10.	Apr. 10
Apr. 29	Freight Shed—New York, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 29	Meter Pipes—Toledo, O. Adv. Apr. 10.	Apr. 10
May 2	Wharf—Victoria, B. C.	Apr. 17

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. J., Jersey City—City rejected bids received Mar. 25, furnishing and laying 39,590 ft. 72 in. riveted steel pipe line between Boonton Reservoir and west entrance of Watchung Tunnel. About $1,500,000. New bids. C. Potts, 30 Church St., New York City, consult. engr. Noted April 3.

Mont., Roundup—City plans to extend water mains. About $12,000. F. Quinnell, Roundup, engr.

Tex., Stevenville—City plans election to vote on $11,500 bonds to extend water mains, sewerage system and improve streets.

Okla., Claremore—City plans election soon to vote on $82,000 bonds, to extend and improve waterworks system.

Okla., Eufaula—City plans election soon to vote on $40,000 bonds to improve waterworks system. H. B. Parris, city clk.

Idaho, Buhl—City election soon to vote on $30,000 bonds, to replace wood pipe with cast iron pipe under proposed paving and bring distribution system, including fire hydrants, up-to-date. McGee & Baird, Caldwell, engrs.

Idaho, Wilder—City plans to build waterworks, tanks and distribution system. About $15,000. Address J. Pfifer, Wilder.

Wash., Bellingham—City plans to build 5400 ft. 16 and 24 in. c.i. water mains between James St. and Mausoleum. About $35,000. C. M. Adams, city engr.

Que., Montreal—City voted $135,375 bonds to extend waterworks system.

Ont., Eastview Center—Town having plans prepared for water distribution plant. About $12,000. H. R. Washington, clk.

B. C., Victoria—Dept. Pub. Wks., Ottawa, soon receives bids installing waterworks system to Williams Head Quarantine Station. About $80,000. D. Lapleur, c/o Dept. Pub. Wks., engr. Noted Apr. 3.

BIDS DESIRED

N. Y., Gilboa—Until May 14, by Bd. Water Supply, Municipal Bldg., New York City, building dam here, same being part of Schoharie Watershed development for New York City water supply. Work includes 1300 ft. masonry overfall, 160 ft. high and 1000 ft. earthen section, etc., Contr. No. 203. L. J. O'Reilly, comr. bd. water supply; advertised in this issue. Noted Mar. 13.

Pa., Pottsville—Until May 5, by J. Archibald, genl. mgr. Girard Water Co., Thompson Bldg., furnishing material and labor for 100,000 cu.yd. earth fill dam with concrete gate tower, bridge, spillway and cutoff wall on Whiskey Mill Creek. Gannett, Seelye & Fleming, 204 Locust St., Harrisburg., engrs.; advertised in this issue.

Ga., La Grange—See "Sewers."

Miss., Hollandale—Until May 13, by Comrs. Black Bayou, D.D., Greenville, building 1 story pumping plant, concrete dam and sluice gate near here, involving 350 cu. yd. concrete, 5½ tons steel, 7000 ft. B. M. timber, 2800 cu. yd. earth excav., 22,000 ft. B. M. sheet piling, 700 lin. ft. round piling and 3 sluice gates. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

O., Toledo—Until Apr. 25, by Comrs. Lucas Co. laying water pipe line, in Overland Heights, involving 7720 ft. 6 in. c.i. pipe, etc. About $16,800. Noted Mar. 27.

Minn., Brainerd—Until May 8, by city, for improvements to waterworks. Work includes 14 mi. new water mains, 6-8 in. tube wells, 1 open well, pumping station with electric pump equipment and 300,000 gal. tank on 90 ft. rein.-con. tower. About $250,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, consult. engr.

Minn., Ely—Until May 6, by City Council, building sedimentation basin for waterworks system. Separate bids to be made on construction of sedimentation basin and installation and furnishing raw water piping and drainage system. I. Winsted, Jr., city clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mo., Kansas City—J. R. Samuel, city purch. agt., received bids Apr. 9, building and completing 15,000,000 gal. storage basin at Wabash and St. John Aves., from E. H. Bradbury, 441 Shudley Bldg., $67,470; W. C. Mullins, 1230 Montgall Ave., $71,450; McTernan & Halpin Constr. Co., 48th and Chestnut Sts., $78,305. Noted Mar. 27.

Sewers

PROPOSED WORK

N. Y., Oneida—See "Streets and Roads."

N. Y., Rochester—See "Streets and Roads."

N. J., Phillipsburg—City Comrs. approved $150,000 bond issue to build new sewerage system and sewer oxidation plant. C. E. Tildon, city engr.

Pa., Allentown—City plans to issue $180,000 bonds to build sewers and bridges. H. T. Bascom, city engr.

Md., Cambridge—City plans to build 1400 lin.ft. 24-in. storm sewers and 600 lin.ft. 8-in. sanitary sewer, manholes, inlets, foundations, etc. O. L. Dail, city clk.

Wis., Green Bay—City plans to build 5000 ft. 12 in. vitr. sewer in Bway., Chestnut, Clinton, Yale, Washington, Kurtz and Grignon Sts., Irving Ave. and School Pl. W. Reed, city engr.

Neb., Lincoln—City receives bids about May 15, building 4½ mi. intersecting sewer. Bonds for $100,000 voted for project. A. Dobson, 945 D St., engr. Noted Mar. 6.

Tex., Stevenville—See "Waterworks."

Ariz., Douglas—City defeated $115,000 bond issue to build storm drain system. Noted Jan. 9.

Ore., Astoria—See "Streets and Roads."

Ore., Pendleton—City plans to build sewers in Calvin St. to Bluff St., east from Bluff St. to Marie St. and south on Marie St. to High St.

Cal., Santa Barbara—See "Streets and Roads."

Ont., Woodslee—Town passed ordinance to build tile, stone and timber drains. About $50,000.

Que., Montreal—City voted $197,114 bonds to extend sewerage system.

BIDS DESIRED

Conn., Ridgefield—Until Apr. 25, by Sewer Com. of Burgesses, laying 5200 ft. 8 in. tile sewer and installing two detention tanks, dosing chamber, sludge bed and appurtenances. G. E. Benedict, boro. clk.; advertised in this issue.

Sewers (Continued)

N. Y., New York—Until Apr. 22, by H. Bruckner, pres. Bronx Boro., building sewers and appurtenances in Rhinelander Ave. between Bronxdale and Lurting Aves., Fowler Ave. between Rhinelander and Morris Park Aves., Bogart Ave. between Rhinelander and Morris Park Aves., Radcliff Ave. between Summit south of Rhinelander Ave. and summit north of Rhinelander Ave., Colden Ave. between Rhinelander and Neill Aves., Hone Ave. between Rhinelander and Neill Aves.

Ga., La Grange—Until May 1, by G. H. Sargent, city engr., building 11 mi. sewers, sewage disposal plant, 4 mi. water mains, storage reservoir, 2 mi. transmission line, one 500,000 gal. filter and one 500 gal. per minute horizontal centrifugal pump direct connected to motor and furnishing all labor and materials entering therein. C. L. Smith, clk. and treas.; advertised in this issue.

O., Cleveland—City receiving bids building sewers in East 87th St. from Euclid Ave. to Hough Ave., involving 350 tons crushed slag, 2140 ft. 12-24 in. vitr. pipe; Bosworth Rd. from Thrush Ave. to Governor Ave., 1440 ft. 12-18 in. vitr. pipe; Hamilton Ave. from East 9th to 12th Sts., 630 ft. 12-20 in. vitr. pipe; Church Ave. from West 28th to 29th Sts., 480 ft. 12-18 in. vitr. pipe, East 121st St. from Woodland Ave. to Hamlen Ave., 650 ft. 12-20 in. vitr. pipe; East 174th St. from Lake Shore Blvd. to Grovewood Ave., 60 ft. 12 in. vitr. pipe, 1050 ft. No. 4 C brick sewer, and 730 ft. No. 3 C brick sewer; Superior Ave. from East 12th to 18th Sts., 5000 ft. B. M. wooden invert, 20,000 ft. B. M. plank and timber, 710 ft. No. 5 C brick sewer, 300 ft. No. 4 C brick sewer, 300 ft. No. 3 C brick sewer, 300 ft. No. 2 C brick sewer, 230 ft. 12-20 in. vitr. pipe Superior Ave. from East 21st to 22nd. Sts., 2000 ft. B.M. wooden invert, 10,000 ft. B.M. plank and timber, 400 ft. No. C brick sewer, 30 ft. 12 in. vitr. pipe, East 36th St. from Croton Ave. to point 265 ft. south, 310 ft. 12 in. vitr. pipe; Miles Ave. from East 133rd St. to city limits, 1400 ft. No. 4 C brick sewer, 1 junction chamber, 20,000 ft. B. M. plank and timber, and 60 ft. 12 in. vitr. pipe.

O., Toledo—Until Apr. 25, by Comrs. Lucas Co., building sewers in Brussels, Berkshire, Barrow, and Berdan Aves., Overland Heights, involving 6255 ft. 8 in. and 50 ft. 6 in. vitr. pipe, etc. L. A. Boulay, co. engr. Noted Mar. 27.

Mich., Detroit—Until Apr. 30, by Dept. Pub. Wks., furnishing all labor and material (except manhole rings and covers), and building and finishing complete, together with backfilling, Lonyo Rd. Pub. Sewer, Sect. 1, from Dix Ave. to Sta. No. 44, 4186 ft. long, Sect. 2 from Sta. No. 44 to south line Kirkwood Ave., 4132 ft. long, involving 2 barrel rein.-con. sewers each 14 x 14 ft. 6 in. for each barrel; Seven Mile Rd. Pub. Sewer from Woodward to Yakama Aves., 4781 ft. long, cylindrical section varying in size from 11 ft. 3 in. to 10 ft. in diam., brick or monolithic concrete. C. W. Hubbell, city engr.

Wis., Sheboygan—Until Apr. 21, by Bd. Pub. Wks., building sewers in North 3rd St. from Bluff to Bell Aves. and in Geele Ave. from North 3rd St. to North 6th St., involving 2550 lin.ft. 10 in. and 1160 lin.ft. 8 in. vitr. and 156 lin.ft. 10 in. c.i. pipe, etc. C. U. Boley, comr. pub. wks.

S. D., Platte—Until May 8, by C. F. Olate, city aud., building sewerage system and sewage disposal plant; advertised in this issue.

Mo., Macon—Until May 5, by City Council, furnishing labor and material building sewage disposal plant. Work includes Imhoff tank, sludge bed, storm overflow, 790 lin.ft. 18 in. sewer and straightening creek canal. F. L. Wilcox, Syndicate Trust Bldg., St Louis, engr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Central Falls—(Pawtucket P. O.)—City will lay 1¼ mi. 8-18 in. c.i. pipe in Hunt St. About $15,000. Work will be done by day labor. Noted Mar. 20.

R. I., Providence—Bd. Contr. & Supplies, received bids building sewers in (a) Ardrene and Gallatin Sts., involving 48 ft. 34 in and 775 ft. 16 in. brick sewer, 464 ft. 12 in. and 180 ft. 6 and 8 in. pipe sewers; (b) Robert and Rutherglen Sts., 1417 ft. 12 in. and 1482 ft. 16 in. brick sewer, from M. K. Gammino Constr. Co., 428 Grosvenor Bldg., (a) $12,348 (90 days); (b) $39,704 (180 days); A. Aiello, 107 Westminster St., (a) $12,842 (130 days); (b) $33,578 (250 days); Valley Co., 75 Westminster St., (a) $18,933 (90 days); (b) $48,925 (200 days). Noted Apr. 3.

N. Y., Albany—I. Wacksman, secy. bd. contr. & supply, State St., received bids Apr. 7, improving (1) Ridgefield St., (a) asphalt; (b) vitr. block; (2) Park Ave.; (3) Mapleridge St.; (4) grading Bedford St.; (5) building sewer in Frisbie Ave., from P. W. Muldberry, 5 St. Josephs Terrace, (1a) $17,575; (b) $17,950; (3) $22,186; M. F. Dollard, 7 Hall Place, (1a) $18,006; (b) $18,608; (2) $9906; (3) $21,626; T. F. Shaughnessy, 34 South Pine Ave., (2) $11,309; (4) $7786; (5) $997; W. F. Campion, 223 North Pearl St., (4) $9737; (5) $1321; J. Doyle Plumbing Co., 64 Hudson Ave., (5) $1163. Noted Mar. 27.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract building sewer in 59th St from 20th to 21st Aves., to J. McCauley, 425 6th Ave., $40,471; also in Ave. M from West St. to Ocean Parkway, to De Rienzo & Cox, 1010 60th St., $5096. Noted Apr. 3.

Pa., Pittsburgh—City received bids installing sewers in (a) Jackson St., (b) Baltimore & Ohio private property, (c) Methyl St., (d) Soho playgrounds and north west sidewalk Wyandotte St. to Moultrie St., from Manella Constr. Co., (a) $979; J. Bellesario, (a) $1003, (d) $1987; C. Donatelli, 1313 Collier St., (a): $1090, (b) $8175; M. O'Herron, South 1st and McKean Sts., (b) $7246, (c) $14,677, (d) $210; F. and F. Diulus, 40 Boundary St., (b) $8677, (c) $12,094; M. Ott & Co., 414 Warrington St., (c) $16,798; M. Manello, 5140 Breedshill St., (4) $200. Noted Feb. 20.

★O., Cleveland—Comrs. Cuyahoga Co. let contract building sewers and drains for county jail, West 3rd St. and Lakeside Ave. to J. Duff, 603 Marshall Bldg., Cleveland. About $38,000. Noted Mar. 20, under "Excavation and Dredging."

★O., Cleveland—City let contract building vitr. sewers in sections of East 155th, East 156th, East 159th and East 160th Sts., to A. C. Hattendorf, 1261 6th Ave., East Cleveland, total $11,656; East 156th St., to D. Pfahl, Guardian Bldg., $5378; East 157th St., to Aftoora & Joseph, 887 Arcade Bldg., $2413; Yorick Ave., to W. P. Gibbons, 340 Leader-News Bldg., $2735; Walds Rd., to Fredericks & Housaine, 635 Bradley Court, $2228. Noted Feb. 27.

★Minn., Keewatin—City let contract building extension to sewerage system and sewage disposal plant, to E. W. Coons Constr. Co., Hibbing, $59,184.

★Cal., Seal Beach—City let contract building sewerage system to include sewers, pumping plants, septic tank, etc., to Mlagenovich & Gillespie, 219 Bloom St., Los Angeles, $42,000. Noted Mar. 20.

Bridges

PROPOSED WORK

Pa., Allentown—See "Sewers."

Pa., Dubois—City plans to build bridge. About $25,000. T. North, city engr.

Pa., Pittston—Luzerne Co. (Wilkes-Barre) having plans prepared by D. A. Keefe, engr., Main St., Athens, for rein.-con. bridge here, 1080 ft. long, 40 ft. wide, concrete piers. About $450,000.

Pa., Shickshinny—Luzerne Co. (Wilkes-Barre) having plans prepared by D. A. Keefe, engr., Main St., Athens, building rein.-con. bridge 1550 ft. long, 30 ft. wide, stone piers, here. About $225,000.

W. Va., Spencer—Comrs. Roane Co. plan to build two 35 ft., two 30 ft. and one 25 ft. rein.-con. span bridges, 16 ft. clear roadway, on Spencer-Walton Rd. About $10,000. Federal Government will appropriate toward cost. Woodward & Alexander, Spencer, engrs.

O., Akron—Comrs. Summit Co. receive bids about May 1, building bridge over Little Cuyahoga River, 2700 ft. long, 72 ft. wide. Bonds for $1,600,000 voted for project. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs.

O., Youngstown—City having preliminary plans prepared building concrete bridge on Ohio Ave. and Tod Lane, 300 ft. long, 30 or 32 ft. wide. About $40,000. F. M Lillie, city engr.

Wis., Kenosha—City had tentative plans prepared for 150 ft. rein.-con. bascule bridge on Main St., 46 ft. wide. Work consists of straightening Main St., depressing railroad crossing and making elevated approaches by earth fill between retaining wall. About $350,000. P. Hurtgen, city engr.

Ia., Des Moines—City having plans prepared by Marsh Eng. & Constr. Co., engrs., East 7th and Vine Sts., for rein.-con. bridge to have six 102½ ft. spans. About $250,000.

Ia., Independence—Bd. Supervs. Buchanan Co. receives bids in May building 60 rein.-con. bridges and culverts. About $20,595. J. Tschirgi, co. engr.

Wash., Walla Walla—City having plans prepared for 3 concrete bridges. A. Rehorn, city engr. About $10,000.

Cal., Bay Point—See "Railways" under California.

BIDS DESIRED

Pa., Pine Grove—Until May 6, by J. E. Kanter, co. controller, Schuylkill Co. (Pottsville) building concrete bridge over Swatara Creek, here; advertised in this issue.

Pa., Pottsville—See "Waterworks."

S. C., Lockhart—Until Apr. 30, at office of L. Mills, Lockhart, building 700 ft. steel highway bridge over Broad River, here, for State Highway Comn., Columbia. Plans include two 250 ft. spans and two 100 ft. spans and necessary concrete piers and abutments, involving 885 cu.yd. class 1:2½:5 concrete and 775 lb. reinforcing steel. J. R. Pennell, state highway engr. Noted Apr. 3; advertised in this issue.

Fla., Jacksonville—Harrington, Howard & Ash, engrs., Orear-Leslie Bldg., Kansas City, Mo., receiving bids building steel and concrete bridge over St. John's River here, for city, 2300 ft. long exclusive of approaches. Plans include 30 ft. roadway, two 6 ft. walks, etc. About $950,000. Noted Dec. 5.

Wis., Menasha—Until May 3, by City Council, building 430 ft. bridge, 59 ft. wide, over Fox River. Consisting of 7 rein.-con. arches. About $84,000. Parsons & Obert, Milwaukee, engrs. Noted Apr. 10.

Ia., Waverly—Until Apr. 22, by Bd. Supervs. Bremer Co., building bridges in various townships, involving 1048 cu.yd. concrete and 42 tons steel reinforcing. About $21,720. C. A. Cool, co. engr.

Kan., Eureka—Until May 5, by Comrs. Greenwood Co., building Armitage Bridge, 35 ft. girder span, involving 124 cu.yd. concrete and 7941 lb. steel reinforcing; Ivenpaugh Bridge, three 12 ft. spans, low water bridge, involving 110 cu.yd. concrete and 3524 lb. steel reinforcing; also 6 culverts, involving 120 cu.yd. concrete. A. Ross, Eureka, engr.

Tex., Dallas—See "Streets and Roads."

Wash., Toledo—Until Apr. 28, by State Highway Comn., Olympia, building steel bridge over Cowlitz River, on Pacific Highway, here, consisting of four 180 ft. spans and approaches. J. Allen, state highway comr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Lockport—L. Nixon, supt. pub. wks., Capitol, Albany, received bids Apr. 11, building concrete culvert over Eighteen Mile Creek, Niagara Co., from Savage Constr. Co., 59 Welker St., Buffalo, $11,144; G. J. Metzger, 676 Genesee St., Buffalo, $11,750; W. F. Martens, 245 Cutler Bldg., Rochester, $11,840; Mohawk Dock & Dredge Co., Herkimer, $13,187. Noted Apr. 3 under "Miscellaneous."

★Pa., Connelsville—City let contract building concrete arch bridge over Connell Run, under East Park viaduct, to A. De Polo, Connellsville; $13,354. Work involves 522 cu.yd. foundation excav., 119 cu.yd. channel excav., 785 cu.yd. concrete and 500 sq.ft. mesh reinforcing.

★Ill., Ottawa—G. Farnsworth, supt. highways of La Salle Co., let contract building four 55 ft. span rein.-con. arch bridge on Sheridan St., 18 ft. roadway, to Oltendorf Constr. Co., Palatine, $23,450. Noted Mar. 27.

Bridges (Continued)

★Ia., Atlantic—Comrs. Cass Co. let contract building 20 concrete box culverts, 1 concrete slab bridge, 2 I beam bridges with concrete abutments and 2 concrete headwalls, to Wickham Bridge & Pipe Co., Council Bluffs, $47,840. Work involves 2009 cu.yd. rein. con., 11½ tons structural, 55 tons reinforcing steel and 2688 lin.ft. wooden piling.

★Ia., Cherokee—Bd. Supervs. Cherokee Co. let contract to Northwestern Constr Co., Sheldon, building 15 rein.-con. box culverts, involving 646 cu.yd. rein.-con. and 17 tons steel, cost, $12,871; Miller Eng. & Constr. Co., 16 rein.-con. box culverts, 637 cu.yd rein.-con. and 17½ tons steel, $12,703; H. A. Holmes, Aurelia, 11 rein.-con. box culverts, 553 cu.yd. rein.-con. and 14 tons steel, $12,100; G. Gardner & Son, Sheldon, 18 rein.-con. box culverts, 642 cu.yd. rein.-con. and 17½ tons steel, $12,861; Federal Bridge Co., 1122 Equitable Bldg., Des Moines, 4 concrete slab and 2 I beam bridges, 472 cu.yd. rein.-con., 8½ tons structural and 13 tons reinforcing steel and 1900 lin.ft. wooden piling, $13,880; Ward & Weighton, 516 Davidson Bldg., Sioux City, 2 pony truss with concrete abutments, 8 I beam with concrete abutments and 8 concrete slab bridges, 1439 cu.yd. rein.-con., 57 tons structural and 42 tons reinforcing steel and 6044 lin.ft. wooden piling, $18,300.

★Ia., Emmetsburg—Comrs. Palo Alto Co. let contract building 4 I beam bridges and 2 pony truss bridges, on concrete abutments, to Iowa Bridge Co., 712 Hubbell Bldg., Des Moines, $30,212. Work involves 796 cu.yd. rein.-con., 45½ tons structural and 21 tons reinforcing steel and 5152 lin.ft. wooden piling.

★Ia., Ft. Dodge—City let contract building 3 span concrete arch bridge, 312 ft. long, 42 ft. wide, to G. Koss Constr. Co., 2818 5th St., Des Moines, $49,999.

★Ia., Mason City—Bd. Supervs. Cerro Gordo Co. let contract building 1 rein.-con. box culvert, 1 I beam bridge on concrete abutments and 6 concrete deck girder bridges, to Henkel & Brown, Mason City, $20,900. Work involves 1014 cu.yd. rein.-con., 13 tons structural and 38 tons reinforcing steel and 5636 lin.ft. wooden piling.

★Ia., Tipton—Comrs. Cedar Co. let contract to F. Smith, Tipton, for 30 concrete box culverts, cost, $12,684; A. Vinall, Davenport, 15 concrete box culverts and one I beam bridge, $8257; C. M. Neal, Lyons, 22 concrete box culverts and 3 I beam bridges, $13,900; S. R. Johnson, Tipton, 27 concrete box culverts and one I beam bridge, $9930; J. Anderson & Son, Maquoketa, 3 pony truss bridges on concrete abutments, $20,600.

★Ia., Webster City—Bd. Supervs. Hamilton Co let contract, to W. F. Baxter, Webster City, building 7 concrete box culverts, 1 concrete deck girder and 1 concrete through girder bridges, $11,310; J. A. Dimkel, Webster City, 1 concrete box culvert, 3 concrete deck girder and 1 concrete through girder bridges, $14,547; A. Swanson Co., Webster City, 5 concrete box culvert, 2 I beam bridges and 1 pony truss bridge, $15,202; W. J. Zitterell, Webster City, one 20 x 120 ft. rainbow arch bridge, $17,487.

★Mo., Kansas City—Bd. Park Comrs. let contract building rein.-con. bridge carrying Cliff Drive over Chestnut Ave. Trafficway, to Concrete Constr. Co., 1821 Independence Bldg., $45,291. Noted Mar. 27.

★Colo., Denver—City let contract building 2 rein.-con. bridges, over Cherry Creek on Logan and West Colfax Aves., to F. C. Dreber, Denver, $20,870 and $26,333 respectively. Noted Mar. 13.

★Ont., Ottawa—Comrs. Carleton Co. let contract building steel bridge over Mississippi River on 4th concession line, to Ontario Bridge Co., Crown Office Bldg., Toronto. About $55,000.

Structural Steel

BIDS DESIRED

Wash., Toledo—See "Bridges."

Reinforced Concrete

PRICES AND CONTRACTS AWARDED

★Indicates award of contract

Ia., Atlantic—See "Bridges."

PROPOSED WORK

N. Y., East Rochester—See "Industrial Works."

Pa., Phila.—See "Industrial Works."

Pa., Pittston—See "Bridges."

Pa., Shickshinny—See "Bridges."

Ill., Chicago—See "Buildings."

Wis., Kenosha—See "Bridges."

Ia., Independence—See "Bridges."

Wash., Walla Walla—See "Bridges."

Cal., San Francisco—See "Buildings."

BIDS DESIRED

Pa., Pine Grove—See "Bridges."

Wis., Green Bay—See "Miscellaneous."

Ia., Waverly—See "Bridges."

Minn., Elk River—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Bristol—See "Industrial Works."

★Pa., Connellsville—See "Bridges."

★Ia., Atlantic—See "Bridges."

★Ia., Emmetsburg—See "Bridges."

★Ia., Ft. Dodge—See "Bridges."

★Ia., Mason City—See "Bridges.'

★Ia., Tipton—See "Bridges."

★Ia., Webster City—See "Bridges."

★Cal., Los Angeles—See "Buildings."

Streets and Roads

PROPOSED WORK

Mass., Boston—Bd. Pub. Wks. plans to pave Charles St. from Leverett to Beacon Sts., cost $91,000; Cambridge St. from Charles to North Russell Sts., $32,000; Washington St. from Beach to William Sts., $291,000; Tremont St. from Hammond St. to Roxbury Crossing, $109,000; Washington St. from Cliff to Green Sts., $219,000; Boston St. from railway bridge to Edward Everett Sq., $57,000; Dorchester Ave. from Park St. to Peabody Sq., $105,000; East Bway from Dorchester Ave. to city point, $85,000; D St. from Dorchester Ave. to West 1st St., $86,000; H St. to Farragut Rd. except from A St. to railroad crossing, $225,000; Rutherford and Cambridge Sts. from Chapman to Main Sts., $150,000; Main St. (Charlestown) from City Sq. to Sullivan Sq., $214,500; Medford St. from Chelsea to Main Sts., $185,000; Warren St. and Blue Hill Ave. from Dudley to Washington Sts., $229,700, all granite block; Columbus Ave. from Roxbury Crossing to Egleston Sq., asphalt and granite block, $148,000; Washington St. from Ashland to Lagrange Sts., $126,000; Huntington Ave. from Gainsboro St. to Brookline Twp. line, $136,000; Cambridge St. from Union Sq. to Washington St., $61,400; Washington St. from Market to Fanuel Sts., $62,200; Tremont St. (Brighton) from Oak Sq. to Newton Twp. line, $27,000; Chelsea St. from Maverick St. to Bay Sq., $80,000; Center St. (Jamaica Plain) from Columbus Ave. to Green St., $107,000; Blue Hill Ave. and Washington St. from Grove Hall to Mattapan, $282,000, all asphalt; Columbus Ave. from Egleston Sq. to Walnut Ave., macadam, $24,000. B. F. Bates, asst. engr.

Mass., Fall River—City soon receives bids paving Hope, Fountain, William, Tecumseh, Snell, Wade, Dover and Forest Sts., macadam; also Bay and Rodman Sts., Hassam pavement.

R. I., Cranston (Providence P. O.)—City receives bids in May paving Broad and Cranston Sts., asphaltic macadam. About $40,000. D. W. Waterman, city clk.

N. Y., Brooklyn—E. Riegelmann, boro. pres., rejected bids grading, curbing and laying sidewalks on 86th St. from 21st to 22nd Aves. Noted Mar. 13.

N. Y., Cohoes—City plans to issue $14,167 bonds to pave Jay and Factory Sts. and alter Newark St.; also build sewer in alley between Worth St. and Central Terrace. E. Hayes, city engr.

N. Y., Depew—Village had plans prepared paving 4000 lin.ft. Olmstead Ave., 24 and 36 ft. wide; 1600 lin.ft. Burlington Ave., 36 ft. wide; 2000 lin.ft. Terrace Blvd., 36 ft. wide; 800 lin.ft. Penora St., 30 ft. wide; 600 lin.ft. St. Marys St., 24 ft. wide; 6 and 8 in. concrete pavement and sandstone curbing. Village authorized $160,000 bond issue for project. A. Utecht, pres. village bd.

N. Y., Ogdensburg—City having estimates made and plans prepared for paving Paterson and North Water Sts. About $18,000. G. A. Tate, city engr.

N. Y., Oneida—Town soon receives bids paving and installing storm sewers in Central Ave. from West to Weaver Sts.; Lenox Ave. from Nicholas Vibbert property to west corporation line; James St. from New York Central R. R. to Elm Street.; Broad St. from Lenox Ave. to New York Central R. R.; Linden St., total length and Pleasant Ave. from Spring to Maple Sts. About $26,000. J. M. Hutton, city engr.

N. Y., Rochester—City soon receives bids paving South Goodman St. between Park and Monroe Aves., asphalt; cost $35,000; also rebuilding sewer in same district. A. C. Poole, city engr.

N. Y., Sloan (Buffalo P. O.)—Village had plans prepared paving Halstead Ave., Lovejoy and Gifford Sts., involving 15,000 sq.yd. concrete, 11,560 lin.ft. stone curbing and 4450 cu.yd. excav. G. C. Diehl, Ellicott Sq., Buffalo, engr.

N. Y., Utica—City having plans prepared paving with asphalt Conkling Ave. and St. Vincent St. from Arthur to James Sts.; James St. from Brinckerhoff Ave. to Mohawk St. and Van Vorst St. from Holland to Bradford Aves. J. Kemper, city engr.

N. J., East Orange—Town plans to improve Ridgewood Rd., bitulithic pavement on present Telford pavement, also widen South Clinton St. from 45-60 ft. W. D. Willigerod, town engr.

N. J., Mays Landing — Bd. Freeholders Atlantic Co. plans to pave with concrete White Horse Pike (main road to Atlantic City). About $60,000.

N. J., North Bergen—City rejected bid paving 23rd St. from Hudson Blvd. to New Durham Ave., with asphalt block. New bids will be received. Noted Apr. 3.

N. J., North Bergen—Town plans to improve Grand Ave. with granite block. About $15,000. A. Brady, town clk.

N. J., Nutley (Newark P. O.)—Bd. Freeholders, Essex Co., (Newark) soon receives bids paving 1700 ft. Avondale Rd. with granite block and bituminous concrete. About $28,723. F. A. Reimer, co. engr.

N. J., Nutley (Newark P. O.)—Bd. Supervs. Essex Co., (Newark) soon receives bids paving 9450 ft. Center St. with granite block and bituminous concrete. F. Reimer, co. engr.

Pa., Farrell—City election Apr. 29 to vote on $212,000 bonds to improve various streets.

Pa., Pittsburgh—City soon lets contract grading, paving and curbing Warrington Ave. from Montooth St. to West-Liberty Ave.; Hampshire Ave. from Bway. to Napoleon St.; Tonopah Ave. from Belasco St. to Bway.; Realty Ave. from Crosby St. to Bway.; Creedmore Ave. from Brookline Blvd. to Freedom St.; Oakridge Ave. from Chelton Ave. to Creedmore Ave.; Stevenson St. from Bluff St. to end of present pavement; also repairing flooring of Radcliffe St. bridge. T. Reed, City County Bldg., engr.

Pa., Pittsburgh—J. P. Moore, co. controller, Allegheny Co., receives bids about May 1 building 4000 ft. Library Rd., Baldwin Twp., from Nobles Lane to village of Fairhaven, 24 ft. wide. R. V. Warren, co. engr.

Md., Cumberland—Comrs. Cumberland Co. receive bids about Apr. 29, building 4½ mi. concrete road extending out of Amcelle (suburb of Cumberland) 16 ft. wide, 3 ft. dirt shoulders, 8 in. thick in center and 6 in. thick on sides. About $230,000. State Rds. Comn. Baltimore, will appropriate $115,000 toward cost. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

Md., Frederick—Frederick Co. having plans prepared by J. N. Mackall, engr., c/o State Rds. Comn., 601 Garrett Bldg., Baltimore, rebuilding 5½ mi. Buckeyestown Pike, 15 ft. wide, 3 ft. dirt shoulders. About $233,842. State will appropriate half of cost.

W. Va., Buckhannon—Comrs. Upshur Co. plan to regrade and surface 10 mi. Class A roads in Buckhannon Dist., 16 ft. wide. Work involves 94,000 sq.yd. concrete and 36 000 cu.yd. earth excav. About $250,000. W. C. West, co. engr.

W. Va., Clarksburg—Comrs. Harrison Co. soon let contract building 1 mi. Mt. Clare Rd., vitr. brick; 1¾ mi. Fairmont & Clarksburg Pike, from Hepsibath to Ziesing; 1¼ mi. Weston Rd. at Loneberry tunnel; 2 mi. Fairmont & Clarksburg Pike from Cove to Hepzibah; 2½ mi. Wolf Summit Rd. from Wolf Summit to Ten Mile bridge; 2 mi. Johnson Fork Rd., Wilsonburg towards Wallace, vitr. brick. G. M. Harbert, Clarksburg, engr.

Streets and Roads (Continued)

W. Va., Keyser—Mineral Co. election Apr. 19, to vote on $137,000 bonds to build roads in Elk Dist. E. C. Smith, Piedmont, engr.

S. C., Sumter—Sumter Co. and Highway Comn. plan to build roads also hard surfaced highway from Sumter to Mayesville.

Fla., Pensacola—Escambia Co. plans to build concrete and brick highway from Pensacola to Flomaton, 9 ft. wide, sand clay filling. About $100,000. Federal Government will appropriate $50,000 toward cost.

Ala., Anniston—Calhoun Co. Comrs. plan to build highway from Camp McClellan to Jackson. Federal Government will appropriate between $20,000 and $50,000 toward project.

O., Akron—City having plans prepared paving and curbing East Ave. from Wooster Ave. to South Maple St. About $100,000. E. A. Kimmbler, Delaware Bldg., engr.

O., Columbus—Comrs. Franklin Co. plan to grade and pave with brick, 4.28 mi. Harbor Rd., 20 ft. wide.

O., Dayton—City plans to pave North Western Ave., East 3rd, Springfield and Germantown Sts. About $200,000. F. O. Eichelberger, City Bldg., engr.

O., Martins Ferry—City receives bids in May paving and building culverts 1 mi. Grand. Park, 8th and 9th Sts., Martins Ferry and Colerain Pike, vitr. brick, 30 ft. wide. About $25,000. C. Lash, Martins Ferry, engr.

O., Toledo—City plans to issue $70,000 bonds to build and repair sidewalks. H. C. McClure, Valentine Bldg., engr.

O., Toledo—City plans to pave, grade, drain, and curb 1550 ft. Nevada St. from Spring Grove Ave. to city line, 26 ft. wide. About $20,000. H. C. McClure, 229 Valentine Bldg., engr.

O., Toledo—City had plans prepared for paving, grading, and draining 1078 ft. Ambia St. from Detroit Ave. to New York Central R.R., 24 ft. wide, involving 2200 lin.ft. curbing and 1697 cu.yd. earth excav., cost $12,516; 2058 ft. Vermaas Ave. from Philips Ave. to Cornelia Dr., 22 ft. wide, 6671 cu.yd. earth excav., $20,584; 1262 ft. Berkley Dr. from Sylvania to Berdan Aves., 24 ft. wide, 1859 cu.yd. earth excav., $15,829. H. C. McClure, 229 Valentine Bldg., Toledo, engr.

O., Yorkville—City receives bids about June 1, paving ½ mi. streets, with vitr. brick, 30 ft. wide. About $22,000. C. Rothermond, Martins Ferry, engr.

Mich., Detroit—City soon receives bids paving with asphaltic concrete on 6 in. concrete foundation, Berea, Medina or other curbing, Harper Ave., Sect. 1, from Hurlbut to Montclair Aves., 40 ft. wide less 18 ft. track space, cost $22,935; Greeley Ave. from Wellington to Holbrook Aves., 26 ft. wide, $20,600; Olivet Ave. from Springwells Ave. to Michigan Central R. R., 26 ft. wide, $12,079; Marquette Ave. from Wabash to Lawton Aves., 26 ft. wide, $39,372; Witt Ave. from Lawndale to Elsmere Aves., 26 ft. wide, $12,408; Lakewood Blvd. from Kercheval to Waterloo Aves., 1 roadway 30 ft. wide and 2 roadways each 20 ft. wide, $12,596; Goodwin Ave. from Holbrook to Owan Aves., 26 ft. wide, $9,200; Goodwin Ave. from Caniff Ave. to city limits, 26 ft. wide, $10,152; Woodlawn Ave. from Oakland Ave. to Detroit, Grand Haven & Milwaukee Ry., $25,300; Distel Ave. from Fort St. to Olivet Ave., 26 ft. wide, $10,152; "T" alley bounded by 2nd, Cass, Canfield and Prestis Aves., 20 ft. wide with 1 course concrete, $5880; alley bounded by Trumbukl, Lincoln, Canfield and Lysander Aves, 18 ft. wide, with 1 course concrete, $1550; Harper Ave., Sect. 2, from Montclair to Connors Aves., 30 ft. wide, cost $32,916; Longworth Ave. from Springwells to Elsmere Aves., 26 ft. wide, $35,006; Carter Ave. from Dexter Blvd. to Quincy Ave., 26 ft. wide, $15,548; Casper Ave. from Ferndale to Dix Aves., 26 ft. wide, $28,336; Norman Ave. frm Ferndale to Woodmere Aves., 26 ft. wide, $28,428; Pasadena Ave. from Herman Ave. to 12th St., 24 ft., $15,886; Philadelphia Ave. from Linwood to Lawton Aves., 26 ft. wide, $11,327; Solvay Ave. from West Jefferson Ave. to Wabash R. R., 26 ft. wide, $29,762; Solvay Ave. from Fort St. to Michigan Central R. R., 26 ft. wide, $27,462; Webb Ave. from Oakman Blvd. to Oakman and Stoll's subdivision, 1 roadway 26 ft. wide, 2 roadways each 18 ft. wide, $27,072. C. W. Hubbell, city engr. Noted Mar. 27.

Ill., Chicago—Cook Co. receives bids about May 1, paving 27,960 ft. River Rd. south of Desplaines Village, 18 ft. wide, involving 55,990 sq.yd. cement concrete or bituminous concrete on concrete base, 24,543 cu.yd. earth excav. and 601 cu.yd. concrete in culverts and bridges. About $188,000 for bituminous concrete and $155,000 for cement concrete. B. D. Barker, co. supt. highways.

Ill., Lincoln—Logan Co. having plans prepared for 2½ mi. earthwork and culverts on Lincoln Peoria Rd. and 3 mi. on Hartsburg Rd., 26 ft. roadway. About $12,000. L. H. Holland, co. supt. highways.

Ill., Petersburg—Menard Co. voted $55,000 bonds to build ⅞ mi. Springfield-Peoria Rd., 16 ft. wide, cement concrete. C. M. Buckley, co. supt. highways.

Wisconsin—State Highway Comn., Capitol, Madison, soon lets contract paving and grading 1.6 mi. Cedar Creek Rd., 16 ft. wide, involving 15,000 sq. yd. 8 in. concrete and 3000 cu. yd. grading. About $35,000.

Wis., De Pere—City plans to surface with concrete 1 mi. Oneida and Ashwabenon Rds., 16 ft. wide. About $15,000.

Wis., Green Bay—City plans to pave 5,000 ft. Woodlawn and North Maple Aves., Pine and Kellogg Sts., 30 ft. wide. W. Reed, city engr.

Wis., Racine—Bd. Pub. Wks. soon lets contract improving Grange Ave., involving 7750 sq.yd. paving and 3975 lin.ft. curbing and guttering, also Osborne Blvd., 8970 sq. yd. paving, 3179 lin.ft. curbing and guttering and 1400 cu.yd. excav. Bids will be received on either brick, sheet asphalt, asphatic concrete or rein. con. Noted Feb. 20.

Wis., Sheboygan—Highway Comn. Sheboygan Co. soon lets contract grading, curbing and paving with concrete Green Bay Rd., 20 ft. wide, Cedar Grove Village, cost, $10,000; Waldo-Cascade Rd., 20 ft. wide, Lyndon Twp., $11,000; Upper Falls Rd., Kohler Village, 20 ft. wide, $12,000. G Ubbelahde, Sheboygan, engr.

Ia., Clarion—City plans to pave 5 mi. streets, vitr. brick, asphalt or bituminous concrete. J. Brown, clk.

Ia., Davenport—City soon receives bids grading Telegraph Rd. from 3rd to Mary Sts., Hilltop Ave. from 10th to 20th Sts., Hickory St. from Fairview Ave. to 2nd St. and 1st St. from Concord to Hickory Sts. R. E. Sowistowsky, city engr.

Ia., Dubuque—City soon receives bids paving, curbing and guttering 35 blocks of streets, involving 35,000 sq.yd. vitr. brick, wood block or asphalt on 4 in. concrete base. About $125,000. J. Stuber, clk.

Ia., Emmetsburg—City soon receives bids paving, curbing and guttering Bway, Pearl, Grand, Union, 14th, 17th, 19th, 5th, 11th, Jefferson and State Sts., vitr. brick or bituminous concrete. About $200,000. T. E. Rudledge, city clk.

Ia., Harlan—City soon receives bids paving, curbing and guttering 50 blocks, vitr. brick or concrete. About $200,000. F. Fenton, city clk.

Ia., Reinbeck—Town Council plans to pave, curb and gutter 30 blocks, asphalt, concrete or bituminous concrete. F. G. Thorne, 317 Haines Blk., Clinton, engr.

Ia., Webster City—Comrs. Hamilton Co. rejected bids received Mar. 26, gravel surfacing 4½ mi. road from Williams to Dows, 1⅞ mi. from Williams to Wilke, 3⅞ mi. from Ellsworth to Williams, 5 mi. from Webster City to Stanhope, 3⅞ mi. from Webster City to Strattford and 3 mi. from Ellsworth to Strong City. About $40,000. Work will be readvertised in May. O. O. Howd, co engr.

Minn., Blue Earth—Comrs. Faribault Co. plan to grade and gravel 20 mi. Federal Aid Rd., 24 ft. wide. About $80,000. R. J. Short, Blue Earth, engr.

Minn., Moorhead—Comrs. Clay Co. plan to pave 10 mi. State Aid Rd., 18 ft. wide, involving 105 sq.yd. paving and 20,000 cu. yd. excav. About $240,000. E. Martinson, Moorhead, engr.

Minn., St. Paul—Comrs. Ramsey Co. received no bids grading and graveling 1¾ mi. Anoka Co. Rd. to Centerville, 24 ft. wide. About $10,000. Work will be readvertised. J. H. Armstrong, [illegible] Hague St., engr. Noted Apr. 3.

Kan., Leavenworth—Leavenworth Co. (Leavenworth) and Wyandotte Co. (Kansas City) had plans and specifications prepared for surfacing with concrete 8 mi. Fort-to-Fort Highway, 18 ft. wide. O. K. Williamson, Kansas City, co. highway engr.

Neb., Madison—City having plans prepared paving 7200 ft., Madison Pearl and 3rd Sts., 24-56 ft. wide, involving 29,000 sq yd. vitr. brick on 5 in. concrete base, 10,000 lin.ft. concrete curb and 6000 cu.yd. earth excav. About $135,000. W. D. J. Steckelberg, city engr.

North Dakota—State Highway Comrs., Capitol, Bismarck, rejected bids building 4½ mi. State Aid Project No. 0582, Bottineau Co. Noted Feb. 13.

N. D., Lakota—Comrs. Nelson Co. plan to build Federal-aid roads. About $150,000. W. H. Robinson, c/o State Highway Comn., Bismarck, engr.

Mo., Kansas City—City having preliminary plans prepared building boulevard and parkway from Armour-Swift Burlington bridge to Admiral Blvd. and 6th St.—Independence Ave. trafficway. Plans include 75 ft. roadway from 3rd, Locust and Cherry Sts. to Admiral Blvd. and diagonal trafficway from Independence and Locust Sts. to 6th and Grand Sts. R. W. Waddell, city engr.

Mo., Kansas City—City plans to widen Baltimore Ave. from 14th St. to Southwest Blvd. and 7th St. Bonds for $81,418 sold for project. R. W. Waddell, city engr.

Arkansas—State Highway Dept., Little Rock, plans to pave roads in Faulkner Co. as follows: 23 mi. in Conway-Damascus Rd. Impvt. Dist., cost $250,000; 17 mi. in Conway-Vilonia Rd. Impvt. Dist., $175,000; 2 mi. in Reeves School Rd. Impvt. Dist., 15 ft. wide, $20,000; 15 mi. in Conway-Palorm Rd. Impvt. Dist., $150,000; all bituminous macadam or concrete. W. J. Parkes, Citizens Bank Bldg., Pine Bluff, engr.

Arkansas—State Highway Dept., Little Rock, plans to grade, drain and gravel surface 60 mi. road in Ouachita and Caddo Valley Rd. Impvt. Dist., Montgomery Co. About $300,000. McGill & Carter, Little Rock, engrs.

Tex., Stevensville—See "Waterworks."

Okla., Oklahoma—State Legislature appropriated $75,000 to pave and build sewers in various streets. Benham Eng. Co., 1300 Colcord Bldg., engrs.

Idaho., Arco—Butte Co. election Apr. 19 to vote on $50,000 bonds to build roads and bridges. R. R. Duke, co. aud.

Idaho, Buhl—City election soon to vote on $200,000 bonds to pave 20 blocks with bitulithic and 2 mi. streets with macadam. McGee & Baird, Caldwell, engrs.

Idaho, Genesee—City voted $170,000 bonds to pave various streets, also to build link in state highway between Lewiston and Moscow, via Genesee.

Wash., Aberdeen—City plans to pave 40 blocks and build sidewalks. About $150,000.

Wash., Cheney—City soon receives bids paving 37 blocks. N. P. Rolfe, mayor.

Oregon—State Highway Comn. Portland, having surveys made paving 5 mi. road from Eugene to underground crossing of Southern Pacific R. R. track, 16 ft. wide, with 4 ft. macadam on each side; also for overhead crossing, 4 mi. south, at McVeigh Point; 8 mi. Tillamook Highway between Bellevue and McMinnville. County to appropriate $2000 per mile toward hard-surfacing; farmers to furnish grading gratis; also paving 15.7 mi. road from Eugene to Florence; 24 mi. from Pilot Rock to Prairie City; 48 mi. from Prairie City to Unity; road from Dufur to Madras; Eugene to Goshen; 5 mi. from Rickreall to Monmouth; Roseburg to Wilbur except Winchester Hill; 7 mi. road from Amity south to Holmes Gap R. R. crossing; 2 mi. Pacific Highway from Monmouth to Independence; road from The Dalles to Dufur; Post Rd., county and government coöperating; also grading 18 mi. road from Camas Valley to Coquille, Douglas Co. H. Munn, engr.

Streets and Roads (Continued)

Oregon—State Highway Comn., Portland, having plans prepared paving 20 mi. Deer Island-Clatskanie Rd., Columbia Co.; 20 mi. Hood River-Multnomah Rd., 3 mi. Dalles-Chenowith Rd.; 11.7 mi. Hillsboro-Gaston Rd., Washington Co., grading and paving Oregon City Rd. to Multnomah Co. line, by way of Oswego; 6 mi. Canby-Aurora Rd., 14 mi. Scappoose-Deer Island Rd. H. Munn, engr.

Ore., Albany—Linn Co. plans election in June to vote on $1,000,000 bonds to build roads.

Ore., Astoria—City plans to establish grades from 15th St., 307 ft. above grade base to 16th St., 292 ft. above; Niagara St., 294 ft. above to James St. 285 ft. above; James St. from 16th St. to 60 ft. east, at 283-285 ft. above grade base; improve 49th St. from Birch to Ash Sts., 10th St. from Exchange to Franklin Sts., 9th St. from Harrison to Jerome Sts.; establish sewerage and drainage system in Taylors Ave.; also hardsurface and build retaining wall on 10th St. from Bond St. to waterfront, 30 ft. wide. G. T. McClean, city engr.

Ore., Oregon City—Clackamas Co. plans to pave 14th and Washington Sts. to connect with pavement extending to Multnomah Co. line; also unpaved portions through Gladstone Twp. and River Rd. L. A. Morris, chn. rd. com.

Ore., Salem—Marion Co. plans to grade, scarify and hardsurface Liberty Rd., from ¾ mi. south of city limits of Commercial St. Grading will be done by day labor. W. J. Culver, co. rd. master.

Ore., Tillamook City—Tillamook Co. plans election to vote on $430,000 bonds to improve roads.

Ore., Toledo—Lincoln Co. election June 8, to vote on $200,000 bonds to hardsurface road from Newport to Benton Co. line, and from Toledo to Siletz. State Highway Comn., Capitol, Salem, will appropriate $250,000 toward cost.

Ore., Vale—Malheur Co. plans election to vote on $200,000 bonds to build roads.

Cal., Sacramento—City plans to pave following alleys with 4 in. asphaltic concrete: 8400 sq.ft. from 9th to 10th Sts. between O and P Sts.; 6400 sq.ft. from 15th to 16th Sts., between J and K Sts.; 6290 sq.ft. from 11th to 12th Sts. between I and J Sts.; also pave following streets with 1½ in. asphalt surface on 4 in. concrete base: 2800 lin.ft. 29th St. from R to Y Sts., involving 124,288 sq.ft. paving, 4569 lin.ft. curbing and guttering and 21,718 sq.ft. cement walk; 400 ft. 33rd St. from J St. to point north, 11,552 sq.ft. paving; 2300 lin. ft. Sacramento Ave. from 5th to 8th Aves., 72,860 sq.ft. paving and 3990 lin.ft. curbing and guttering; 2500 lin.ft. 21st St. from Y St. to Marshall Way, 100,000 sq.ft. paving. T. C. Miller, city engr.

Cal., Santa Barbara—City plans to improve 6 mi. San Andres, Mission, Montecito, Padre, Los Olivos, Carpenteria Sts., Modoc Rd. and around City Blvd. Work includes grading, concrete and asphalt paving, curbing, guttering, sidewalks and sewers. A. B. Cook, city engr.

N. S., Bridgewater—City having plans prepared by W. T. Rothey, engr., Bridgewater, building 30 mi. road. About $60,000.

N. S., Kentville—City having plans prepared building 50 mi. roads. About $90,000. J. Carrol, clk.

Que., Drummondville—Town having plans prepared paving and improving streets. About $20,000. J. A. Montplasir, mayor.

Ont., Kingston — Suburban Rd. Area Comn. soon receives bids building new roads leading to city. About $13,000. J. W. Bradshaw, clk.

Ont., L'Original — Village Council soon receives bids paving streets with bituminous macadam. About $16,000. V. Belanger, L'Original, engr.

BIDS DESIRED

Massachusetts—Until Apr. 22, by State Highway Comn., Boston, building 16,500 ft. bituminous macadam road, 18-24 ft. wide in Saugus Twp. About $75,000. A. W. Dean, State House, Boston, engr.

Connecticut—Until Apr. 25, by C. J. Bennett, comr. state highway, Capitol, Hartford, building 5200 ft. Killin-Worth Rd., trap rock macadam, Haddam Twp.; 3270 ft. Deming St., bituminous macadam, Manchester Twp.; 4238 ft. Westfield Rd., bituminous macadam, Meriden Twp.; 6979 ft. Stanley Quarter Rd., concrete, Topeka, Warrenite or asphalt, New Britain, Newington and Farmington Twps.; 3650 ft. Black Hall-Niantic Rd., gravel, Old Lyme Twp.; 34,518 ft. Lakeville-Sharon Rd., 10 in. gravel or gravel on slag base, Salisbury and Sharon Twps.; 7258 ft. Thomaston Ave., concrete or Topeka on concrete base, Thomaston and Waterbury Twps.; advertised in this issue.

N. Y., Brooklyn—Until Apr. 23, by E. R. Riegelmann, boro. pres., regulating and repaving with permanent asphalt on 6 in. concrete base, Manhattan Ave. from Grand to Cook Sts.; Ave. O from Coney Island Ave. to East 13th St.; Sackett St. from 3rd to 4th Aves.; 15th Ave. from 47th to 54th Sts., a strip 24 ft. wide; with permanent Grade 1 granite on 6 in. concrete base, Van Brunt St. from Harrison to Irving Sts.; regulating and grading 86th St. from Bay 37th St. to Stillwell Ave.

N. Y., Elmira—Until Apr. 28, by L. I. Andrews, city clk., grading, curbing and paving 2800 sq.yd. Woodlawn Ave.; 2400 sq.yd. East and West 1st St.; 14,900 sq.yd. Walnut St.; advertised in this issue.

N. Y., Long Island City—Until Apr. 21, by M. E. Connolly, pres. Queens Boro., regulating and repaving with improved granite blocks on 6 in. concrete foundation, 4th St. from Vernon to Jackson Aves., 1st Ward; with sheet asphalt on 6 in. concrete foundation, East Ave. from Borden to Hunterspoint Aves., 1st Ward; Hamilton St. from Webster Ave. N., to Vernon Ave., 1st Ward; 1st Ave. from Graham Ave. to Bway, 1st Ward; with sheet asphalt on concrete foundation between curbs and outside rails of Jackson Ave. from Thomson Ave. to Bridge Plaza S., Jackson Ave. from 2nd Ave. to Old Newtown Rd., 1st Ward; with improved granite block on concrete base between curbs and outside rails, Jackson Ave. from Bridge Plaza S., to 2nd Ave., 1st Ward.

N. Y., New York—Until Apr. 22, by H. Bruckner, pres. Bronx Boro., regulating, grading, setting curbstones, flagging sidewalks, laying crosswalks, building approaches and fences in Corlear Ave. from 230th to 240th Sts.; repaving with granite blocks on concrete foundation Morris Park Ave. from East Tremont to Hunt Aves.; with sheet asphalt on concrete foundation, Bathgate Ave. from 3rd Ave. to East 188th St.; Intervale Ave. from Freeman to Chisholm Sts.; Clay Ave. from East 166th to East 167th Sts.; East 163rd St. from Teller to Morris Aves.; bituminous concrete on cement concrete foundation, Victor St. from Morris Park to Van Nest Aves.; Van Nest Ave. from Victor St. to White Plains Rd.; Walton Ave. from Fordham Rd. to Burnside Ave.; East 177th St. from Tremont to Rosedale Aves.; East 178th St. from Park to 3rd Aves.

N. Y., New York—Until Apr. 24, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving, with sheet asphalt on concrete foundation, 10th Ave., from 58th to 60th Sts.; 43rd St. from 3rd to Lexington Aves.; with granite block on concrete foundation 7th Ave. from 30th to 42nd Sts.; Greenwich St. from Battery Pl. to Vesey St.; re-regulating, repairing and regrading with granite block on concrete foundation 4th Ave. from west side curb rail 32nd St. to 34th Sts.

New Jersey—Until Apr. 30, by State Highway Comn., Broad St., Bank Bldg., Trenton, improving State Highway Route No. 5, Sect. 1 B, from Morris Plains to Morristown, involving 11,500 sq.yd. concrete surface. A. L. Grover, ch. clk.; advertised in this issue.

N. J., Freehold—Until Apr. 30, by Bd. Freeholders Monmouth Co., building 2nd Sect. Matawan-Freehold Rd., Marlboro and Freehold Twps., involving 36.248 sq.yd. rein.-con. surface. W. M. Bergen, dir.; advertised in this issue.

N. J., Jersey City—Until Apr. 24, by Bd. Freeholders Hudson Co., resurfacing and improving Tonnelle Ave. from here to Secaucus, involving 17,000 sq.yd. bituminous macadam.

N. J., North Bergen—Until Apr. 22, by Town Council, improving Tower Hill Ave. from Hudson Blvd. to New Durham Ave., granite block. About $10,000.

N. J., Trenton—Until Apr. 22, by Bd. Freeholders, Mercer Co., furnishing labor, material, etc., for (1) 40 mi. road, southern section of county, south of Pennsylvania R. R., involving 95,960 gal. tar and 3695 ton covering material; (2) 24 mi. road, northern section of county, north of Pennsylvania R. R., involving 51,030 gal. tar, 2005 tons covering material; (3) 43 mi. road in county lying north of Pennsylvania R. R. or adjacent thereto, involving 121,773 gal. asphaltic oil and 4195 ton covering material. Separate bids will be received on each of above divisions. H. F. Harris, co. engr.; advertised in this issue.

N. J., Trenton—Until Apr. 22, by Bd. Freeholders Mercer Co., furnishing labor and material and applying 95,960 gal. surface dressing of tar to 40 mi. road in southern section of county; 51,030 gal. to 24 mi. and 121,773 gal. surface dressing of asphaltic oil to 43 mi. H. F. Harris, 759 Stuyvesant Ave., engr.

N. J., West Orange—Until Apr. 22, by Bd. Pub. Wks., widening Eagle Rock Ave. from Harrison to Washington Sts. and Washington St. in front of property of Bd. Educ. C. A. Winston, Town Hall, engr.

Pa., Ardmore—Until Apr. 22, by Comrs. Lower Merion Twp., surface treating 94,000 sq.yd. road in Lower Merion Twp., tarvia or asphalt. Bids requested for using ⅓ gal. per sq.yd., ¼ gal. per sq.yd. and ½ gal. per sq.yd. G. C. Anderson, secy.

Pa., Scranton—Until Apr. 28, by C. P. Savage, co. controller Lackawanna Co., repairing county road running from Luzerne Co. line through Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn and Mayfield Boroughs, etc.; advertised in this issue.

Pa., Waynesburg—Until Apr. 22, by Comrs. Greene Co., rebuilding 4765.5 lin. ft. rein. con. pavement, 16 ft. wide, in Franklin Twp.

Delaware—Until Apr. 30, by State Highway Dept., Dover, building highways in Kent and Sussex Counties. Work involves 4.5 mi. road, involving 4 acres clearing and grubbing, 27,000 cu.yd. grading, 250 cu.yd. concrete masonry, 15,000 lb. reinforcement, 332 lin.ft. 15-24 in. rein.-con. pipe, 40 tons stone for macadam, 8600 cu.yd. cement concrete roadway and 130 joints, Contr. No. 10; 4 mi. road., involving 1.74 acres clearing and grubbing, 19,500 cu.yd. grading, 240 cu.yd. concrete masonry, 10,000 lb. reinforcement, 616 lin.ft. 15-36 in rein.-con. pipe, 50 tons stone for macadam, 7655 cu.yd. cement concrete roadway and 125 joints, Contr. No. 11; 5.97 mi. road, involving 11.6 acres clearing and grubbing, 26,273 cu.yd. grading, 350 cu.yd. concrete masonry, 10,000 lb. reinforcement, 625 lin.ft. 15-24 in. rein.-con. pipe, 50 tons stone for macadam, 11,400 cu.yd. cement concrete roadway, 200 joints, Contr. No. 12. C. M. Upham, ch. engr.

Maryland—Until Apr. 25, by State Rd. Comn., 601 Garrett Bldg., Baltimore, building section of Washington Blvd. from Laurel to Hyattsville, Prince George Co. Work involves 0.5 mi. concrete roadway, 20 ft. wide, and 11.14 mi. 3 ft. concrete shoulders on each side of present roadway, Contr. WB-Z. F. H. Zouck, chn.; advertised in this issue.

Maryland—Until Apr. 29, by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 2.33 mi. concrete road from Corrigansville to Maryland-Pennsylvania State Line at Ellerslie, Allegany Co., Contr. A-14; 3.65 mi. concrete road through Greensboro, Caroline Co., Contr. Co-19; 2.12 mi. concrete road from Oakland toward Hutton via Crellin, Garrett Co., Contr. G-13; 1.63 mi. Defense Highway from Bladensburg toward Lanham, Contr. P-16, and 1.67 mi. concrete road from Largo to Western Branch on Halls Station Rd., Contr. P-17, Prince Georges Co.; 1.53 mi. concrete road from end of Quantico State Aid Rd. toward Catch Penny, Wicomico Co., Contr. W1-13; F. H. Zouck, chn.; advertised in this issue.

Md., Baltimore—Until Apr. 23, by Bd. Awards, grading and paving with 6 in. cement concrete 1.2 mi. private alleys, 3-12 ft. wide, listed as Contr. Nos. 20 and 44 G. F. Weighardt, city engr.

Streets and Roads (Continued)

W. Va., Fayetteville—Until May 5, by Comrs. Fayette Co., grading 10 mi. road, steam shovel and team work. Work will be let in 2 sections of 5 mi. each. 20,000 cu.yd. excav. on each section. J. K. McGrath, co. engr.; advertised in this issue.

W. Va., Pennsboro—Until Apr. 28, by V. Eubank, city clk., grading, curbing and paving with concrete Clayton St. from Masonic St. northward to Baltimore & Ohio R. R.; also Davis St. from Clayton St. westward to Baltimore & Ohio R. R.

W. Va., Weston—Until Apr. 26, by L. Troxell, co. clk. Lewis Co., improving 1¼ mi. Weston and Buckhannon Turnpike.

N. C., Durham—Until May 6, by Comrs. Durham Co., improving North Carolina Central Highway, involving 78,900 sq.yd. brick, asphalt, cement, concrete, bituminous concrete or other approved pavement, combination cement concrete header curbing and base course required except with cement concrete construction, 4000 cu.yd. old macadam in present surface removed and replaced along edges of new pavement, 56.92 cu.yd. Class A concrete culverts, 4774 lbs. reinforcing steel in concrete culverts, 75.66 cu.yd. Class B concrete pipe headwalls, 612.5 lin.ft. 15 in., 152.5 lin.ft. 18 in. and 152.5 lin.ft. 24 in. standard vitr. pipe. A. L. Carlton, chn.; advertised in this issue.

Ga., Augusta—Until May 1, by W. L. Martin, city clk., for 55,000 sq.yd. pavement on Walton Way from 15th St. to Monte Sano Ave. Bids will be received on asphaltic concrete and sheet asphalt on 4 in. concrete foundation, monolithic brick, or 6 in. concrete. W. H. Wise, city engr.; advertised in this issue.

Miss., Clarksdale—Until Apr. 30, by Bd. Supervs. Coahoma Co., surfacing 10 mi. roads. Work involves 85,532 sq.yd. asphaltic concrete on concrete or gravel base and 79,375 sq.yd. concrete. L. W. Mashburn, Clarksdale, engr.

Ohio—Until Apr. 30, by State Highway Comn., Columbus, building following roads:

Ashland Co., Sect. "B," Ashland-Wooster Rd., 3.8 mi., grading, constructing bridges and culverts and paving with monolithic brick or concrete, cost $125,331.

Clinton Co., Sect. "O," Cincinnati-Zanesville Rd., 2.37 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $33,407.

Sect. "P and Q," Cincinnati-Zanesville Rd., grading, constructing bridges and culverts and paving with waterbound macadam, $125,258.

Delaware Co., Sect. "B," Delaware-Marysville Rd., 5.02 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $106,679.

Sect. "A-2," Delaware-Marysville Rd., 2.85 mi., grading, constructing bridges and culverts and paving with waterbound macadam or bituminous macadam, $61,017.

Fairfield Co., Sect. "F," Lancaster-Newark Rd., 2.05 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $44,615.

Holmes Co., Sect. "H-1," Millersburg-Canal Dover Rd., 2.5 mi., grading, constructing bridges and culverts, $22,415.

Knox Co., Sect. "A," Mt. Vernon-Newark Rd., 3.79 mi., grading, constructing bridges and culverts and paving with semi-monolithic brick, $166,481.

Marion Co., Sect. "F," Marion-Kenton Rd., 5.36 mi., grading, constructing bridges and culverts and paving with rein.-con. or bituminous macadam, $170,654.

Morrow Co., Sect. "E and F," Mansfield-Mt. Gilead Rd., 4.10 mi., grading, constructing bridges and culverts and paving with plain concrete, $113,032.

Ottawa Co., Sect. "E-2," Oak Harbor-Genoa Rd., 1.59 mi., grading, constructing bridges and culverts and paving with concrete, $50,396.

Stark Co., Sect. "A and B," Lincoln Highway, 8.04 mi., grading, constructing bridges and culverts and paving with brick, $366,525.

Tuscarawas Co., Sect. "O-1," Millersburg-Canal Dover Rd., 1.50 mi., grading, constructing bridges and culverts and paving with concrete, $41,686.

Sect. "O," Canal Dover-Wooster Rd., 2.52 mi., grading, constructing bridges and culverts and paving with brick or concrete, $96,661.

Union Co., Sect. "B-1," Marysville-Kenton Rd., 2.88 mi., grading, constructing bridges and culverts and paving with waterbound macadam, $46,608.

Vinton Co., Sect. "G-2," McArthur-Athens Rd., 1.06 mi., grading, constructing bridges and culverts and paving with concrete, $27,725.

Washington Co., Sect. "J-1," Marietta-Caldwell Rd., 3.027 mi., grading, constructing bridges and culverts and paving with plain concrete, $96,853.

Wyandot Co., Sect. "B," Tiffin-Upper Sandusky Rd., 1.66 mi., grading, constructing bridges and culverts and paving with asphaltic concrete, $61,762.

Lucas Co., Sect. "56 and 58," various roads, surface treating, tar covering, $11,694.

Lucas Co., Sect. "21, 51 and 56," various roads, surface treating, tar covering, $17,694.

Medina Co., Sect. "25," various roads, bituminous macadam treatment, $15,076.

Ind., Greenfield—Until May 5, by Comrs. Hancock Co. grading, draining and building waterbound macadam road in Buck Creek Twp. C. Boone, co. engr.

Mich., Ann Arbor—Until Apr. 29, by F. F. Rogers, state highway comr., at office of Bd. Pub. Rds., here, grading, draining and paving 2.5 mi. Federal Aid Project No. 34, 18 ft. wide, concrete or bituminous; .373 mi. extension to Federal Aid Project No. 16, 18 ft. wide, bituminous concrete or concrete.

Mich., Jackson—Until Apr. 24, by A. W. D Hall, city mgr., paving several streets, involving 21,775 sq.yd. brick, 40,000 sq.yd. asphaltic concrete, 46,300 lin.ft. combined curb and gutter and 16,000 cu.yd. excav.; W. B. Hodges, city engr.; advertised in this issue.

Ill., Chicago—Until Apr. 21, by Bd. Local Impvts., City Hall, paving Cornelia, Karlov, Kedvale, Keeler and Lowell Aves., Roscoe, Henderson, School and Melrose Sts., involving 6450 cu.yd. grading, 21,500 ft. concrete curbing, 29,800 sq.yd. asphalt on 6 in. concrete base, cost $94,500;

South Park Ave., 14,000 cu.yd. grading, 12,100 ft. concrete curbing, 25,900 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or trap rock, $87,000;

North Claremont, Oakley and Irving Sts., and Rosemont, Highland and Thome Aves., 8200 cu.yd. grading, 11,500 ft. concrete curbing, 18,200 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or traprock, $64,000;

Lawrence Ave., 13,600 sq.yd. paving creosoted wood-block on 6 in. concrete base, 6400 cu.yd. grading, $71,500;

Lafayette Ave., West 66th and West 68th Sts., 9700 ft. concrete curbing, 14,800 sq.yd. asphalt paving on 6 in. concrete base, $49,500;

South Chicago Ave., 4000 cu.yd. filling, 4390 ft. sandstone curbing, 10,780 sq.yd. vitr. brick on 6 in. concrete base, $39,000;

Archer Ave., 5200 cu.yd. grading, 6700 ft. concrete curbing, 1028 sq.yd. granite block on 6 in. concrete base, 11,220 sq.yd. vitr. brick on 6 in. concrete, $44,500;

Harrison St., 4600 cu.yd. grading, 5330 ft. concrete curbing, 8000 sq.yd. vitr. brick on 6 in. concrete base, $36,500;

Karlov Ave., 3000 cu.yd. grading, 5370 ft. concrete curbing, 8750 sq.yd. asphalt on 6 in. concrete base, $40,000.

Hayne Ave., 255 cu.yd. grading, 5165 ft. concrete curbing, 8570 sq.yd. asphalt on 6 in. concrete base, $26,000.

Keating St., 2400 cu.yd. grading, 5430 ft. concrete curbing, 7520 sq.yd. asphalt on 6 in. concrete base, $26,500;

Longwood Dr., 6400 cu.yd. grading, 5630 ft. concrete curbing, 9020 sq.yd. asphalt on 6 in. concrete, $35,500;

Devon Ave., 1200 cu.yd. grading, 2100 ft. concrete curbing, 280 sq.yd. granite block on 6 in. concrete base, 3080 sq.yd. vitr. brick on 6 in. concrete base, $17,500;

Kolin St., 1090 cu.yd. grading, 1810 ft. concrete curbing, 2810 sq.yd. asphalt on 6 in. concrete base, 6 brick catchbasins, $13,000;

Otto St., 1300 cu.yd. grading, 2280 f concrete curbing, 3800 sq.yd. asphalt o 6 in. concrete, $15,500;

Morgan St., 300 cu.yd. grading, 1400 ft. concrete curbing, 2360 sq.yd. asphalt on 6 in. concrete base, $9500;

Leavitt St., 800 cu.yd. grading, 740 ft. concrete curbing, 1100 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or traprock, $4500;

West 35th Pl., 1200 cu.yd. grading, 2350 ft. concrete curbing, 3680 sq.yd. asphalt on 6 in. concrete base, $13,000;

South Wabash Ave., 800 cu.yd. grading, 860 ft. concrete curbing, 1219 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or traprock, $5000;

Windsor Ave., 1200 cu.yd. grading, 2270 ft. concrete curbing, 3070 sq.yd. asphalt on 6 in. concrete base, $13,000;

West 18th St., 1100 cu.yd. grading, 3630 ft. concrete curb, 3100 sq.yd. vitr. brick on 6 in. concrete base, $12,500;

Alleys between Harrison and Flournoy Sts. and Spaulding and Homan Aves., 501 cu.yd. grading, 1198 ft. concrete curbing, 940 sq.yd. vitr. brick on 6 in. concrete base, $3777;

Van Buren and Congress Sts. and Washtenaw and California Aves., 600 cu.yd. grading, 2028 ft. concrete curbing, 1780 sq.yd. vitr. brick on 6 in. concrete base, $6100;

Alley between Blackhawk and Division Sts. and Holt and Dickson Aves., 1300 cu.yd. grading, 2690 ft. concrete curbing, 2330 sq.yd. vitr. brick on 6 in. concrete base, $10,457;

Alley between Wabausia and North Aves. and Kedzie and Sawyer Aves., 470 cu.yd. grading, 1590 cu.yd. concrete curbing, 1440 sq.yd. vitr. brick on 6 in. concrete base, $4900;

Alley between Montrose and Cullom Aves., Ashland Ave. and Paulina St., involving 580 cu.yd. grading, 1180 ft. concrete curbing, 1180 sq.yd. vitr. brick on 6 in. concrete base, $5000. C. D. Hill, ch engr.

Wisconsin—Until May 1, by State Highway Comn., Madison, grading and surfacing with gravel 4 mi. Kewannee Algoma Rd. 15 ft. wide, cost, $24,000; 8.66 mi. Algoma Sturgeon Bay Rd., 15 ft. wide, $40,000.

Ia., Des Moines—Until Apr. 21, by City Council, paving 1 block Des Moines St. from East 4th to East 5th Sts., involving 1181 sq.yd. vitr. brick, asphalt or bituminous concrete on 5 in. concrete base and 400 lin. ft. concrete curb and gutter, cost, $3500; 17 mi. Franklin Ave. from 34th St. to Beaver Ave., 7067 sq.yd. vitr. brick, asphalt or bituminous concrete in 5 in. concrete base, 5160 lin.ft. concrete curb and gutter, 5320 lin.ft. header, $19,600. F. Jeffries, clk.

Ia., Fairfield—Until Apr. 22, by Bd. Supervs. Jefferson Co., grading and placing tile and guard rail on 20 mi. Blue Grass Highway, Federal Aid Project No. 3. About $67,000. Work involves 12,717 lin.ft. guard rail, 16,900 lin.ft. drain tile, and 153,172 cu.yd. excav. D. L. Teal, co. engr.

Ia., Mapleton—Until Apr. 21, by City Council, paving 55 blocks, brick, concrete or asphalt on 5 in. concrete base. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Ia., Mason City—Until Apr. 21, by Bd. Supervs. Cerro Gordo Co., grading and paving with concrete 3940 ft. road from here to Plymouth, 3100 ft. 16 ft. wide and 831 ft. 20 ft. wide, involving 7358 sq.yd. concrete, 1600 cu.yd. earth and 230 cu.yd. loose rock excav., cost, $19,207; 5715 ft. road from here to Manly, 18 ft. wide, 11,430 sq.yd. concrete, 20,000 cu.yd earth and 390 cu.yd. loose rock excav., $36,868. R. E. Robertson, co. engr.

Minn., Elk River—Until May 12, by Comrs. Sherburne Co., paving and grading 4 mi. State Rd. No. 1, Federal Aid Project No. 44, 24 ft. wide. About $100,000. Work involves 3½ acres clearing and grubbing, 400 lin.ft. sectional concrete culverts, one 4 x 4 ft. rein.-con. culvert, 47,000 cu.yd. paving and 49,500 cu.yd. excav. F. W. Nickerson, Elk River, engr. Noted Apr. 10.

Minn., Faribault—Until May 7, by Comrs. Rice Co. building Job No. 1901, State Rd. No. 17, involving 5.51 acres clearing, 2.16 acres grubbing, 84,951 cu.yd. excav., 1718 cu.yd. side excav., 98,326 cu.yd. overhaul, 5440 lin.ft. guard rail, 72.5 lin.ft. 15 in. diam., 1125 lin.ft. 18 in. diam., and 202.5 lin.ft., 24 in. diam. concrete culverts, 162.9 cu.yd. rein.-con. culverts and 8131 lbs. reinforcing steel. W. P. Chapman, co. engr.

Minn., St. James—Until Apr. 30, by C. Larson, city clk., for 37,000 sq.yd. paving, 13,960 lin.ft. straight curbing, 2058 lin.ft. circular curbing, 13,000 cu.yd. excav., 380 lin.ft. header curbing and 1000 sq.yd. walks. J. W. Shaffer & Co., 403 New York Life Bldg., Minneapolis, consult. engrs.

Neb., Albion—Until Apr. 25, by F. M. Sillick, city clk., paving 25,000 sq.yd. streets, concrete, vitr. brick or asphalt on 5 in. concrete base. Cost between $76,000 and $106,000. W. E. Standever 414 Bee Bldg., Omaha, engr.

Streets and Roads (Continued)

Neb., Omaha—Until May 6, by City Council, grading and repaving Dodge St. from 17th to 22nd Sts., 18th, 19th and 20th Sts., from Capitol Ave. to Douglas St., 36-60 ft. wide, concrete vitr. brick, asphalt, creosote wood block or stone on 6 in. concrete base. About $185,000. J. A. Bruce, City Hall, engr.

Mont., Dillon—Until May 7, by city, paving 6 blocks on Montana St., 5 on Idaho St., and 6 cross streets, between Montana and Idaho Sts., involving 26,258 sq.yd. About $75,000. G. V. Elder, Dillon, engr. Noted Apr. 3.

Arkansas—Until May 14, (change of date) by State Highway Dept., Little Rock, surfacing and building 55 mi. highway from Little Rock to Hot Springs, concrete or asphalt including culverts and bridges, involving 492,000 cu.yd. earth work, 74 acres clearing and grubbing, 110,000 cu.yd. loose rock, 14,000 cu.yd. solid rock, 4300 ft. 12-30 in. culverts, 1994 yd. concrete in culverts and bridges, etc. Lund & Hill, Little Rock, engrs.; advertised in this issue.

Tex., Dallas — Until May 5, by C. E. Gross, aud. Dallas Co., for 106,000 sq.yd. concrete pavement, 1300 cu.yd. concrete bridging, 210,000 lb. steel reinforcement and 70,000 cu.yd. grading; advertised in this issue.

Okla., Okmulgee—Until Apr. 14, by City Comrs., paving and improving streets in Dist. No. 26. Work involves 5551 cu.yd. excav., 22,656 sq.yd. bituminous concrete, 1860 sq.yd. brick, 16,652 lin.ft. curb and gutter, 1548 lin.ft. armored curb and gutter, etc. R. H. Jenness, comr. of finance.

Okla., Tulsa—Until May 19, by Comrs. Tulsa Co., grading, paving and improving miles 6 of Section L, miles 1 to 5 inclusive of Sect. M, miles 3 to 5 inclusive of Sect. I, miles 1 to 7 inclusive of Sect. G, part of mile 8 of Sect. E from east end mile 2, Sect. I, north 1.3 mi., thence east 0.35 mi. to town of Dawson, total length 18 mi. L. Cline, co. clk.; advertised in this issue.

Idaho, Idaho Falls—Until Apr. 28, by city paving Dist. Nos. 10 and 11, bitulithic asphalt, asphaltic concrete or concrete. About $362,079. J. H. Wilson, engr.

Utah—Until Apr. 22, by State Rd. Comn., Salt Lake City, paving 8.23 mi. state road from Pleasant Grove to Provo, Utah Co., 18 ft. wide. I. R. Browning, State Capitol, engr. Noted Nov. 28.

Utah, Provo—Until Apr. 24, by city, paving 2450 ft., Center St., from 1st E St. to 5th E St., 44 ft. wide; about $5500; also 13,250 ft. from 5th E St. to 7th E St. 66 ft. wide; $18,000. C. H. Swan, city engr. Noted Mar. 27.

Washington — Until Apr. 21, by State Highway Bd., Olympia, building 4 mi. State Rd. No. 18, from Morton to Kosmos, Lewis Co. Work involves 6400 cu.yd. surfacing, 28,260 cu.yd. grading, etc.

Washington—Until Apr. 21, by State Highway Comn., Olympia, grading, draining and surfacing with crushed rock 4 mi. Kosmos-Norton Rd. J. Allen, state highway comr.

Washington—Until Apr. 28, by State Highway Comn., Olympia, paving with concrete 6 mi. Pacific Highway from St. Clair to Nisqually; also constructing 2000 lin. ft. pile and brush protection on Nisqually River, near Nisqually, Pierce and Thurston counties. J. Allen, state highway comr.

Washington—Until Apr. 28, by State Highway Bd., Olympia, clearing, grading, draining and constructing embankments by dredging, on 8.1 mi. Natl. Park Highway, between Nasel River and Bear River, Pacific Co. J. Allen, state highway comr.

Wash., Olympia—Until May 1, by City Council, for paving sidewalks and constructing curbs and gutters on Grant and Harrison Aves. Work involves 85,000 sq. yd. concrete. About $32,000. R. F. Wood, city engr.

Que., Montreal—Until Apr. 22, by Bd. Comrs. paving with granite blocks 570 ft. Commissioner St. between Barri and Victor Sts. About $28,678. P. Mercier, City Hall, engr.

Ont., Pickering—Until Apr. 24, by W. A. McLean, deputy minister of highways, Toronto, surfacing 11.6 mi. road, 20 ft. wide, on Provincial Highway. Alternate bids will be received for concrete surface, asphaltic concrete surface on concrete foundation or other type of material.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★New Hampshire—Comrs. State Highway, Concord, let contract surfacing 5995 ft. Merrimack Valley Rd., 18 ft. wide, Bedford Twp., to Winslow & Cummins, Nashua, $9921. Noted Mar. 27.

★Massachusetts—State Highway Comn., Boston, let contract grading and draining 29,353 ft. State Highway, Beckett Twp., 18-24 ft. wide, to J. H. Kerr, Rumford, $132,084. Work involves 15,000 cu.yd. earth and 100 cu.yd. rock excav., 8000 cu. yd. borrow, 6400 cu.yd. broken stone, 88,000 gal. bituminous macadam and 10,000 cu.yd. stone filling. Noted Mar. 20.

★Mass., Boston—Comr. Pub. Wks. let contracts paving Mattchett St., Justin and Perthshire Rds., 1135 ft. long, 40 ft. wide, involving 3260 sq.yd. asphalt on 7 in. concrete base, 41 sq.yd. granite block, 13,900 sq.ft. concrete sidewalk, 3110 cu.yd. excav., to Central Constr. Co., School St., $17,200; Malverna Rd., 414 ft. long, 40 ft. wide, Roxbury Twp., involving 1200 sq.yd. bituminous macadam, to W. J. Rafferty & Co., 33 Champney St., South Boston, $3828.

R. I., Central Falls (Pawtucket P. O.) —Bd. Street, Water & Sewer Comrs., received bids Mar. 31, paving 2200 sq.yd. Broad St., granite block on concrete base, from Simpson Bros. Corp., 166 Devonshire St., Boston, $15,300; Lindberg & Street, Boston, $16,230. Noted Mar. 20.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract grading, curbing and laying sidewalks on East 8th St. from Ave. K to Ave. M, to Castle Bros., Inc., Johnson Pl., $6162; 36th St. from 15th Ave. to Chester St., to Cranford Co., 52 9th St., $14,655; 4th Ave. from 60th St. to Bay Ridge Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York City, $100,505. Noted Mar. 13.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract regulating and repaving with permanent asphalt, etc., roadway of (1) Engert Ave.; (2) Grove St.; (3) Jerome Ave.; (4) Knickerbocker Ave.; (5) Ridge Blvd.; (6) Saratoga Ave.; (7) St. Johns Place; (8) 23rd St.; (9) 85th St.; (10) 54th St.; to Sicilian Asphalt Paving Co., 41 Park Row, New York City, (1) $3588; (2) $10,440; (4) $2004; (5) $30,154; (6) $3692; (7) $11,171; (8) $6372; (10) $1742; Grimm Constr. Co., 460 Herold Ave., Richmond Hill, (3) $1976; Cranford Co., 52 9th St., (9) $2375. Noted Mar. 27.

N. Y., Utica—Bd. Contr. & Supply received bid paving (1) Gilbert and Ontario Sts., (a) sheet asphalt with artificial curb, (b) sheet asphalt with natural curb; (c) bitulithic with artificial curb; (d) bitulithic with natural curb; (e) asphaltic concrete with artificial curb; (f) asphaltic concrete with natural curb; (2) Hart St. from Plant to Tracy Sts.; (3) resurfacing Main St. from John to 1st Sts., (g) sheet asphalt; (h) bitulithic; (i) asphaltic concrete; (4) John St. from Bagg Sq. to Erie Canal; (5) Hart St. from Mandeville to Kirtland Sts., from H. W. Roberts Co., (1a) $35,210; (b) $36,726; (c) $35,854; (d) 35,438; (e) $33,854; (f) $35,438; (2a) $5219; (b) $5471; (c) 5288; (d) $5540; (e) $5081; (f) $5333; (3g) $7946; (h) $8094; (i) $7584; (4g) $11,256; (h) $11,504; (i) $10,636; (5a) $13,920; (b) $14,592; (c) $14,140; (d) $14,812; (e) $13,480; (f) $14,152. Noted Apr. 3.

★New Jersey—State Highway Comn., Trenton, let contract paving with concrete 5.15 mi. State Highway No. 6, Mullica Hill-Mantua Sect., Gloucester Co., to J. M. Kelly Constr. Co., 432 Market St., Camden, $180,630. Noted Mar. 20.

★N. J., Camden—Comrs. Camden Co. let contract resurfacing Marlton Pike with concrete, to J. M. Kelly Constr. Co., 432 Market St., $129,745. Noted Mar. 27.

★N. J., Hackensack—Bd. Freeholders Bergen Co. let contract improving Williams Ave. from Little Ferry to Hasbrouck Heights, Portland cement concrete surface, to C. C. Jobs & Sons, Little Ferry, $52,123.

★N. J., Salem—Bd. Freeholders Salem Co. let contract paving 3rd Sect. Malaga-Pennsgrove Rd., Woodstown Boro., to Craig & Mulford, Cedarville, $31,674. Noted Mar. 13.

★Pennsylvania—State Highway Comn., Harrisburg, let contracts building roads in Armstrong Co., to Freilino Bros., Leechburg, cost $197,004; Berks Co., G. Merdinger, E. P. Wilbur Trust Bldg., Bethlehem, $86,766; Bradford Co., to W. Moore & Co., Colonial Trust Bldg., Phila., $297,697; Cambria Co., to Bd. Superv. Croyle Twp., Cambria Co., $54,843; Center Co., to Gifford & Pritchard, Phillipsburg, $12,891; Clinton and Elk Counties to Miller Constr. Co., P. O. Box 33, Punxsutawney, $108,746 and $249,176 respectively; Crawford Co., to Baldwin & Welcomer, Union City, $114,759; Erie Co., to J. McCormick & Son, 645 West 10th St., Erie, $149,467; Franklin Co., to Souder Constr. Co., 214 East Orange St., Lancaster, $186,528; McKean Co., to P. F. Connolly Koppel, $20,785; Mercer Co., to Brackenridge Sand & Gravel Co., Brackenridge, $154,800; Potter Co., to Tyne & Willey, 407 Savings Bank Bldg., Binghamton, N. Y., $99,062; Warren Co., to M. Dolan, 35 Fairmont Ave., Jamestown, N. Y., $70,612. Noted Apr. 3.

★Pa., Pittsburgh—Allegheny Co. let contract grading, paving and improving 12,000 ft. Round Hill Rd., 20 ft. wide, Forward Twp. to McLaughlin Contg. Co., Germania Bldg., $73,743. Noted Apr. 10.

★Pa., Pittsburgh—J. P. Moore, co. controller, Allegheny Co., let contract widening and rebuilding 3400 ft. Brackenridge Rd., to W. A. Martin, 4905 Penn Ave. $47,175. Work involves 6800 sq. yd. concrete on concrete base, etc. Noted Apr. 10.

Pa., Pittsburgh—City received bids grading, paving and curbing (a) Jupiter Way, involving 700 sq. yd. vitr. brick on 5 in. concrete base, 907 ft. curbing; (b) Royal St., 428 sq. yd. stone block on 6 in. concrete base, 325 lin. ft. curbing; (c) Eckert Way, 830 sq. yd. vitr. brick on 6 in. concrete base, 438 lin. ft. curbing; (d) Fuchsia Way, 750 sq. yd. block asphalt on 6 in. concrete base, 1168 lin. ft. curbing; (e) Roessler St., 410 sq. yd. stone block on 6 in. concrete base, 432 lin. ft. curbing; (f) Wapello St., 1015 sq. yds. vitr. brick on 6 in. concrete base, 837 lin. ft. curbing; (g) Universal St., 4836 sq. yd. vitr. brick on 6 in. concrete base, 3919 lin. ft. curbing; (h) Arabia Way, 392 sq. yd. vitr. brick on 6 in. concrete base, 26 lin. ft. curbing; (i) Colvill St., 444 sq. yd. stone block on 6 in. concrete base; (j) Mulberry Way, 656 sq. yd. stone block, on 6 in. concrete base; (k) 56th St., 780 sq. yd. vitr. brick on 6 in. concrete base, 545 lin. ft. curbing; (l) 53rd St., 742 sq. yd. on 6 in. concrete base, 573 lin. ft. curbing; (m) Camelia St., 3920 sq. yd. on 6 in. concrete base 3031 lin. ft. curbing; (n) McCandless St., 2230 sq. yd. asphalt on 6 in. concrete base, 1590 lin. ft. curbing; (o) McCandless St., 1537 sq. yd. stone block on 6 in. concrete base, 1192 lin. ft. curbing from J. T. Neelen, Perrysville, (a) $3969, (c) $4135, (f) $6752; Pittsburgh Paving Co., Bakewell Bldg., (a) $4199, (d) $6463, (f) $6744, (h) $1985, (l) $5034; M. O. Herron & Co., 1st and McKean Sts., (a) $4084, (b) $3350, (c) $4479, (d) $6595, (e) $3685, (f) $6685, (h) $2309, (i) $3749, (j) $4657, (k) $4257, (l) $4190, (m) $24,396, (n) $14,235 (o) $16,560; T. Cronin, 17th and Muriel Sts., (b) $3340, (e) $3717, (i) $3768, (j) $4538, (k) $4778, (m) $27,513, (n) $16,335, (o) $20,082; Booth & Flynn, Forbes St., (b) $3481, (e) $3790, (g) $29,120, (i) $3949, (j) $4590, (o) $18,929; F. and F. Diulus, 40 Boundary St., (c) $4499, (g) $29,542, (h) $2185, (k) $4843, (l) $4937, (m) $27,675; Dallas Mardulli, Pittsburgh, (d) $6587; McDonough & O'Toole, Pittsburgh, (g) $28,123; Monongahela Constr. Co., Oliver Bldg., (n) $16,667.

★Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract building 2.65 mi. concrete highway from St. Michaels to Claiborne, Talbot Co., 16 ft. wide, 3 ft. dirt shoulders, to Farmer & Flick, 15 East Fayette St., $78,173. Noted Apr. 3.

★Md., Baltimore—Bd. Awards let contract grading and paving alleys in various sections with 6 in. cement concrete, 3-12 ft. wide, as follows: Contr. No. 41, to Aiello Constr. Co., 3701 Claremont St., $26,752; Contr. Nos. 49 and 53, to Edmonson Paving Co., 521 Calvert Bldg., $30,431 and $29,003 respectively, Contr. No. 51, to Christhilf & Ensey, 608 Munsey Bldg., $27,753; Contr. No. 52, to Reinhart Constr. Co., 523 Calvert Bldg., $43,170; Contr. No. 54 to Ward & O'Connell 407 Law Bldg., $19,421.

★Md., Frederick—Comrs. Frederick Co. let contract building 1.8 mi. State Aid Highway from Emmetsburg to Bridgeport, 15 ft. wide, 8 in. concrete in center, 6 in. on sides, 3 ft. dirt shoulders, to Potomac Eng. & Constr. Co., Law Bldg., Baltimore, $65,088.

Streets and Roads (Continued)

★W. Va., Fairmont—Comrs. Marion Co. let contract building 18,361 sq.yd of concrete road, 6-8 in. thick, 2400 ft. to be 16 ft. in width, balance 14 ft., to Van Wirth & Bromley, Glen Falls, N. Y. $73,587.

★W. Va., Fayetteville—Fayette Co. let contract paving 3 mi. road from Glen Jean to Thurmond, Contr. No. F. Y. 10 B., also 3.3 mi. from Glen Jean to Thurmond, Contr. No. F. Y. 10 B., to Charleston Concrete Constr. Co., Charleston, $34,614 and $38,328 respectively.

★W. Va., New Cumberland—Comrs. Hancock Co. let contract grading and paving 5550 ft. Federal Aid Project No. 22, 9 ft. wide, involving 5550 brick block on 5 in. concrete base, also 5300 ft. Chester-Fairview Rd., 9 ft. wide, involving 5300 brick block, to F. Robinson, New Cumberland, $27,000 and $18,000 respectively; 3200 ft. Lawrenceville Rd., 9 ft. wide, involving 3200 sq.yd. 6-7 in. concrete, to C. B. Kimberly Co., Wheeling, $10,800. Noted Feb. 27.

W. Va., Webster Springs—Comrs. Webster Co., received bid grading and draining 60 mi. road from Rodd & Co., Bristol, Va. About $50,000.

★N. C., Raleigh—Wake Co. let contract paving 4¼ mi. Raleigh-Garner Highway, to Boxley & Co., Roanoke, Va., $118,000. Noted Apr. 3.

★Ga., Atlanta—Comrs. Rds. & Revenues, Fulton Co., let contract paving with bito-slag, 43,000 sq.yd. Marietta Rd., from Inmans Yards to Bolten, to R. M. Hudson Co., 3rd Natl. Bank Bldg., $1.70 per sq.yd. Noted Feb. 27.

★Ala., Eutaw — Comrs. Greene Co. let contract graveling 4½ mi. road from Eutaw to Tuscaloosa, to S. H. Brown & Son, Jasper. About $28,000. Noted Feb. 27.

Ohio—State Highway Comn., Columbus, received bids Apr. 11, grading and paving with concrete and building bridges on 1 mi. Sect. "I,' Columbus-Portsmouth Rd., from Kelly & Dunham, Waverly, $30,293; B. F. Bolin, Columbus, $30,794.

★Ohio—State Highway Comn., Columbus, let contract grading and paving with interbound macadam, and building bridges on 3.85 mi. Sect. "K," Columbus-Cincinnati Rd., to Koffroth, Casey & Mansberger, Richwood, $34,935.

★O., Cleveland—City let contracts paving Poe Ave. from West 39th St. to Fulton Rd., to Roehl Bros. West 25th St. and Clark Ave., $12,444. Work involves 1010 cu.yd. excav., 20,350 sq.ft. 4 in. brick pavement on 6 in. concrete base, 1655 ft. in stone curbing and 1655 ft. 4 in. drain; Hessler Rd. from Bellflower Rd. to point 259 ft. southerly, to Bentley Bros., 403 Electric Bldg., $5292. Work involves 255 cu.yd. excav., 5166 sq.ft. 6 in. concrete foundation, 574 sq.ft. 4 in. wood block and 590 ft. 5 in. Berea stone curbing; Seville Ave. from West 93rd to 95th Sts., to Rieley Bros., 357 Arcade Bldg., $1508; work involves 5120 cu.ft. excav. and 16,000 sq.ft. 5 in. brick. Kirman Ave. from West 74th to 79th Sts., to Baldwin Bros., 4500 Euclid Ave., $11,840. Work involves 20220 5 in. Brick Block and 1830 5 in. Berea stone.

★O., Perrysburg—City let contract building 1 mi 5th St., 26 ft. wide, involving 16,417 sq.yd asphalt on concrete base, 11,035 lin.ft. curbing and 10,860 cu.yd. earth excav., to Federal Asphalt Paving Co., 316 Rentschler Bldg., Hamilton, $56,977. Noted Apr. 10.

★Mich., Detroit—Dept. Pub. Wks. will resurface Bethune St., from 3rd St. to Hamilton Blvd., cost $6380; Cadillac Ave., from Kercheval to Mack Aves., $30,480; Harper Ave. from Chene St. to Mt. Elliott Ave., $34,000; Henry St. from Wabash Ave. to 15th St., $4830; Townsend Ave., from St. Paul to Mack Aves., $31,620; 23rd St., from Buchanan St. to Warren Ave., $13,100; Warren Ave., from St. Aubin St. to Mt. Elliott Ave., $37,440; Garland Ave., from old city limits to Mack Ave., $8010; McMillan St., from Campbell to Cavalry Aves., $3170; Vermont St., from Bagg St. to Grand River Ave., $29,060; also resurface and widen Junction Ave. from 260 ft. south of Rollins St. to Michigan Ave., $25,110; all asphalt; Brewster Ave., from Riopelle St. to Gratiot Ave., $27,770 and Cass Ave. from Colburn to Amsterdam Sts., $33,930, asphalt on new foundation; Livernois Ave., from Stark to Michigan Aves., $25,520, brick or asphalt; 3rd St. from river to Congress St., $20,620, granite block. Work will be done by day labor.

★Ill., Winnetka—Bd. Local Impvts. let contract paving various streets with 1 course rein.-con. and integral curbs, to Marquette Constr. Co., 133 West Washington St., Chicago, $228,957. Noted Mar. 6.

★Ia., Des Moines—Comrs. Polk Co. let contract grading, clearing and grubbing 5 mi. White Pole Rd., to P. J. Ryan, 227 Fairview St., Council Bluffs, $13,530. Work involves 33,000 cu.yd. excav.

★Minn., Anoka—Comrs. Anoka Co. let contract for furnishing trap rock and paving, Div. "C", Federal Aid Project, to Widell Co., 1st Natl. Bank Bldg., Mankato, cost $153,194; grading and graveling Div. "A", to Petrie Colburn & Merill, Anoka, $60,836.

★Minn., Henderson—Comrs. Sibley Co. let contract to Gould & Huntington, Glencoe, grading, hauling and installing portable cement culverts on 7.10 mi. Job No. 1802, State Rd. No. 1, Washington Lake and Green Isle Twps., cost, $16,756; hauling and installing 77 lin.ft. portable culverts on 1 mi. Job No. 1902, State Rd. No. 8, Arlington Twp., $2692; A. W. Webster, Nicollet, clearing 2.1 acres, grubbing 1 acre and hauling and installing 362 lin.ft. portable culverts on Job No. 1903, State Rd. No. 6, $6621; A. G. Truman, New Auburn, grading 2.10 mi. Job No. 1803, State Rd. No. 5, Dryden Twp., $3417. Noted Apr. 3.

★Minn., Stillwater—Comrs. Washington Co. let contract grading and graveling 5 mi. Hudson-St. Paul Highway, 24 ft. wide, to Jamieson, Thorsen & Sandeen, Stillwater, $30,073. Noted Apr. 10.

★Kan., Eldorado—City let contract paving various streets with asphaltic concrete, to L. L. Beye, Eldorado, $74,500; Central Ave. from Summit St. to city limits, brick, to A. Jaicks Co., 508 Amer. Bldg., Kansas City, Mo., $34,800. Noted Apr. 10.

★Kan., Kansas City—City let contract grading and paving 12th St. from Nebraska St. to Washington Ave., involving 950 sq.yd. concrete, also paving Troup St. from 17th to 18th Sts., 1200 sq.yd. concrete, to G. G. Roudebush, 658 Garfield Ave., $1952 and $2100 respectively; 33rd St. from Strong to Metropolitan Sts., 1650 sq.yd. concrete; Ruby Ave. from Woodland to 30th Sts., alley between Kansas and Shawnee Sts. and between 10th and Ferrell Sts., to Brown Bros., 11th and Muncie Blk., $2887, $6300 and $925 respectively.

★North Dakota—State Highway Comrs., Bismarck, let contract grading road on Federal Aid Project No. 10, Pierce Co., to Steig & Olson, $11,968, concrete culverts, to W. B. Paterson, $888; State Aid Project No. 3672 and 19, Ramsey Co., to T. Young & Son, Devils Lake, $3587 and $16,804 respectively, concrete culverts, to J. A. Jardine, Fargo, $641 and $3885 respectively; Federal Aid Project No. 18, Ramsey Co., to J. Yoeman, Devils Lake, $10,301, concrete culverts, to J. A. Jardine, $1627.

★N. D., Grafton—City let contract repaving main streets with asphaltic concrete, to J. O'Connor, Fargo, $72,423. Noted Feb. 27.

★Okla., Oklahoma—City Comrs. let contract paving 13th, 28th, 29th, 36th and 41st Sts., also Olie and Stiles Aves., Lincoln Blvd. and Butler Pl. north and south alley through blocks 3, 6, 9, (Dale Addition), to Western Paving Co., 518 Terminal Bldg., $107,723; 11th and 12th Sts., Park Pl., Lindsay and Laird Aves., to M. A. Swatek & Co., 412 Security Bldg., $77,277. Noted Mar. 13.

Utah—State Rd. Comn., Capitol, Salt Lake City, received lowest 3 bids, Mar. 25, building (a) 8500 ft. road from Centerville to Farmington, 18 ft. wide, (1) bituminous concrete pavement 2 in. top, 4 in. crushed stone base, cement ppe, (2) bituminous concrete pavement, 2 in. top, 4-6 in. concrete base, cement pipe, (3) concrete pavement, 6-8 in. thick with cement pipe; (b) 17,233 ft. road from Clearfield to Sunset, (1) bituminous concrete pavement with 2 in. top and concrete base 4-6 in. thick, with machine made cement pipe, (2) concrete pavement 6-8 in. thick with machine made cement made pipe, from Strange-Maguire Co., Utah Savings & Trust Bldg., (A-1) $56,337; A. E. Christensen, Salt Lake City, (A-2) $45,542; R. E. Campbell, Salt Lake City, (A-1) $67,004, (A-2) $84,247; (A-3) $65,007; Lynch Constr. Co., McIntyre Bldg., (A-3) $51,286; (B-2) $54,316; A. J. Gillis, Kearns Bldg., (B-2) $56,096; P. J. Morgan, Felt Bldg., (B-1) $74,585, (B-2) $63,714. Noted Apr. 3.

★Wash., Bellingham—Comrs. Whatcom Co. let contract building 12 mi. Deming-Wickersham Rd., concrete, to Ledingham & Cooper, Centralia, $230,000.

★Ore., Salem—See "Proposed Works."

★Cal., Los Angeles—Bd. Pub. Wks. let contract grading, oiling and building cement curbs, walks, concrete gutters, also concrete bridge over Sherman Dr., West Blvd. Impvt. Dist., to F. W. Young, 307 Wright & Callender Bldg., $32,000. Noted Apr. 10.

Cal., Los Angeles—City received lowest bid paving, etc., on Huntington Rd. and various other streets in Rose Hill and Pyrites St. Impvt. Dist., from G. H. Oswald, O. T. Johnson Bldg., total cost, $115,828. Work involves 180,152 sq.ft. finish grading at $0.05 and $0.07 per sq.ft., 180,152 sq.ft. protected concrete pavement at $0.21 per sq.ft., 3596 sq.ft. grading, oiling and rolling at $0.04 per sq.ft., 8540 lin.ft. cement curbs at $0.45 per lin.ft., 1790 sq.ft. cement sidewalks at $0.13 per sq.ft., 700 sq.ft. concrete gutters at $0.20 per sq.ft., storm drains, $45,846, sanitary sewers, $2000, and pedestrian subway, $13,000. Former contract rescinded. Noted Nov. 28.

Cal., Santa Barbara—City let contract improving 9 blocks East Montecito St., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $49,580. Work involves 5 in. concrete pavement with 2 in. bitulithic surface, cement curbs and gutters, corrugated iron culverts and 6 in. vitr. sewer connections. Noted Mar. 13.

Railways

PROPOSED WORK

Oregon—See "Industrial Works under Gold Hill."

California—City of Pasadena defeated $3,000,000 bond issue to build electric railway to Los Angeles. Noted Mar. 13.

California—Bay Point & Clayton R.R., 2 Market St., San Francisco, plans to extend its line 1 mi. near Bay Point. Project includes 2 bridges, one 80 ft. long, plate girder span, over tracks Atchison, Topeka & Santa Fe Ry., other, 110 ft. long, over tracks Southern Pacific R.R., also 2000 lin.ft. pile trestle along water front. C. S. Thompson, Cowell, engr. About $100,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★West Virginia—Domestic Coke Corp., Fairmont, let contract building 1¾ mi. line from Holt to Fairmont, to Keeley Bros., Clarksburg. About $125,000.

Excavation and Dredging

PROPOSED WORK

Ia., Sac City—Ditch—Bd. Supervs. Sac Co. soon receives bids improving D. D. No. 71. Sect. 1 consists of open ditch work, cost, $42,000; Sect. 2, large tile in old open ditch, $110,000; Sect. 3, tile system, $37,000. A. E. Holmer, co. drainage engr. Noted Feb. 20.

Ore., Portland—Channel—City plans to build channel from Columbia River to intersection of east edge of Interstate Bridge approach. About $273,650. G. R. Funk, city aud.

Cal., Chowchilla—Irrigation—See "Miscellaneous."

Cal., Coachella— Irrigation — Coachella Storm Water Dist. receives bids about June 1, building large earth fill dam at Point Happy, series of open storm water ditches and concrete drops to control waters of Whitewater River and Snow Creek. Bonds for $300,000 voted and sold for project and $250,000 will be used for construction. B. A. Teagle, secy. A. L. Sondregger and W. K. Barnard, Central Bldg., Los Angeles, engrs.

BIDS DESIRED

Miss., Marks—Dredging—Until May 2, by Newsum Lake, D.D., for dredging and levee work in Quitman and Tallahatchie Counties. Work involves 500,000 yd. floating dredge work, 160,000 cu. yd. embankment in levee, 185 acres clearing and grubbing and 400 lin. ft. 24-36 in. pipe with automatic flood gates. L. W. Mashburn, Clarkesdale, engr.

Ill., Sterling—Ditch—Until Apr. 28, at office of C. E. Sheldon, Sterling, for deepening, widening, etc., ditch, 37,765 ft. long, in D D. No. 1, Hahnaman Twp., Whiteside Co., involving 101,211 cu.yd. excav. E. O. Hills, Fulton, engr., advertised in this issue.

Excavation and Dredging (Continued)

Minn., Benson—Ditch—Until Apr. 28, by Comrs. Swift Co. furnishing material and labor building Judicial Ditch No. 15, involving 125,805 ft. 5-18 in. standard concrete or clay tile and 2 headwalls. About $20,176. A. W. Van Slyke, Benson, engr.

Kan., Marion—Excavation—Until April 30 by Cottonwood Valley D. D., improving Cottonwood River and its tributaries. Work involves (1) 968,000 cu.yd. new channel excav., (2) 160,000 cu-yd excav. from present channels, (3) 130,000 cu.yd. levee embankments, and (4) 56,000 lin.ft. of obstructions other than earth from present channels. Bids for 1 or more divisions will be considered. Tuttle-Ayers-Woodward Eng. Co., 305-7 Reliance Bldg., Kansas City, Mo., engrs.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Miss., Marks—Dredging—Deep Bayou D. D. and Marks D. D., let contract for 12 mi. dredging in bayou channels, involving 210,000 yd. floating dredge work, to Kohler Contg. Co., 608 Globe Bldg., Minneapolis, Minn. About $46,000.

★O., Cleveland — Excavation — Comrs. Cuyahoga Co. let contract for excavation work for county jail, West 3rd St. and Lakeside Ave., to R. C. Carey Co., 1500 West 112th St. About $29,100. Noted Mar. 20 under "Buildings."

Minn., Waseca—Ditch—Comrs. Waseca Co., (Waseca), and Steel Co., (Owatonna), received bids buildings Judicial Ditch No. 5, from Love & Hewitt, Le Roy, Ind., $17,355, and J. A. Erickson, Waseca, $17,579. Noted Feb. 27.

★Mont., Lima—Canal—Lima Ditch Co. let contract building 19½ mi. irrigation canal involving 147,000 cu.yd. earth excav. etc., to J. H. Younkin. About $50,000. Noted Oct. 10.

Industrial Works

PROPOSED WORK

Mass., New Bedford — Baker Mfg. Co., 242 North Water St., soon receives bids building 2 story, 50 x 100 ft. brick and rein.-con. addition to factory, rein.-con. flooring, concrete foundation, on North Water St. About $30,000. LaBrode & Bullard, Theater Bldg., archts.

Mass., New Bedford—Fairhaven Mills, 115 Coggleshall St., plans to build 1 story, 200 x 300 ft. brick and mill construction addition to cotton mill, rein.-con. flooring, concrete foundation. About $125,000. C. W. Praray, Times Bldg., engr.

Mass., New Bedford—F. W. Greene, Jr., 23 Chauncery St., soon lets contract building 1 story, 55 x 220 ft. brick, steel and concrete garage, rein.-con. flooring, concrete foundation, on Union St. About $50,000. La Brode & Bullard, Union St., archts.

Mass., Springfield — New York, New Haven & Hartford R.R., New Haven, Conn., plans to build brick and concrete boiler plant, rein.-con. flooring, concrete foundation, at yards here. E. Gogel, New Haven, ch. engr. About $25,000.

Mass., Westfield—Westfield Candy Co., 132 Elm St., soon receives bids building 1 story brick ice cream plant, rein.-con. flooring, concrete foundation, on Elm St. About $30,000.

R. I., Westerly—Town plans to issue $300,000 bonds to build lighting plant. E. E. Whipple, town clk.

Conn., Bridgeport—Carlisle Cord-Tire Co., Andover, Mass., soon receives bids building 1 story, 150 x 250 ft. brick and concrete factory, rein.-con. flooring, concrete foundation, on Fairfield Ave., here. About $100,000.

Conn., Bridgeport—R. Poladian, 172 Wade St., soon receives bids building 1 story, 60 x 85 ft. brick and timber plant, concrete flooring, and foundation, on Wade St. About $25,000.

Conn., Bridgeport—Post Publishing Co., 49 Cannon St., plans to build 2 story plant at 140 Middle St. About $60,000. W. J. Skinner, 1188 Main St., archt.

Conn., New London—New Haven Dairy Co., Hazel St., New Haven, plans to build 2 story, brick and rein.-con. ice plant, rein.-con. flooring, concrete foundation, on Pequot Ave., here. About $50,000.

Conn., Norwich—Cudworth & Thompson, archts., Thayer Bldg., soon receive bids building 1 story, 80 x 80 ft. brick garage, rein.-con. flooring, concrete foundation, on Bath St., for W. F. Bailey, 1° Bath St. About $25,000.

N. Y., East Rochester—Beechnut Packing Co., Main St. E., plans to build 4 story, 73 x 180 ft. rein-con. warehouse and 1 story 34 x 50 ft. office on Main St. E. About $100,000 and $9000 respectively.

N. Y., Long Island City—Amer. Chicle Co., Harris Ave., having plans prepared by Ballinger & Perrot, archts., 1328 Bway., New York City, building 5 story rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Harris Ave. Cost over million dollars. Noted Apr. 10.

N. J., Jersey City—See "Buildings."

N. J., Trenton—MacCrellish & Quigley, 11 South Montgomery St., plan to build 3 story, printing plant on Montgomery St. About $200,000. J. W. West, 156 Mercer St., pres.

Pa., Harrisburg—C. H. Masland, Amber and Westmoreland Sts., Phila., having preliminary sketches prepared by Lockwood, Greene & Co., archts., 101 Park Ave., New York City, for brick and steel plant, rein.-con. flooring, concrete foundation, near here. Plans include several 1 and 2 story buildings.

Pa., Phila. — Ledger Publishing Co., Independence Sq., receives bids in spring 1920, constructing 10 story, concrete building, concrete foundation, on 6th, 7th, Sansom and Chestnut Sts. About $1,000,000. F. C. Roberts, Real Estate Trust Bldg., archt.

Pa., Tamaqua—B. R. Stevens, archt., 1737 Filbert St., soon receives bids building 2 story, 87 x 102 ft. concrete factory for M and G Ice & Ice Cream Co. About $50,000.

Md., Baltimore—L. Blaustein, 401 Amer. Bldg., plans to build 4 story, 63 x 69 ft. brick, concrete and steel warehouse, stone and concrete foundation, on Eastern Ave. G. R. Callis, 55 Knickerbocker Bldg., archt.

Md., Baltimore—Standard Oil Co., Pier 2, Pratt St., plans to build 6 story, 100 x 100 ft., rein.-con., steel and brick warehouse on Pier 2. About $200,000.

Md., Baltimore—C. M. Stieff, Inc., 9 North Liberty St., having plans prepared by T. W. Pietsch, archt., 1210 Amer. Bldg., for 3 story, 25 x 100 ft. rein.-con., steel and brick, stone and concrete foundation, at 315 North Charles St. About $100,000.

Md., Baltimore—Universal Garage Co., Pennsylvania and Fulton Aves., soon receives bids building 1 and 2 story, 98 x 350 ft., brick, concrete and steel garage, brick and concrete foundation, on Pennsylvania and Fulton Aves. Cost between $55,000 and $60,000. G. R. Callis, Jr., 55 Knickerbocker Bldg., archt.

Va., Petersburg—W. H. Camp, Inc., Wharf, plans to build 1 story fertilizer plant. About $55,000.

W. Va., Wheeling — Wheeling Traction Co. plans to build 2 story, brick car barn and shop on Warwood St. About $75,000. C. P. Billings, genl. mgr.

La., New Orleans—Times-Picyune Publishing Co., 314 Camp St., plans to build 4 story, 85 x 150 ft., brick and concrete plant, rein.-con. flooring, concrete foundation, on Camp and North Sts. M. H. Goldstein, Perrin Bldg., archt.

O., Cleveland—G. W. Hale, Leader News Bldg., plans to build 3 story, 165 x 180 ft. brick, steel and rein-con. garage, rein.-con. flooring, concrete foundation, on East 9th St. and Bolivar Rd. About $250,000.

O., Cleveland — C. Schwarzenberg & Gaede, archts., 1900 Euclid Ave., soon receives bids building 3 story, brick, steel and concrete warehouse, rein.-con. flooring, rock foundation, on East 40th St. and New York Central Ry., for H. S. Rivitz Co., 2112 Ontario St. About $300,000.

O., Cleveland—Van Dorn Electric Tool Co., 2978 Woodhill Rd., had plans prepared by W. J. Carter, archt., 723 Illuminating Bldg., building 4 story, 50 x 100 ft. brick, steel and concrete factory. About $75,000.

O., Cleveland—J. J. Weiner Eng. & Serv. Co., 10101 Quincy Ave., plans to build 1 story, 50 x 125 ft. brick, steel and concrete plant, rein-con. flooring, brick foundation. About $25,000.

Mich., Detroit—C. Bohn Fdry. Co., Chene St., soon lets contract building 1 story, 168 x 240 ft. steel and brick foundry, concrete foundation, on Chene St. and Finley Ave. C. W. Brandt, 1114 Kresge Bldg., archt.

Mich., Detroit—Detroit Seamless Steel Tube Co., 841 West Jefferson Ave., having plans prepared building brick and steel factory, on Wyoming and West Warren Aves. Cost, including equipment, $1,700,000. A. A. Templeton, pres.

Ill., Chicago—Wells & Co., 2501 South Dearborn St., plans to build printing plant on 100,000 sq.ft. site on South 52nd Ave. and 18th St.

Ill., Duquoin—Chamber Commerce having plans prepared for shoe factory. About $50,000.

Wis., Green Bay—H. W. Kreuger soon lets contract building 2 story, 100 x 100 ft. sheet metal factory. Cost between $50,000 and $60,000.

Wis., Sheboygan—F. Blocki Co., 8th St. and Maryland Ave., plans to build 2 story factory. About $70,000.

Minn., Minneapolis—Brin Glass Co., 610 North 1st St., soon lets contract building 4 story, 66 x 162 ft., concrete warehouse on 6th Ave., N. About $100,000. C. E. Bell, 518 Security Bldg., Minneapolis, archt.

Kan., Oswego—City voted $50,000 bonds to build new lighting plant. Noted Mar. 20.

Neb., Beatrice—City plans to build hydroelectric power plant. About $56,000.

Neb., Omaha—Nebraska & Iowa Steel Tank Co., 13th St. and Wills Ave., plans to build 1 story, 120 x 235 ft., rein.-con. and brick plant. About $50,000. T. R. Kimball, 836 World-Herald Bldg., archt.

N. D., Fargo—City voted $150,000 bonds to build electric light plant. F. L. Anders, city engr. Noted Mar. 13.

Mo., St. Louis—Swift & Co., 39th and Papin Sts., soon lets contract building 1 story, 60x60 ft., concrete, brick and steel addition to power house, rein.-con. flooring, concrete foundation, on 39th and Papin Sts. Cost including equipment $70,000. H. A. Green, o/c owner, supt.

Wash., Selah—T. R. Slusher plans to build addition to cold storage warehouse. About $50,000.

Wash., Vancouver—California Barrel Co. purchased 130 acre site and plans to build plant. About $500,000. Address F. J. Koster, 22nd and Illinois Sts., pres. of San Francisco Chamber Commerce.

Ore., Gold Hill—Rogue River Lumber & Box Co. purchased sawmill plant of Gold Hill Lumber & Ry. Co., 6 mi. north of here, and plans to rebuild box factories here and extend railway into timber lands. Address S. Bishoprick, Portland.

Ore., Portland—Cook & Gill, Bway. and Everett St., plan to build 4 story, 75 x 112 ft. rein.-con. garage, on 11th and Burnside Sts. About $60,000. Sutton & Whitney, Lewis Bldg., archts.

Ore., Portland—A. H. Maegley, Eilers Bldg., plans to build 95 x 100 ft. brick garage on 2nd and Main Sts. J. V. Bennet, Chamber Commerce Bldg., archt.

Ore., Woodburn—A. Graves, pres., Sheridan State Bank, Sheridan, having plans prepared for large berry cannery here.

Cal., Calexico—C. R. Rockwood had plans prepared by J. F. Rhodes, archt., 415 Central Bldg., Los Angeles, building 1 story, 100 x 146 ft., rein.-con. garage and shop, concrete foundation.

Cal., Los Angeles—G. H. Wadleigh, c/o E. L. Mayberry, archt., 468 Pacific Electric Bldg., having plans prepared for 3 story, 70 x 170 ft., rein.-con. and brick garage and shop, rein.-con. flooring, concrete foundation, on 7th St. near Figueroa St. H. G. Haffer, 1026 Orange St., lessee.

Cal., San Diego—Brighton Mills, Brighton Ave., Passaic, N. J., plans to build cotton spinning and weaving plant here. About $100,000. E. C. Lyall, representative.

Cal., San Diego—Weldon Sash & Door Co. plans to rebuild 1 story, brick and timber mill, concrete foundation, on 13th and L Sts. About $25,000.

Cal., Turlock—E. L. Jewett, C. W. Hunt and L. E. Bontz, all of Turlock, plan to build 50 x 500 ft. curing plant. About $60,000.

Ont., Ottawa—Ottawa Gas Co., Sparks St., soon receives bids completing plant on Lees Ave. About $850,000. A. A. Dion, 35 Sparks St., supt.

Ont., Timmins — Hollinger Consolidated Mines soon receives bids building plant. Cost, including equipment, $500,000. A. F. Brigham, mgr.

Industrial Works (Continued)

Cuba, Havana—Cuban Air Reduction Co., 120 Bway., New York City, having plans prepared for 2 story, 98 x 108 ft. rein.-con. acetylene plant, rein.-con. flooring, concrete foundation, here. About $100,000.

BIDS DESIRED

N. Y., New York—Until May 1, by J. Fisher, archt., 25 Ave. A, constructing 2 story, 70 x 154 ft. brick and concrete storage building, rein.-con. flooring, concrete foundation, on East 3rd and Tompkins Sts., for J. Goldstein, c/o archt. About $75,000. Noted Mar. 20.

N. Y., New York—Until Apr. 19, (change of date), by J. Fisher, archt., 25 Ave. A, building 2½ story, 75 x 150 ft. brick and steel warehouse, rein.-con. flooring, concrete foundation, on 3rd and Tompkins Sts., for Horowitz Bros., 371 East 4th St. About $75,000. Noted Apr. 3.

Pa., Phila.—Until Apr. 21, by C. W. Miller, Morris Bldg., building 1 story, 50x215 ft., brick garage, cement flooring, stone foundation, on Market and 49th Sts. L. B. Rothschild, 1225 Sansom St., archt.

Pa., Phila.—Until Apr. 25, by F. E. Hahn, archt., 1112 Chestnut St., building 3 story, 80x200 ft. rein. con., brick and steel warehouse at 943 North 2nd St., for United Wholesale Grocery Co.

Md., Baltimore—Crouch & Leeser, 114 East Lombard St., receiving bids for 1 story, 81 x 200 ft., concrete and brick garage brick and concrete foundation, on York Rd. and 35th St. About $50,000. F. E. Beall, Gilmor St., archt.

O., Dayton—Until Apr. 26, by R. E. Gebhart, archt., 73 Callahan Bank Bldg., building 3 story, 60 x 80 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on Franklin St., for Custer Specialty Co., 26-28 North Ludlow St.

Neb., Omaha—Until May 15, by Skinner Packing Co., 904 1st Natl. Bank Bldg., building 8 story, 99 x 132 ft. cold storage plant, on 12th and Douglas Sts. About $500,000. H. C. Christianson & Co., 7258 Union Ave., Chicago, archts. Noted Mar. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Cambridge (Boston P. O.)—C. F. Hathaway & Sons, 25 Richdale Ave., let contract building 1 story, 110 x 125 ft. brick and steel addition to bakery, rein.-con. flooring, concrete foundation, on Richdale Ave., to B. Fox, Inc., 15 Exchange St., Boston. About $60,000.

★Mass., East Boston—(Boston P. O.)—Simson Drydock Co. let contract building 1 story, brick and concrete machine and repair shop, concrete foundation, on Marginal St., to Dillaby Fireproofing Co., 101 Tremont St., Boston. About $50,000.

★R. I., East Providence (Providence P. O.)—Office, Standard Oil Co., 136 South Water St., Providence, let contract building 100 x 150 ft. brick and steel addition, concrete foundation, on Pawtaucket Ave., to H. D. Best & Co., 949 Bway., New York City. About $500,000.

★R. I. Elmwood—(Providence P. O.)—Office, etc.—Providence Body Co., 32 Eagle St., Providence, let contract building 1 story, 75 x 302 ft. mill construction factory, and 1 story, 30 x 30 ft. office, on Elmwood Ave. here. to J. F. Cole, 81 Niagara St., Providence. About $55,000.

★R. I., Providence—M. W. Norton, Page St., let contract building 1 story, 80 x 125 ft. mill construction garage, rein.-con. flooring, concrete foundation, on Dorrance St., to Interstate Constr. Co., 29 Weybosset St. About $30,000.

★Conn., Bristol—E. Ingraham Co., 392 North Main St., let contract building 5 story, 50 x 100 ft. rein.-con. addition to factory, rein.-con. flooring, concrete foundation to H. Wales Lines Co., 134 State St., Meriden. About $100,000. Noted Apr. 17.

★Conn., Hartford—Fassler & Silberman, 109 Commerce St., let contract building 3 story, 80 x 137 ft. mill construction warehouse, rein.-con. foundation, on Commerce St., to J. H. Grozier Co., 721 Main St. About $30,000.

★Conn., New Haven—Hemming Bros. Co., Inc., 205 River St., let contract building 1 story, 50 x 140 ft. brick and timber factory, rein.-con. flooring, concrete foundation, on River St., to Larkin-Carey Co., 166 Brewery St. About $25,000.

★Conn., Stratford (Bridgeport P. O.)—W. F. Chatlos, 1374 Barnum Ave., Bridgeport, will build brick and timber plant and lumber yard, concrete flooring and foundation, on West Broad St. About $50,000. Work will be done by day labor.

★N. Y., Brooklyn—M. Goetz, 241 26th St., will build 2 story, 60 x 119 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Atlantic Ave. and St. James Pl. About $45,000. Work will be done by day labor.

★N. Y., Brooklyn—Landcus Realty Co., 215 Montague St., will build 1 story, 50 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on North 6th and Havemeyer Sts. About $50,000. Work will be done by day labor.

★N. Y., Long Island City—Repetti Inc., 514 West 36th St., New York City, let contract building 90 x 200 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on Nott Ave. and Blvd., to Factory Constr. Co., 44 Court St., Brooklyn. About $350,000.

★N. Y., New York—C. J. Brooks, 872 9th Ave., will build 2 story, brick and steel garage, rein.-con. flooring, concrete foundation, at 605-19 West 56th St. About $28,000. Work will be done by day labor.

★N. Y., New York—Pictorial Review Co., 222 East 39th St., let contract building 12 story, 107 x 147 ft. brick and steel printing plant, rein.-con. flooring, concrete foundation, on 7th Ave. and 39th St., to G. B. Beaumont, 286 5th Ave. About $850,000. Noted Feb. 27.

★N. Y., New York — Z. T. Piercy, 207 Thomson St., will build 3 story, 39 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 125-129 West 3rd St. About $50,000. Work will be done by day labor. Noted Apr. 3.

★N. Y., New York—M. Rubin, 1969 Amsterdam Ave., will build 2 story, 100 x 203 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Jamel Pl. and 167th St. About $200,000. Work will be done by day labor.

★Pa., Philadelphia—A. Colburn & Co., 2238 North 10th St., let contract building 4 story, 60 x 220 ft., brick and timber factory, concrete foundation, on 10th and Nevada Sts., to F. L. Hoover & Sons, 1023 Cherry St. About $90,000. Noted Apr. 10.

★Pa., Pittsburgh—Simon Caplan Glantz Co., 145 Fullerton St., let contract building 2 story, 96 x 120 ft., concrete and brick bakery, concrete foundation, to H. Miller & Sons Co., May Bldg. About $60,000.

★Md., Baltimore—Maryland Color Printing Co., Holliday and Hillen Sts., let contract building 10 story, 82 x 120 ft., rein. con. and brick printing plant, on Holliday and Hillen Sts., to Consolidated Eng. Co., 243 Calvert Bldg.

★Md., Relay—Jones-Boardman Corp., 909 Fidelity Bldg., Baltimore, will build two 2 story, 100 x 300 ft., mill construction warehouses, concrete foundation, here (9 mi. from Baltimore). About $60,000. Work will be done by day labor.

★O., Akron—Akron Towel Supply Co., 423 Wabash Ave., let contract building 1 story, 74 x 122 ft. brick, steel and concrete laundry, at 423 Wabash Ave., to McShaffrey Co., 171 South Ford St. About $60,000.

★O., Cleveland—M. Bealls, 2711 Scoville Ave., let contract building 1 story, 36 x 90 ft. brick and timber addition to factory, to S. Newman, 1710 Drexel Ave. About $25,000. Noted Mar. 13.

★O., Cleveland—Dickey Grabler Co., 118 Noble Court, let contract building 1 and 2 story, 46 x 69 and 60 x 268 ft. brick, steel and concrete factory and office, rein.-con. flooring and concrete foundation, on Madison Ave. and West 104th St., to W. Dunbar Co., 8201 Cedar Ave. About $65,000. Noted Apr. 3.

★Ill., Chicago—Phipps Estate, 787 5th Ave., New York City, let contract building 1 story, 133 x 520 ft., brick and timber factory, rein.-con. flooring, concrete foundation, on 47th and Whipple Sts., to Stresenreuter Bros., 3020 South Halsted St. About $200,000. Marshell, Field & Co., 22 East Washington St., lessee. Noted Feb. 27.

★Wis., Green Bay—Automatic File & Index Co., 414 Bellin-Buchanan Bldg., let contract building 3 story, 120 x 180 ft., rein.-con. factory, on Pearl St., to L. M. Hansen Co., 113 West Walnut St. Cost between $50,000 and $60,000.

★Wis., Racine—Amer. Skein & Fdry. Co., Lakeside, let contract building 1 story, 140 x 160 ft., concrete, brick and steel foundry, concrete foundation, on Lakeshore Rd., to L. Nelson & Co., Robinson Bldg. About $50,000. Cost plus percentage basis.

★Wis., Sheboygan—Raab-T[illegible]emon Co. let contract building 2 story, [illegible] x 150 ft. rein.-con., brick and steel garage, rein.-con. flooring, brick foundation at 528 8th St., to Geuhlstorf & Heyer, Sheboygan.

★Ore., Astoria—Astoria Pulp & Paper Co. let contract building 40 x [illegible] ft. addition to paper mill, to P. Trullinger. About $25,000. Noted Feb. 20.

★Ore., Astoria—Port of Astoria let contract constructing shed and building addition to and remodeling existing plant, to J. A. McEachern, $6165 and $27,500 respectively. Noted Mar. 20.

★Cal., Atwater—Sunlit Fruit Co. will build 2 story, 120 x 175 ft. concrete and brick addition to cannery. About $100,000. Work will be done by day labor. Noted Mar. 27.

★Cal., Bakersfield—C. F. Hubbard, agt. for Maxwell Auto Co., 6560 Hollywood St., Los Angeles, let contract building garage, shop and sales building, 1 story, 74 x 122 ft., with 57 x 122 ft. wing, concrete and brick, on 23rd and I Sts., to Currie & Dulgar, Bakersfield, $30,000.

★Cal., Fresno—Western Meat Co., 744 P St., let contract building 2 story, 50 x 150 ft., brick and concrete packing and cold storage plant, rein.-con. flooring, concrete foundation, on Santa Fe Ave., to Larson & Sampson, Crocker Bldg., San Francisco. About $38,000.

Que., Sherbrooke—Canadian Connecticut Cotton Mills, Ltd., Drummond Rd., let contract building 4 story, brick and steel addition, to Loomis-Dakin Constr. Co., 25 Belvidere St. About $50,000. Noted Feb. 27.

Buildings

PROPOSED WORK

Mass., Greenfield—School—Bd. Educ. plans to build school in Nash Mills Dist. and on Montague City Rd. About $100,000.

R. I., Bristol—School—Town plans to build school. About $200,000. Address L. P. Colt, chn. com.

R. I., Providence—Hospital—Homeopathic Hospital of Rhode Island, 64 Jackson St., plans to build 3 story on Chalkstone Ave. About $100,000. Kendall, Taylor & Co., 93 Federal St., Boston, engrs.

Conn., Bloomfield—Church—Blue Hills Chapel, Blue Hills Ave., plans to build brick church on Euclid and Blue Hills Aves. About $50,000.

Conn., Bridgeport — Hotel — E. B. Caldwell, archt., 886 Main St., soon receives bids building 4 story, 170 x 194 ft. brick, concrete foundation, on Washington Ave. and Coleman St., for H. E. Frank, 426 Boston Ave. About $200,000. Noted Mar. 13.

Conn., Bristol—Church—Polish Catholic congregation, Hartford, plans to build on West Main St., here. About $60,000. J. J. Nilan, Hartford, bishop.

Conn., Bristol—Community-City plans to erect community building to include hall, stage and auditorium. About $200,000.

Conn., Bristol—School—Bd. Educ. plans to sell $100,000 bonds to build addition to Park St. School.

Conn., Enfield—Hospital—Town plans to build hospital. About $150,000. Address T. G. Alcorn, 25 South St., Thompsonville.

Conn., Manchester — Hospital — Town plans campaign to raise $150,000 to build memorial hospital on Main St.

Conn., New Haven—Hotel—A. Gingold, 23 Church St., plans to build 5 story, 73x110 ft. brick and concrete, concrete foundation, on Orange St, About $100,000. C. J. Bailey, 94 Church St., archt.

Conn., New Haven—Hotel—S. Ladinsky, 40 Arch St., plans to build 4 story, on Chapel and Dwight Sts. About $100,000.

Conn., New Haven—Hotel—A. D. Mullen, 42 Church St., soon receives bids building 4-story, 70 x 155 ft. brick and concrete, concrete foundation, on Crown and High Sts. About $100,000. W. A. Donovan, 3 Colony St., Meriden, archt.

Conn., New London—Club House—Loyal Order of Moose, 39 Bank St., plans to build 4 story, brick and concrete. About $100,000.

Conn., New London — Memorial — Connecticut College for Women, Mohegan Ave., plans to build 3 story memorial to the late F. H. Sykes. About $100,000. Address W. S. Swisher, 44 Tremont St.

Buildings (Continued)

N. Y., Albany—Theater—M. Spiegel, Strand Theater Bldg., soon receives bids building 2 story, 75 x 175 ft. brick and steel, concrete foundation, on Monroe St. About $150,000. T. W. Lamb, 644- 8th Ave., New York City, archt. Noted Mar. 20.

N. Y., Amsterdam—School—City election May 6, to vote on $125,000 bonds to build brick and concrete school on East Main St. Address H. Sherburne, c/o Bd. Educ.

N. Y., Brooklyn—Theater—H. Spiegel 308 Sheffield Ave., having plans prepared by Zipkes, Wolf & Kudroff, archt., 25 West 42nd St., New York City, building 2 story, 100 x 200 ft. brick and steel, concrete foundation, on Stone and Pitkin Aves. About $100,000.

N. Y., Buffalo—High School—Bd. Educ. having plans prepared by Essenwein & Johnson, archts., Ellicott Sq., building 3 story, 60 x 300 ft. brick and steel addition, concrete foundation, on Lafayette Ave. About $125,000.

N. Y., Dolgeville—School—City election soon to vote on $100,000 bonds to build school. Address Bd. Educ.

N. Y., Geneva—High School—Bd. Educ. having plans prepared building high school. About $300,000.

N. Y., New York—Theater—B. S. Moss Co., 729 7th Ave., soon lets contract building 2 story, 137 x 161 ft. brick and steel, concrete foundation, on 181st St. and Bway. About $475,000. De Rosa & Pereira, 110 West 40th St., archts.

N. Y., New York—Theater—823 Trinity Ave. Corp., 7 East 42nd St., soon receives bids building 2 story, 92 x 130 ft. brick and steel, concrete foundation on Fordham Rd. and Valentine Ave, (Bronx Boro.). About $75,000. M. Kramer, pres. H. J. Krapp, 116 East 16th St., archt.

N. Y., North Tonawanda—Club House—Elks Lodge soon receives bids building club house on Main and Sweeney Sts. About $100,000.

N. Y., Rochester—Club House—Rochester Knights of Columbus, Triangle Bldg., having plans prepared by W. V. Madden, archt., Rochester, building 70 x 270 ft. on southeast corner Chestnut and Lawn Sts. Cost between $150,000 and $175,000.

N. Y., Utica—School—Bd. Educ. having plans prepared by Gouge & Ames, archts., 70 Genesee St., altering and building addition to school on Elizabeth and Charlotte Sts. About $70,000.

N. J., Jersey City—Office—Armour & Co., 324 17th St., plans to build office and storage plant between 17th and 18th Sts. About $4,000,000.

N. J., Jersey City—Theater, etc.—J. M. Brennon and M. Schlesinger, Broad St. Theater Bldg., Newark, had tentative plans prepared by W. E. Lehman, archt., 738 Broad St., Newark, building 2 story moving picture theater, stores and offices on Newark Ave. and Frazer Pl., here.

N. J., Jersey City — Theater — Keith Theater Co., 174 Newark Ave., plans to build theater on Bay St. and Newark Ave. About $400,000.

N. J., Perth Amboy—School—St. Stephens congregation, 500 State St., having plans prepared by E. F. Durang ,archt., 1220 Locust St., Phila., building 3 story, 60 x 135 ft., stone, rock foundation. About $125,000.

N. J., Trenton — Hotel — Essenwein & Johnson, archts., Ellicott Sq., Buffalo, N. Y., preparing plans for 9 story, 110 x 200 ft. brick and steel, concrete foundation, here. About $1,000,000. Owner's name withheld.

Pa., New Castle—Church—Polish Catholic congregation soon lets contract building 94 x 101 ft. brick and stone, on Miller Ave. About $50,000. W. G. Eckles, Lawrence Savings & Trust Co. Bldg., archt.

Pa., Phila. — Club — Art Alliance, 1823 Walnut St., had plans prepared by R. A. Cram, archt., 15 Beacon St., Boston, building 6 story, 67 x 228 ft. concrete and brick, concrete foundation. About $1,000,000.

Pa., Phila.—Temple—Lu Lu Temple, 1337 Spring Garden St., receives bids in June, constructing new building on 22nd St. and Parkway. About $1,000,000. J. T. Windrim, Commonwealth Bldg., archt. Noted Mar. 20.

Pa., Pittsburgh—Y. M. C. A. soon receives bids constructing 4 story, 81 x 120 ft., steel and brick building, concrete foundation, on Center and Francis Sts. Plans include swimming pool and gymnasium. About $100,000. E. B. Lee, Chamber of Commerce Bldg., archt. Noted Apr. 10.

Pa., Wilkes-Barre — Church — Syrian Greek Catholic congregation, Blackman St., having plans prepared for 1½ story, 35 x 75 ft. rein.-con., steel and brick, concrete foundation, on High and Blackman Sts. About $52,000. C. R. Rinehimer, 10 Airy St., archt.

Md., Baltimore — Bank — Citizens Natl. Bank, Pratt and Hanover Sts., plans to build 2 story, concrete and steel on Light and Redwood Sts. About $200,000. A. D. Graham, pres.

Md., Baltimore—School—Blessed Sacrament congregation, York Rd. and Springdale Ave., soon lets contract building 2 story, 60 x 100 ft., rein.-con., steel and brick, brick and concrete foundation, on York Rd., Springdale Ave. and Star Lane. About $75,000. H. I. Kavanaugh, 913 North Charles St., archt.

Md., Baltimore—School—City plans to build 3 story, brick, concrete and stone, on Falls Rd. and 36th St. About $140,000. R. G. Osborne, City Hall, archt.

Md., Baltimore—Theater—Greater Baltimore Theater Co., 2706 Philadelphia Ave., having plans prepared by W. O. Sparklin, archt., 1402 Fidelity Bldg., for 1 story, 75 x 150 ft., concrete, steel and brick, on Belnord Ave. and Fayette St. About $80,000.

Fla., Jacksonville—Church—Presbyterian congregation plans to build church. About $50,000. C. T. Paxon, Mutual Life Bldg., mgr.

Fla., Miami—Hotel—Urmey Hotel, 13th St. and Ave. B., plans to improve and build 2 story addition. About $100,000.

Ala., Albany—Hotel—Albany Hotel Co., recently incorporated, plans to build hotel. About $125,000. J. Patterson, chn.

Miss., Columbus—Bank—Columbus Natl. Bank, having plans prepared by P. J. Krouse, archt., M & W Bldg., Meridan, for bank to replace one recently damaged by fire. Loss $250,000.

O., Cleveland—High School—F. Warner, archt., 768 Hippodrome Annex Bldg., receives bids in May, building 3 story, 125 x 200 ft. brick, steel and concrete, rock foundation, on Lee Rd. About $300,000.

O., Dayton—Club House—W. Kidder, Salem Pike, plans to build 2 story, 120 x 240 ft. timber and concrete, rein.-con. flooring, on Salem Pike. About $150,000. Schenck & Williams, Mutual Home Bldg., archt.

O., Toledo—Theater—Hurtig & Seaman, 1571 Bway., New York City, having plans prepared by Thal & Bruyere, archts., 747 Ohio Bldg., building 3 story, brick, steel and rein.-con. on St. Clair St., here. About $90,000.

Mich., Detroit—Office, etc.—Gen. Motors Corp., Boyer-Campbell Bldg., having plans prepared by A. Kahn, archt., Marquette Bldg., building 15 story, 336 x 482 ft. rein.-con. steel and brick office building, rein.-con. flooring, concrete foundation on Cass Ave. and West Grand Blvd., cost $5,250,000; 4 story, 60 x 480 ft. rein.-con., steel and brick research laboratory, rein.-con. flooring, concrete foundation, on Cass and Milwaukee Aves.; also 8 story rein.-con. steel and brick sales and service building, rein.-con. flooring, concrete foundation, on Cass and York Aves., to be used by Cadillac Motor Car Co., cost $1,500,000.

Ill., Chicago—Bank and Office—Merchants Loan & Trust Co., 112 West Adams St., and Illinois Trust & Savings Bank, 233 South La Salle St., plan to combine into one company, (name not yet announced), and erect 16 story building on 45,000 sq. ft. site on Jackson St. from Clark to La Salle Sts. About $2,000,000.

Ill., Chicago — Hospital — Ravenswood Hospital Assn., 1917 Wilson Ave., having plans prepared by W. H. Pruyn Jr., archt., 122 South Michigan Ave., building 6 story, 150 x 100 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on Winchester and Wilson Aves. About $400,000.

Ill., Chicago—Hotel—C. H. Lott, Parkway Hotel, plans to build 14 story, 120 x 128 ft. brick, rein.-con. and steel, concrete foundation, on Lincoln Park West and Webster Ave. About $1,750,000. M. Friedstein, associated with G. H. Gottschalk, 111 West Washington St., archt.

Ill., Chicago—Merchandise—J. R. Magill & Co., 35 North Dearborn St., plans to build 2 story, 9 x 130 ft. display building with glass front, facing on both upper and lower levels of improved Michigan Ave. and East South Water St.

Ill., Chicago—Theater, etc.—A. E. Whitbeck, c/o W. W. Ahlschlager, archt., 111 West Washington St., soon lets contract building 3 story 135 x 150 ft., brick and timber, rein.-con. flooring, concrete foundation, on 63rd and Union Sts. About $700,000. Noted Mar. 27.

Ill., Chicago—Theater and Office—Jones Linick & Schaefer, Rialto Theater Bldg., had plans prepared by T. Ryan, archt., New York City, for 120 x 142 ft. buildings, 200 ft. high, on State and Monroe Sts. About $1,000,000.

Wis., Green Bay—Home—McCormick Memorial Home having plans prepared by Foeller & Schober, archts., 123 North Washington St., building home for aged. About $50,000 available.

Wis., Kenosha—School—Bd. Educ. plans to build 2 story, 140 x 180 ft., steel and timber grade school, rein.-con. flooring, concrete foundation. About $200,000. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Wis., Madison—Vocational and High School—F. L. Kroenberg, archt., 18 North Carroll St., receives bids about May 1, building brick addition on Johnson and Carroll Sts., for Bd. Educ. About $300,000. Noted Feb. 27.

Minn., Centerville—School—City having plans prepared by Magney & Tusler, archts., Builders Exch., Minneapolis, building 2 story, 50 x 62 ft., brick school. About $50,000. G. E. Burque, city clk.

Minn., Duluth — Business — United Yard & Terminal Assn., 5823 Oneida St., plans to build 3 story, 100 x 140 ft. brick, rein.-con. flooring, concrete foundation. About $100,000. C. C. Randall, pres.

Minn., East Grand Forks—High School—City having plans prepared by B. Keck, archt., Grand Forks, N. D., for school. About $100,000.

Minn., Moorhead—School—City soon receives bids building 2 story, brick and steel, brick foundation, in 3rd Ward. About $50,000. J. H. Hess, Moorhead, archt.

Minn., St. Paul—Barn—Comrs. Ramsey Co. plan to build 40 x 225 ft., brick and stucco stock barn. About $61,000. Buechner & Orth, 500 Shubert Bldg., archts.

Minn., St. Paul—Libraries—City having plans prepared by C. A. Hausler, city archt., City Hall, building 2 public libraries, brick, one on Marshall and Fairview Aves. and other on Jefferson and Oneida Sts. About $25,000 each.

Minn., Sauk Rapids—Church—Sacred Heart congregation plans to build church. About $75,000.

Minn., Stillwater—Church—First Church of Christ Scientist plans to build 1 story, 43 x 83 ft., brick, rock foundation. About $50,000. Magney & Tusler, Builders' Exch., Minneapolis, archts.

Minn., Willmar—High School—Bd. Educ. soon lets contract building 3 story, 100x150 ft., concrete and steel addition to high school, brick foundation. About $140,000. Tyrie & Chapman, 320 Auditorium St., Minneapolis, archts.

Neb., Omaha—Bath House—City having plans prepared by B. Kvenild, archt., City Hall, for 1 story, 60 x 200 ft., brick and concrete, at Carter Lake. About $60,000.

Neb., Omaha—High School of Commerce—Bd. Educ. had plans prepared by F. W. Clarke, archt., 623 Brandeis Bldg., building 3 story, 210 x 240 ft., high school, 2 story 50 x 244 ft., brick shop building and 90 x 150 ft., gymnasium. About $800,000.

Neb., Omaha—Home and School—Sisters of Mercy, 15th and Castelar Sts., having plans prepared by J. Latenser & Sons, archts., 632 Bee Bldg., for 3 story, 80 x 100 ft., concrete, on 18th and Cass Sts. About $200,000.

Neb., Omaha—Police Station and Jail—City plans to build 3 story, 86 x 132 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on 11th and Dodge Sts. About $200,000. G. L. Fisher, 1529 City Natl. Bank, archt.

Mont., Billings—Church—St. Johns' Lutheran congregation had plans prepared by T. Thorsen, archt., Forest City, Ia., for church. About $50,000. O. Skilbred, pastor.

Mont., Bozeman — Hospital — Montana Osteopath Society plans to build hospital. About $75,000. A. Dean, interested.

Mo., St. Louis—Auditorium—Bd. Pub. Serv. plans election soon to vote on $1,000,000 bonds to build auditorium. L. R. Bowen, city engr.

Buildings (Continued)

Mo., St. Louis — High School — Rosatti-Kain High School, Grand and Lucas Aves., purchased site and plans to build high school. About $150,000. J. J. Glennon, archbishop.

Mo., St. Louis—Hog House—Swift & Co., 39th and Papin Sts., receives bids about Apr. 21, building 30x300 ft., steel and concrete addition. About $72,000. H. E. Poertner, c/o owner, engr.

Okla., Beggs—School—Bd. Educ. plans to build brick and stone. About $55,000. J. Hicks, 19½ West Main St., Oklahoma, archt.

Okla., Tulsa—High School—City voted $135,000 bonds to build high school including gymnasium.

Okla., Tulsa—Hotel—J. R. Brauns plans to build 125 room hotel. Thompson & Flemming, Tulsa, archts.

Utah, American Fork—School—City plans election soon to vote on $150,000 bonds, to build school in Alpine School Dist.

Wash., Aberdeen—Club House—Aberdeen Soldiers and Sailors League plans to build club house. About $50,000. R. Mack, pres.

Ore., Astoria—Hotel—F. White, archt., Chamber Commerce Bldg., Portland, preparing plans for 50 x 150 ft. brick, here. About $60,000. Owner's name withheld.

Ore., Corvallis—Laboratory—Oregon Agricultural College having plans prepared by J. Bennes, archt., Chamber Commerce Bldg., Portland, for 2 story, 56 x 220 ft. brick and concrete engineering laboratory. State Legislature appropriated $60,000 for same.

Cal., El Segundo—School—School Trustees having plans prepared by Train & Williams, archts., 226 Exch. Bldg., Los Angeles, building brick school, concrete foundation, to include auditorium, manual training departments, gymnasium, etc. About $90,000. Election will be held Apr. 28 to vote on bonds for project.

Cal., Fresno — Church — Methodist Episcopal congregation plans to build, here. About $100,000. H. M. Du Bose, bishop.

Cal., Hollister—School—Trustees Grammar School Dist. having plans prepared by H. C. Smith, archt., Humboldt Bank Bldg., San Francisco, building 1 story, rein.-con. and brick, rein.-con. flooring, concrete foundation. About $125,000.

Cal., San Francisco—Bank—Bank of Italy, Montgomery and Clay Sts., having plans prepared by Bliss & Faville, archts., Balboa Bldg., building 6 story, rein.-con. and brick, on Powell and Eddy Sts. About $500,000.

Cal., San Francisco—School—Bd. Educ. plans to build on Pacific Ave. and Broderick St. About $200,000. G. E. Gallagher, pres.

Cal., San Francisco—School—St. Ann's congregation having plans prepared by W. D. Shea, archt., 244 Kearney St., building 2 story rein.-con., rein.-con. flooring, concrete foundation on 14th Ave. and Irving St. About $60,000.

N. S., Halifax—Hospital—Dominion Government, Ottawa, Ont., soon lets contract for 3 story, 41 x 109 ft. stucco and timber ward building; also altering present building at Bellevue Military Hospital here. About $60,000. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, engr.

Que., St. Angus—Church—L. Auger, archt., 39 St. Johns St., Quebec, soon lets contract building 40 x 110 ft. brick and steel, concrete foundation, for Roman Catholic congregation. About $72,000. J. A. Provencher, pastor.

Ont., London—Custom House—Dept. Pub. Wks., Ottawa, soon receives bids building here. About $400,000. R. C. Wright, c/o Dept. Pub. Wks., engr.

Ont., Orillia—Bank—Dominion Bank of Canada, King St., Toronto, having plans prepared by J. M. Lyle, archt., 19 Avondale Rd., Toronto, building brick and stone here. About $50,000.

Ont., Ottawa—Market—Bd. Control receives bids in summer bulding market near Ward Market Sq. About $150,000. A. F. MacCallum, City Hall, engr.

Ont., Ottawa—Schools—Dept. Educ., Toronto, soon receives bids remodeling and repairing Provincial Normal and Normal Model Schools on Elgin St., brick and timber, rock foundation. About $65,000. J. Leath, supt.

Ont., Ottawa—Store—H. J. Daly, Connaught Pl., having plans prepared building 6 story, 75 x 200 ft. on Spark St. About $300,000.

Ont., Renfrew—Church—Roman Catholic congregation having plans prepared by Millson & Burgess, archts., 209 Sparks St., Ottawa, building church. About $65,000.

Sask., Saskatoon—Store—Barries, Ltd., purchased site on 2nd Ave. and 22nd St. and plans to build store. About $100,000.

BIDS DESIRED

Mass., Foxboro—Hospital—Until Apr. 21, by State Comn. Mental Diseases, State House, Boston, building 3 story, 50 x 160 ft. brick addition, concrete foundation, on state grounds here. J. McLaughlin, 88 Tremont St., Boston, archt. Noted Jan. 16.

N. Y., Albany—Laboratory—Until Apr. 30, by H. M. Biggs, comr. of health, State Dept. Health, Capitol, building laboratory, etc. L. F. Pilcher, Capitol, state archt.; advertised in this issue.

N. Y., Long Island City—School—Until Apr. 22, by C. B. J. Snyder, supt. school buildings, Municipal Bldg., New York City, building P. S. No. 3, 3 story, 105x108 ft., brick and steel, concrete foundation, on Colonial Ave. between Livingston and Meteor Sts., Queens Boro. About $200,000. Noted Mar. 27.

N. Y., Newark—Cottage—Until May 8, by S. F. S. Armstrong, pres. bd. trustees, State Custodial Asylum for Feeble Minded Women, building cottage here. L. F. Pilcher, Capitol, Albany, state archt.; advertised in this issue.

O., Akron—School—Until May 5, by J. F. Barnhart, clk. bd. educ., Forge and College Sts., building 2 story, 100 x 160 ft. brick school annex. T. R. Ridley, Cottage Pl., archt.

Ind., Gary—Theater—D. S. Klafter, archt., 64 West Randolph St., receiving bids for 1 story, brick and steel, rein.-con. flooring, concrete foundation, on 16th St. and Bway. About $125,000. Noted April 3.

Mich., Flint—Hotel—Until May 12, by Essenwein & Johnson, archts., Ellicott Sq., Buffalo, N. Y., building Duran Hotel, here, 6 story, 100 x 200 ft., concrete and steel, concrete foundation, for Citizens' Hotel Co., Ellicott Sq., Buffalo, N. Y. About $850,000. Noted Dec. 26.

Wis., Racine—City Hall—Until May 3, by Bd. Pub. Wks., remodeling 3 story, brick and steel, on Main St. About $60,000. A. A. Guilbert, Robinson Bldg., archt.

Minn., Campbell—School—Until Apr. 28, by C. P. Carlson, clk. bd. educ., building 2 story, brick, brick foundation. About $75,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul, engr.

Minn., Kearney—School—Until May 15, by E. F. Broomhall, archt., Alworth Bldg., Duluth, building two 2 story, rein.-con., brick and steel grade schools, rein.-con. flooring, concrete foundation. About $50,000 each.

Okla., McAlester — High School — Until May 12, by Bd. Educ., building 2 story, 100 x 213 ft., rein.-con. and brick, rein.-con. flooring. About $240,000. Noted Mar. 20.

Ont., Iroquois—K. G. Rea, archt., Beaver Hall Hill, Montreal, Que., receiving bids for 2 story, 45 x 80 ft. stone and steel, concrete foundation, here, for Molson Bank, St. James St., Montreal. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Hartford — Hotel — D. Kaplan, c/o Berenson & Moses, archts., 26 State St., will build 3 story, 60 x 120 ft. brick and concrete, concrete foundation, on Buckingham St. About $75,000. Work will be done by day labor. Noted Mar. 6.

★Conn., Hartford—Hotels—A. K. Morrissey, 401 Farmington Ave., will build two 3 story, 34 x 77 ft. and 34 x 89 ft. brick and timber hotels, concrete foundation, on Imlay St. About $100,000. Work will be done by day labor.

★Conn., Hartford—Hotel—J. J. Wall, 9 Clinton Ave., will build 4 story, 22 x 155 ft. brick, concrete foundation, on Clinton St. About $65,000. Work will be done by day labor.

★Conn., New Haven—Hotel—H. A. Leonard and others, 902 Chapel St., let contract building 10 story, 100 x 120 ft. brick and steel, rein.-con. flooring, concrete foundation, on College and Chapel Sts., to J. W. Leonard & Co., 902 Chapel St. About $400,000. Noted Mar. 13.

★N. Y., Huntington Park (Huntington P. O.)—Museum—A. Heckscher, 50 East 42nd St., New York City, let contract building 1 story, 44 x 113 ft. brick and marble, concrete foundation, here, to J. G. Deisler, Inc., 105 West 40th St., New York City. About $160,000. Noted Mar. 13.

★N. Y., New York—Office—Chicago Pneumatic Tool Co., 343 South Dearborn St., Chicago, let contract building 12 story, 50 x 90 ft. brick and steel, concrete foundation, at 6-8 East 44th St., to Westinghouse, Church, Kerr, 37 Wall St. Cost plus percentage basis. Noted Mar. 6.

★Pa., Phila.—Drill Shed—Armory Bd. of State of Pa., Capitol, Harrisburg, let contract building 1 story, 154 x 282 ft., rein.-con., steel and brick, rein.-con. flooring, concrete foundation, on Lancaster Ave., here, to G. F. Pawling & Co., 1432 South Penn Sq. About $215,000. Noted Mar. 27.

★Pa., Pittsburgh—Office—Peoples Natl. Gas Co., 6th Ave., let contract building 11 story, 20 x 110 ft. concrete, steel and brick addition, concrete and brick foundation, to Thompson-Starrett Co., 2nd Natl. Bank Bldg. About $280,000.

★Pa., Scranton—Buildings—Poor Dist. let contract for additions and constructing new buildings at Hillside Home, to Breig Bros., Scranton Real Estate Bldg.; $72,043.

Md., Baltimore—Church—Gregory Memorial Baptist congregation. Lyman Ave. and York Rd., received bids building 1 story, 40 x 82 ft., rein.-con., steel and brick, stone and concrete foundation, on York Rd. near Bellona Ave., from E. Eyring & Son, 3612 Fait Ave., J. Waters Bldg. Co., 23 East Centre St.; C. L. Stockhauser Co., Gay and Waters St. and Hicks, Tase & Norris, Inc., 106 Madison Ave. About $50,000.

★O., Cleveland—Office—"See Industrial Works."

★O., Euclid—Schools—Bd. Educ. let contract building two 2 story, brick, steel and rein.-con., concrete foundation, on Berwick and Noble Rds., to Drummond & Miller Co., Guardian Bldg., Cleveland, $100,000 and $75,000 respectively.

★O., Kunkle—High School—Bd. Educ. let contract building 2 story, brick, steel and concrete, to J. B. Manor & Son Co., Grand Rapids. About $60,000.

★Mich., Detroit — Mercantile — W. H. Turner, 512 Moffat Bldg., let contract building, 4 story, 40 x 100 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, on Michigan Ave. and Washington Blvd., to H. G. Christman Co., 315 Stevens Bldg. About $150,000. Noted Apr. 10.

★Mich., Detroit—Office—Chicago Pneumatic Tool Co., 343 South Dearborn St., Chicago, let contract building 5 story, 60 x 181 ft. rein.-con. and steel, rein-con. flooring, concrete foundation, here, to Westinghouse, Church, Kerr, 37 Wall St., New York City. Cost plus percentage basis.

★Ill., Chicago—Office—Chicago Union Station Co., 600 West Jackson Blvd., let contract constructing 14 story, 180 x 380 ft. brick and steel mail order building, concrete foundation, on Randolph and Canal Sts., to J. Griffiths & Son Co., 112 West Adams St. About $2,500,000. Noted Mar. 20.

Ill., Chicago—School—Bd. Educ., 5 South Dearborn St., let contract building 3 story, 105 x 110 ft. brick and steel addition to Nash School, rein-con. flooring, concrete foundation, on Erie St. and Lamon Ave., as follows: masonry, to J. L. Connelly, 133 West Washington St., $48,100; structural iron, to Wendnagel & Co., 600 West 22nd St., $21,375; fireproofing, to Illinois Fireproof Constr. Co., 209 South La Salle St., $15,921. Noted Mar. 27.

★Ill., Chicago—Store and Office—L. E. Waterman & Co., 191 Bway., New York City, let contract building 7 story, 28 x 148 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, at 127-129 South State St., to Holabird & Roche, 104 South Michigan Ave. About $225,000. Noted Mar. 27.

★S. C., Paris—Y. W. C. A., 600 Lexington Ave., New York City, let contract building 2 story, 100 x 150 ft. brick and timber hostess house, here, brick foundation, to Tullis & Blanchart, 32 East 42nd St., New York City. About $55,000.

Buildings (Continued)

★**N. C., Fayetteville**—Hospital—R. L. Pittman let contract building 4 story brick, concrete flooring, to T. T. Thain, Fayetteville. About $60,000.

★**Cal., Los Angeles**—Laboratory—Radium & Oncologic Institute, Investment Bldg., let contract building 2 story, 38 x 65 ft. with 36 x 50 ft. wing, rein.-con. on 6th St. and Lucas Ave., to Winter Constr. Co., 2141 Sacramento St. About $50,000.

★**Cal., Santa Barbara**—Theater, Store and Office—E. A. Johnson will build 1 and 2 story, 65 x 150 ft., rein.-con. and brick, concrete foundation, on West Canon Perdido St. About $50,000. Work will be done by day labor.

★**Que., Joliette**—School—School Comn. of Ville de Joliette let contract building 3 story, 60 x 160 ft., concrete, stone and brick, on St. Bartholemy St., to Fournier Bros., 89 2nd Ave., Lachine; $91,500.

★**Que., St. Anne de Bellevue**—Hospital—Dept. Pub. Wks., Ottawa, Ont., let contract for recreation building at military hospital here, to J. Quinlan & Co., 1165 Greene Ave., Montreal, $55,600; Physiotherapy building, to Quinlan & Robertson, 260 St. James St., Montreal, $68,565.

★**Que. Ste. Agathe** — Sanitorium — Dept. Pub. Wks. & Labor, Quebec, let contract constructing of rein.-con. and steel buildings at Laurentian Sanitorium, here, to J. Gosselin, 82 Dalhousie St., Quebec; $253,926. Noted Mar. 6.

★**Ont., Sydenham**—Hospital—Dept. Pub. Wks., Ottawa, let contract altering and building additions to Military Hospital, here, to W. H. Harvey, Kingston. About $75,000. Noted Mar. 6.

★**Man., Winnipeg**—Hospital—Dept. Pub. Wks., Ottawa, let contract building hospital here, to Carter-Halls-Aldinger Co., 1010 Union Bank Bldg. About $172,000. Plans include medical officer's residence, nurses' quarters, orderlies' barracks, recreation and storage buildings.

Federal Government Work

PROPOSED WORK

R. I., Coddington Point—Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build double quarters, here; Spec. 3862. About $15,000.

Pa., Ft. Mifflin—T. N. T. Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here, steel frame and stucco walls. Spec. 3866. About $150,000.

D. C., Wash.—Hospital—Dist. Comrs., Dist. Bldg., Wash., receive bids about June 1, building foundation, power house and tunnel work in connection with new Gallinger Municipal Hospital. Plans include 21 buildings. About $500,000 appropriated for project. Noted Mar. 27.

D. C., Wash.—Swimming Pools—Dist. Comrs., Dist. Bldg., rejected bids building swimming pools at Cardozo Playground, 1st and H Sts., S. W., and at Reservation 126, on Virginia Ave., and 10th St., S. W. Noted Apr. 3.

Va., Camp Humphries—Buildings—War Dept. will ask Congress for appropriation to erect concrete and brick buildings for permanent engineers' camp. Contract will run into millions.

Va., Hampton Roads—Hangars, Landing Pier, Pavement, Roads, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3818. About $560,000.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 6 story, rein.-con. here; Spec. 3859. About $800,000.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 3 story, rein.-con. aircraft storehouse here; Spec. 3860.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 1 story, rein.-con., here; Spec. 3861.

Ill., Great Lakes—Machine Gun Range—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3865. About $10,000.

Mont., Libby—Bureau Pub. Rds., U. S. Dept. Agriculture, Post Office Bldg., Portland, Ore., plans to grade 40 mi. Libby-Rexford Rd., Lincoln Co. About $80,000.

Tex., Galveston—Air Station—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to develop air station, here. Plans include barracks, mess hall, officers' quarters, administration building, dispensary, guard house, roads, fence and railroad connections, hangars, paving, sewer system, beach, etc. Spec. 3864. About $758,000.

Wash., Raymond—Dredging—U. S. Dist. Engr., Seattle, soon receives bids dredging river channel and filling tidelands at Willapa Harbor. About $500,000.

Ore., Portland—Roads—Bureau Pub. Rds., U. S. Dept. Agriculture, Post Office Bldg., soon lets contract building McClellan Pass Natl. Rd., Rainier Natl. Forest, Pierce Co., involving 10 mi. grubbing, 36 acres clearing, 12,600 cu.yd. rock and 50,000 cu.yd. common excav.; Blewett Pass Natl. Forest Rd., Chelan and Kittitas Counties, 8.4 mi. grubbing, 33 acres clearing, 25,000 cu.yd. rock and 125,000 cu.yd. common excav., etc. L. I. Hewes, dist. engr.

Ore., Portland—Road—Bureau Pub. Rds., U. S. Dept. Agriculture, Portland, plans to construct Mt. Hood loop forest road, 37.2 mi. long, 16 ft. wide. About $514,000, cost to be borne by Government and state. L. I Hewes, dist. engr.

BIDS DESIRED

Mass., New Bedford—Dredging—Until May 15, by U. S. Eng. Office, Newport, R. I., dredging harbor here; advertised in this issue.

Conn., Bridgeport—Alterations to Post Office—Until May 6, by J. A. Wetmore, act. superv. archt., treas. dept., Wash., D. C., for alterations to post office here.

N. Y., New York—Removing Wreck—Until May 1, by U. S. Engr. Office, 39 Whitehall St., removing wreck of "Steamship Serantes" in upper Bay; advertised in this issue.

N. J., Cape May—Cold Storage Building—Until April 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at section base, here; Spec. 3685. About $50,000; $10 deposit required for plans and specifications. Noted Nov. 28.

Md., Baltimore—Light House—Until Apr. 22, by Light House Supt., Baltimore, building Cherrystone Bar Light, Va.

Md., Baltimore—Rip Rap—Until May 15, by Supt. Lighthouses, Baltimore, furnishing and placing rip rap stone at light stations in Chesapeake Bay and Potomac River; advertised in this issue.

D. C., Wash.—Galvanizing Plant—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., building here; Spec. 3772. About $110,000.

D. C., Wash.—Grading—Until Apr. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., grading west extension of Navy Yard, here; Spec. 3830. About $8000. Noted Mar. 13.

W. Va., Charleston—Fence—Until May 5. (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3789. About $25,000; $10 deposit required for plans and specifications. Noted Feb. 6.

Ga., Brunswick—Hangars—Until Apr. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., completing 3 steel seaplane hangars; Spec. 3792. About $75,000.

Fla., Pensacola—Sewer Discharge Pipe—Until May 5, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending 8 in. submerged discharge pipe; Spec. 3267. About $12,000; $10 deposit required for plans and specifications. Noted Aug. 1.

Idaho, Sand Point—Post Office—Until May 22, by J. A. Wetmore, act. superv. archt., treas. dept., Wash., D. C., building here.

PRICES AND CONTRACTS AWARDED

(★Indicates Award of Contract)

N. H., Portsmouth—Building Addition—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building addition to Building No. 42, for spar shop,

(1) net price and time for work complete in accordance with specification and drawings;

(2) net price to be added to or deducted from amount stated under (1), if wood roof sheathing and asbestos roofing is used on main building instead of cast in place of gypsum slab construction and asbestos roofing;

(3) net price to be added to or deducted from amount stated under (1) if wood roof sheathing and slate roofing is used on main building instead of cast in place gypsum slab construction and asbestos roofing, from

Hughes Foulkrod Co., 1406 Commonwealth Bldg., Phila. Pa., (1) $62,000; (2) $1472; (3) $1014.

Oscawanna Bldg. Co., 101 Park Ave., New York City, (1) $67,470, (140 days); (2) deduct $1600; (3) deduct $200.

Levering and Gargue, 552 West 23rd St., New York City, (1) $67,977, (140 days); (2) deduct $1250; (3) deduct $200. Noted Apr. 10.

Mass., Boston—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 14, furnishing 6 electric traveling bridge cranes for extension to shop and foundry, here,

(1) net price and time for entire work, consisting of two 50-ton cranes with auxiliary girder and spacing struts for extension 42-A; one 50-ton crane for extension 42-B, one 30-ton crane for extension 42-C, and two 10-ton cranes for extension 42-B all complete and in accordance with drawings and specification;

(2) net price and time to be deducted from price and time stated under (1), for omission of two 50-ton cranes including auxiliary girder and spacing struts, complete, in accordance with drawings and specification (for extension 42-A);

(3) net price and time to be deducted from price and time stated under (1) for omission of one 50-ton crane, complete in accordance with drawings and specification (for extension 42-B);

(4) net price and time to be deducted from price and time stated under (1) for omission of one 30-ton crane, complete, in accordance with drawings and specifications (for extension 42C);

(5) net price and time to be deducted from price and time stated under (1) for omission of two 10-ton cranes, complete, in accordance with drawings and specifications (for extension 42B), from

Whiting Fdry. & Equipment Co., 157th and Lathrop Sts., Harvey, Ill., (1a) $72,065, (110 days); (2a) $29,140, (10 days); (3a) $14,850; (4a) $17,910; (5a) $10,180.

Manning, Maxwell & Moore, 119 West 40th St., New York City, (1a) $72,455, (70 days); (2a) $29,885, (10 days); (3a) $14,887, (5 days); (4a) $17,208, (5 days); (5a) $10,475.

Cleveland Crane & Engr. Co., Wickliff, O., (1a) $78,695, (150 days); (2a) $31,335, (20 days); (3a) $16,860, (30 days); (4a) $18,230, (30 days); (5a) $12,270, (50 days.) Noted Apr. 10.

Mass., Chatham—Sewage Disposal System, etc.—Bureau Yards & Docks Navy Dept., Wash., D. C., received bids Apr. 14, building spetic tank, sewage disposal system, etc., at Naval Air Sta.

(1) net price and time for work, complete, in accordance with drawings and specification, excluding fill required as per (2);

(2) unit price per cu. yd. for fill, measured in excavation, required adjacent to filler bed, as directed by officer in charge based upon a total amount of 25,000 cu. yds., from

H. S. Roberts & Co., 1123 B'way., New York City, (1) $28,425 (75 days); (2) $0.50.

Coleman Bros., 1 Marginal St., Chelsea, Mass., (1) $39,700, (70 days); (2) $1.10.

C. M. Leach, P. O. Box 2285, Boston, Mass., (1) $47,997, (90 days); (2) $1.35. Noted Apr. 3.

★**R. I., Newport**—Quay Wall, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building concrete quay wall and fill at Naval Training Sta., to W. L. Miller & Co., 171 Alford St., Boston, Mass., $133,739 (149 days). Noted Apr. 3.

R. I., Providence—Remodeling Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 8, remodeling post office, here, from Hope Bldg. Co., 87 Weybosset St., $33,746; J. Miles & Son, 393 Main St., Worcester, Mass., $33,980; E. Turgeon, 86 Weybosset St. $34,973. Noted Apr. 3.

★**N. Y., Brooklyn**—Concrete Floors, Sewer and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Air Sta., here, to E. F. Monaham, 195 Hastings St., Manhattan Beach, $8546, (30 days).

★**N. Y., New York**—Fuel Oil—U. S. Shipping Bd., Wash., D. C., let contract furnishing and delivering 3,500,000 bbl. fuel oil here, to Standard Oil Co. of New Jersey, foot Claremont Ave., Jersey City, N. J., $1.15 per bbl. for Grade No. 1 "B"; $.98 for No. 1 "C"; $1.22 for No. 2 "B"; $1.05 for No. 2 "C."

★**N. Y., Wards Island**—Electrical Conduit and Switchboard—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract extending underground electric system and installing addition to switchboard at U. S. Naval Hospital, to E. S. Downs Co., 9 Campbell St., Newark, N. J., $3640, (90 days). Noted Apr. 10.

Pa., Phila.—Gasolene Supply System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 14. building at Navy Yard, here,

(1) net price and time for work, complete, in accordance with drawings and specificatons:

Federal Government Work (Continued)

(2) net price and time to be added to or deducted from (1) for each round pile more or less than number shown, on drawings, based on a length of 50 ft. from point to cut-off;

(3) net price and time to be added to or deducted from (1) and (2) for each foot of length added to or deducted from length of 50 ft. for each round pile, from

Mansfield & Savage, 135 William St., New York City, (1) $10,000, (60 days); (2) $50, (3) $1.00.

C. Meades & Co., 38 Park Row, New York City, (1) $12,312, (time as specified).

G. F. Pawling & Co., 1432 South Penn. Sq., (1) $13,000, (70 days); (2) add $50, deduct $20; (3) add $1.65, deduct $0.15. Noted Apr. 3.

★**Pa., Phila.**—Layout for Quartermaster Department—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building yard layout, to E. C. Fish & Co., 704 Real Estate Trust Bldg., $32,700. Noted Mar. 13.

★**Md., Baltimore**—Fuel Oil—U. S. Shipping Bd., Wash., D. C., let contract furnishing and delivering 500,000 bbl. fuel oil here, to Standard Oil Co. of New Jersey, foot Claremont Ave., Jersey City, N. J., $1.15 per bbl. for Grade No. 1 "B"; $.98 for No. 1 "C"; $1.22 for No. 2 "B"; $1.05 for No. 2 "C."

★**D. C., Wash.**—Grading—Dist. Comrs., Dist. Bldg., Wash., let contract grading Kearney St., N. E., from 18th to 20th Sts.; Vista St., N. E., from Franklin St. to South Dakota Ave., to G. Hyman, 2209 F St., N. W., $.74 and $.59 per cu.yd. respectively; grading Central Ave. to point 200 ft. south of Brentwood Rd.; 13th St. from Quincy to Randolph St. and 13th St. and Kansas Ave. from Quincy St. to Spring Rd., to G. B. Mullin, 3329 14th St., N. W., $.63, $.48 and $.48 per cu.yd. respectively.

★**Va., Alexandria**—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing 6 "I" beam electric traveling cranes at Naval Assembly plant, to Cameron Eng. Co., East Stroudsburg, Pa., $7940, (90 days). Noted Apr. 3.

Va., Norfolk—Dredging and Filling—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 14, dredging and filling at Navy Yard here,

(1) net price per cubic yard, place measurement, for dredging, as called for by specification, and accompanying drawing, using hydraulic dredges and disposing of selected material as fill in fitting out pier and behind quay wall, balance of material being deposited on areas "H" or "J." Government reserves right under this item to omit fill in fitting out pier and behind quay walls, and to require all material to be deposited on areas "H," "I" or "J.";

(2) net price per cubic yard, scow measurement for dredging, as called for by specification and accompanying drawing, material being disposed of on authorized dumping ground other than fitting out pier and behind quay walls;

(3) net price per cubic yard for filling in fitting out pier and behind quay walls, measured as fill, in accordance with specification and accompanying drawing, it being understood that award under this item is contingent upon award under (2), and further that work is to be done under this item shall be included under specified rate named in paragraphs 14 and 15, as modified by stated comparison between "Place" and "Scow" or "Fill" measure specified in paragraph 41;

(4) net price for removal of Wadham's Wharf and structural elements contained in cofferdam, in accordance with specification and accompanying drawing, from

Morris & Cummings Dredging Co., 17 State St., New York City, (2) $0.285, (3) $0.285, (4) $4000.

Maryland Dredging & Contg. Co., 1515 Fidelity Bldg., Baltimore, Md., (2) $0.45, (365 days); (3) $0.45 (365 days); (4) $5000, (30 days).

★**Va., Norfolk**—Fuel Oil—U. S. Shipping Bd., Wash., D. C., let contract furnishing and delivering 1,500,000 bbl. fuel oil here, to Standard Oil Co. of New Jersey, foot Claremont Ave., Jersey City, N. J., $1.15 per bbl. for No. 1 Grade "B"; $.98 for No. 1 "C"; $1.22 for No. 2 "B"; $1.05 for No. 2 "C."

★**Va., Norfolk**—Timber Wharf—Bureau Yards & Docks,: Navy Dept., Wash., D. C., let contract building here, to Sanford & Brooks Co., 24 Commerce St., Baltimore, Md., $67,750, (100 days). Noted Apr. 10.

BRIDGE—CHICAGO, ILL.

Bids were received by Commissioner of Public Works, March 20th, for constructing substructure of bridge over north branch of Chicago River on Kimball Ave., from (A) Paschen Bros., 111 West Washington St.; (B) Fitzsimons Connel Dredge & Dock Co., 10 South La Salle St.; (C) Concrete Dock Construction Co., 133 West Washington St., superstructure, (A) Overland Construction Co., 39 South La Salle St.; (B) Loeffer & Co., 133 West Washington St.; (C) Paschen Bros., 111 West Washington St. The unit bids were as follows:

	A	B	C
Superstructure complete (lump sum)	$20,825.00	$21,766.00	$22,600.00
800 cu.yd. excavation	2.55	2.15	1.50
690 cu.yd. concrete	17.25	15.50	12.70
3,200 ft. Norway piles	.27	.30	.24
2 test piles	75.00	150.00	110.00
1,700 ft. creosoted oak piles	.65	.80	.74
4,200 ft. driving piles	.27	.35	1.25
17,000 ft. creosoted oak timber	190.00	160.00	160.00
5,500 lb. reinforcing steel bars	.10	.06	.06½
7,300 cu.yd. filling and grading	.60	.60	.60
1,700 sq.yd. macadam paving	2.00	2.10	2.60
730 sq.yd. cinder and limestone sidewalk	1.75	2.10	1.00
1,300 ft. wood curbs	.35	.35	.40
910 ft. gas pipe railing	4.50	5.25	4.40
5 cu.yd. brick masonry	22.50	35.00	27.00
4,000 lb. structural steel	.12	.07	.09
6 catch basins	80.00	100.00	78.00
1 manhole	150.00	125.00	220.00
2 cast iron covers	30.00	30.00	30.00
340 cu.yd. black earth	2.00	1.75	2.60
Extended totals	$57,371.00	$57,872.00	$59,318.00

	A	B	C
Cofferdams, etc. (lump sum)	$25,000.00	$14,500.00	$20,000.00
4 test piles	110.00	100.00	100.00
15,000 ft. piles	.24	.30	.26½
10,500 ft. driving piles	.53	.28	.50
4,500 cu.yd. excavation	1.20	2.75	2.25
2,700 cu.yd. filling and grading	.65	.60	.60
100 cu.yd. concrete in vaults	12.00	20.00	22.00
2,900 cu.yd. concrete in abutments and retaining walls	* .43	13.50	13.25
7,300 cu.ft. concrete in piers below level at pier struts	.92	1.15	1.60
100 cu.ft. removal of boulders	.60	.01	.75
380 cu.ft. removal of bedrock	.45	.50	.85
1,000 cu.ft. concrete in pier shafts	.40	.01	.25
62,000 lb. reinforcing steel	.06	.07	.08
116,000 ft. yellow pine timber	86.00	92.00	114.00
16,000 ft. oak timber	118.00	110.00	115.00
800 ft. gas pipe railing	4.40	5.50	4.85
400 ft. concrete curb and gutter	1.10	1.50	2.00
600 ft. timber curb	.40	.50	.40
1,800 sq.ft. concrete sidewalk	.21	.28	.29
4,250 sq.ft. cinder sidewalk	.04	.20	.12
30 ft. 8 in. tile sewer	1.80	3.00	2.00
1 manhole	75.00	125.00	75.00
2 catch basins	70.00	100.00	75.00
2 abandon catch basins	20.00	25.00	30.00
1,000 lb. iron covers	.09	.10	.05
6,300 lb. structural steel	.08	.10	.11
25 cu.yd. brick masonry	27.00	25.00	20.00
1,300 sq.yd. macadam pavement	2.60	2.00	2.00
Extended totals	$109,266.00	$113,927.00	$124,487.00

* Bid per foot.

W. Va., Wheeling—Pass, Weir, etc.—U. S. Eng. Office, Wheeling, received bids Apr. 5 building pass, weir, beartrap, etc., for (a) Dam No. 23, (b) Dam No. 25, Ohio River, from Nat'l Contg. Co., Evansville, Ind., (a) $586,322; (b) $569,423; Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., (a) $609,195; (b) $643,710. Noted Mar. 20.

★**La., New Orleans**—Fuel Oil—U. S. Shipping Bd., Wash., D. C., let contract furnishing and delivering 2,000,000 bbl. fuel oil here, to Standard Oil Co. of Louisiana, New Orleans, $.97 per bbl. for Grade No. 2 "B" and $.80 for No. 2 "C."

Ill., Great Lakes—Roads—Pub. Wks. Officer received bids improving roads at Sheridan and Five Points, (work complete), from Contg. & Material Co., 3219 Michigan Ave., Chicago, $81,638; J. Cape & Sons Co., 468 Water St., Racine, Wis., $94,280, (75 days); Marquette Constr. Co., 133 West Washington St., Chicago, Ill., $102,400, (75 days).

Miscellaneous

PROPOSED WORK

Coal Pocket—Cranston (Providence P. O.) **R. I.**—Curran & Burton, Inc., Station St., plan to build concrete coal pocket. About $15,000.

Coal Pocket—Cranston, R. I.—(Providence P. O.)—W. Lunnie, 880 Cranston St., plans to build 2 concrete coal pockets. About $12,000.

Stone—Brooklyn, N. Y.—E. Riegelmann, boro. pres., rejected bids received Feb. 11, furnishing and delivering 3000 cu.yd. 1½ in. broken stone for concrete, etc. Noted Feb. 20.

Pier—Philadelphia, Pa.—G. S. Webster, dir. dept. wharves, docks and ferries, Bourse Bldg., receives bids in May, building 300-500 ft. pier at Penn Treaty Park, wood piles, rein.-con. superstructure.

Harbor Improvements—Grand Isle, La.—Grand Isle Navigation Co. plans to improve harbor facilities and build inland waterway. About $42,000. W. R. Buck, New Orleans, engr.

Dock Equipment—Manitowoc, Wis.—Kelsey Brewer & Co., Grand Rapids Savings Bank Bldg., Grand Rapids, Mich., plans to install coal dock equipment, cranes, overhead carriers, etc., here. About $125,000.

Park Improvements—Henryetta, Okla.—City election Apr. 23 to vote on $10,000 bonds to improve parks. I. Martin, city clk.

Retaining Wall — Astoria, Ore. — See "Streets and Roads."

Retaining Wall — Pendleton, Ore. — City plans to build retaining wall west of Brown Hall to improve Riverside Dr.; also had plans prepared for retaining wall on east extension of Washington St.

Float—Portland, Ore.—Pub. Dock Comn. having plans prepared building landing float and shore stairs on Woodward Ave. G. B. Hegardt, ch. engr.

Dam, etc.—Chowchilla, Cal.—C. J. Bills, 1503 H St., Lincoln, Neb., having surveys made for dam and reservoir in Chowchilla River to impound water to irrigate 10,000 acres Madera and Merced Counties. About $300,000.

Miscellaneous **(Continued)**

Harbor Improvements—Newport Beach, Cal.—Bd. Supervs. Orange Co., (Santa Ana), election June 5, to vote on $500,000 bonds to improve Newport harbor including extension to jetty, dredging and new channel for Santa Ana River. Leeds & Barnard, Central Bldg., Los Angeles, engrs.

Wharf—Newcastle, Ont.—Newcastle Harbor Co. plans to build wharf. About $15,000.

Gas Mains—Ottawa, Ont.—Ottawa Gas Co., 35 Sparks St., soon receives bids for extending gas mains, involving 200 tons 4 in. c. i. pipe, A. A. Dion, Ottawa, engr.

Memorial Tower—Toronto, Ont.—University of Toronto, Queens Park, had plans prepared by Sproatt & Rolph, archts., North St., for stone memorial tower. About $250,000.

Dock—Vancouver, B. C.—Dominion Government, Ottawa, having plans prepared by Dept. Pub. Wks., Ottawa, for lumber assembling dock on Kitsilanti Indian Reserve, here. About $1,000,000.

BIDS DESIRED

Cranes—Providence, R. I.—Until Apr. 28, by Bd. Contr. & Supply, furnishing 6 or 8 gantry or similar non derricking revolving type cargo unloading cranes to be placed at Municipal wharf. Each crane to be operated by three 220 or 550 volt General Electric or Westinghouse motors.

Dam, etc.—Scituate (North Scituate P. O.) **R. I.**—Until Apr. 23, by Water Supply Bd., City Hall, Providence, building portions of main dam of Scituate reservoir, Contr. No. 11, involving 132,000 cu.yd. earth excav. and borrow, 3500 cu.yd. rock excav., 1500 cu.yd. concrete masonry; also building 3.5 mi. earth road, 10 mi. westerly of Providence, Contr. No. 10, involving 24,000 cu.yd. earth excav. and borrow, 800 cu.yd. rock excav. and 400 cu.yd. concrete masonry. F. E. Winsor, ch. engr.

Flagging, etc.—Brooklyn, N. Y.—Until Apr. 23, by E. R. Riegelmann, boro, pres., furnishing and delivering 10,000 sq. ft. new or used bluestone flagging with 2 in. thickness. Former bids rejected. Noted Feb. 27.

Paving Material—New York, N. Y.—Until Apr. 22, by H. Bruckner, pres. Bronx Boro., furnishing and delivering 25 tons paving pitch and 200,000 gal. asphalt road oil.

N. Y., Poughkeepsie—Until May 1, by Bd. Pub. Wks., Eastman Park Mansion, building rein.-con. pre-filtration plant and placing all pipes, valves, strainers, etc., which will be furnished by Bd. Pub. Wks. E. W. Sylvester, supt.; advertised in this issue.

Road Oil — Baltimore, Md. — Until Apr. 23, by R. Gwynn, city register, furnishing 120,000 gal. asphalt road oil; advertised in this issue.

Transmission Line—La Grange, Ga.—See "Sewers."

Asphalts and Tars—Columbus, O.—Until Apr. 24, by C. Cowen, State Highway Comr., Columbus, furnishing 1,100,000 gal. of tars and asphalts, in tank cars for shipment to various points in Ohio; advertised in this issue.

Floating Dry Dock—Green Bay, Wis.—Morrison & Beck, engrs., 140 South Dearborn St., Chicago, receiving bids building 80 x 100 ft., rein.-con. floating dry dock to include two 15 ft. working platforms made in twelve 40 ft. sections, for C. Hartman, 114 South Oakland Ave. Cost between $400,000 and $500,000. Noted Mar. 13.

River Protection — Washington — See "Streets and Roads."

Wharf—Victoria, B. C.—Until May 2, by Dept. Pub. Wks., Ottawa, Ont., repairing 41x482 ft. wharf at Williams Head Quarantine Station, 9 mi. southwest of here. Work includes renewing 200 timber piles (creosoted) decking, stringers, joists, guards, etc. About $20,000.

SEWERAGE SYSTEM—CHICAGO, ILL.

Bids were received by Board Local Improvements, Mar. 28, for constructing Augusta Ave. sewerage system, from (A) Ryan Co., 4500 West Divison St.; (B) H. J. McNichols Co., 924 South Kilbourne Ave.; (C) John W. Farley, 118 North La Salle St. The unit bids were as follows:

	A	B	C
120 ft. 11 ft. x 8 ft. concrete sewer on private property	$95.00	$86.80	$90.00
540 ft. 11 ft. x 9 ft. concrete sewer on Elston Ave	90.00	67.70	70.00
1,600 ft. 11 ft. x 9 ft. concrete sewer on Augusta St	80.00	42.00	45.00
5,330 ft. 10 ft. 3R brick sewer on Augusta St	40.00	40.00	42.00
4,030 ft. 8 ft. 3R brick sewer on Augusta St	30.00	32.00	35.00
1,340 ft. 7 ft. 3R brick sewer on Noble St	24.00	33.30	32.00
1,000 6 ft. 2R brick sewer on Noble St	16.00	21.20	20.00
870 ft. 5½ ft. 2R brick sewer on Noble St	15.00	20.00	20.00
800 ft. 3½ ft. 2R brick sewer on Noble St	11.00	16.00	17.00
2,660 ft. 4 ft. 2R brick sewer on Leavitt St	12.00	15.50	17.00
1,330 ft. 5¼ ft. 2R brick sewer on Leavitt St	14.00	19.30	20.00
1,330 ft. 5 ft. 2R brick sewer on Leavitt St	13.00	18.00	20.00
1,000 ft. 4 ft. 2R brick sewer on Leavitt St	12.00	14.35	15.00
870 ft. 3½ ft. 2R brick sewer on Leavitt St	11.00	13.25	14.00
780 ft. 3 ft. 2R brick sewer on Leavitt St	10.00	12.00	12.50
50 ft. 5 ft. 2R brick sewer connections	14.00	40.00	38.00
50 ft. 4½ ft. 2R brick sewer connections	12.00	40.00	36.00
100 ft. 4 ft. 2R brick sewer connections	11.00	40.00	34.00
50 ft. 3 ft. 2R brick sewer connections	10.00	30.00	25.00
50 ft. 2½ ft. 2R brick sewer connections	8.00	30.00	20.00
200 ft. 2 ft. DS tile pipe sewer connections	7.00	10.00	12.00
50 ft. 18 in. DS tile pipe sewer connections	5.00	8.00	9.00
300 13 in. tile pipe sewer connections	4.50	5.00	6.00
800 12 in. tile pipe sewer connections	4.00	5.00	5.00
Concrete bulkhead	10,000.00	20,000.00	18,000.00
75 brick manholes	50.00	60.00	65.00
10 brick catch basins	60.00	75.00	75.00
(a) 7000 cu.yd. Class "A" concrete (1 fine agg to 2 coarse agg, 7 cu.ft. of concrete in place to contain 94-lb. cement)	9.00	7.50	8.00
(b) 100 cu.yd. Class "A" concrete	9.00	7.50	8.00
(a) 100 cu.yd. Class "B" concrete (1 fine agg to 2 coarse agg, 5½ cu.ft. of concrete in place to contain 94 lb. cement)	10.00	12.00	12.00
(b) 100 cu.yd. Class "B" concrete	10.00	12.00	12.00
1,000 sq.yd. temporary granite pavement	.70	1.00	1.25
(a) 2,500 sq.yd. permanent granite pavement	.90	3.00	2.75
5,000 sq.yd. temporary brick pavement	1.00	1.00	1.25
(a) 17,000 sq.yd. permanent brick pavement	1.60	2.65	2.50
(a) 33,000 sq.yd. permanent asphalt pavement	1.90	1.75	1.65
3,000 cu.yd. macadam	6.00	4.50	5.00
25,000 ft. b.m. temporary plank pavement	.12	75.00	80.00
(a) 100 ft. curb and gutter	1.15	1.00	1.00
(a) 600 ft. vertical curb	1.15	1.00	1.00
(a) 90,000 cu.yd. excavation and removal	1.50	1.50	1.50
(b) 80,000 cu.yd. excavation and removal	1.50	1.50	1.50
12,000 cu.yd. rock excavation	4.00	6.00	6.00
Extended totals with permanent pavement	$1,079,815	$1,173,970	$1,147,790
Extended totals without permanent pavement	$909,760	$997,907	$974,865

Bidders were required to bid on job with and without permanent paving. Bids including the permanent paving include all items marked "a" and exclude items marked "b." Bids not including permanent paving exclude items marked "a" and include items marked "b."

PRICES AND CONTRACTS AWARDED
(★Indicates award of contract)

Pipe—Fall River, Mass.—City received bids furnishing c.i. pipe in 2 and 3 ft. lengths for 1 year, from Borden & Remington, 115 Ann St., 67½ and 68½% off list price; J. F. Johnston Co., 65½ and 62½% off list price; W. M. Pettey, 129 Front St., 60 and 75% off list price.

★Pipe, etc.—New Britain, Conn.—City let contract furnishing sewer pipe for year 1919, to City Coal & Wood Co., 141 Elm St., 69½% off list price; Portland Cement, to Swift & Upson Lumber Co., 153 Elm St., $3.38 per bbl.

★Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ. let contract improving heating and ventilating system in P. S. 40, Bronx Boro., to D. J. Rice, 405 Lexington Ave. About $62,173. Noted Apr. 3.

★Elevator Tower—Phila., Pa.—Phila. Gen. Hospital, 34th and Pine Sts., let contract building elevator tower, to M. H. McClosky, Inc., 1620 West Thompson St.; $11,019.

Paving Material—Springfield, Ill.—Dept. Pub. Wks. received bids Apr. 2, furnishing about 2,000,000 bbls. Portland cement for state and Federal-aid road and bridge work, from Lehigh Portland Cement Co., 111 West Washington St., Chicago; Atlas Portland Cement Co., 134 South La Salle St., Chicago; Universal Portland Cement Co., 210 South La Salle St., Chicago; Missouri Portland Cement Co., Life Bldg., St. Louis, Mo.; Continental Portland Cement Co., Wright Bldg., St. Louis, Mo.; Louisville Portland Cement Co., Speed Bldg., Louisville, Ky.; Sandusky Portland Cement Co., Columbus, O. Bids ranged from $1.90 per bbl. net (delivered to railroad station in county designated) to $2.14 in the 102 counties, 5c. less per bbl. for bulk. Bids of 7 companies for each individual county were identical in practically every case. Noted Mar. 27.

★Piles—Blythe, Cal.—Palo Verde Joint Levee Dist. let contract hauling and driving about 400 timber piles to form jetties and revetments in Colorado River; also bridge work over trestles and timber frame for brush revetments, south of Ehrenburg crossing 4½ mi. southeast of here, involving 60,000 lin.ft. lumber, to Wattson & Hunter, 4907 Melrose Ave., Los Angeles. Dist. will furnish material. About $10,000.

Pier—Manhattan Beach (Manhattan P. O.), **Cal.**—City received bids building deck and superstructure of rein.-con. pleasure pier, from Darrell Condley Co., 520 Marsh Strong Bldg., Los Angeles, $33,500; C. D. Sotieas, 775 East 14th St., Los Angeles, $36,750; C. A. Palmer, San Francisco, $39,600.

★Asphalt—St. John, N. B.—City let contract furnishing 460 tons Mexican asphalt, to J. T. Knight, $27.75 per ton. Noted Mar. 13.

★Cement, Sewer Pipe, Etc.—Brantford, Ont.—City let contracts supplying cement during 1919, to Wilson Coal Co., 128 Nelson St.; sewer pipe, to Hamilton & Toronto Sewer Pipe Co., Wentworth St., N., Hamilton; crushed stone, to Hagersville Crushed Stone Corp., Dundas. Noted Mar. 20.

★Pipe, Valves, etc.—Ottawa, Ont.—City let contract to Natl. Iron Corp., foot of Cherry St., Toronto, furnishing 500 ft. 3 in. c. i. pipe, at $95 per net ton, 500 ft. 4 in. c. i. pipe, $82 per net ton and 2500 ft. 5 and 6 in. c. i. pipe, $80 per net ton; to Drummond McCall Co., 28 Victoria Sq., Montreal, for twelve 3 in. gate valves, $9.95 each, twelve 5 in. gate valves, $19.70 each, six 8 in. gate valves, $37.70 each and three 12 in. gate valves at $93.00 each; to Canadian Fairbanks Morse Co., 26 Front St., Toronto, for 1000 ft., ½ in., 2000 ft. ⅝ in., 500 ft. ¾ in. and 500 ft. 1 in. lead pipe at $.13 per lb., 10,000 lbs. pig lead, (best quality) $.07 per lb., three hundred ½ in. couplings, $.59 each and fifteen 2 in. corporation cocks, $8.25 each; to J. Robertson Co., Ltd., 215 Spadina Ave., Toronto, for three hundred ⅝ in. curb cocks at $1.80 each, 50 in. curb cocks, $2.60 each and 500 service post screws, $.07 each.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 m., May 1, 1919, and then opened, for removing wreck of "Steamship Serantes," sunk in upper bay, New York Harbor. Information on application.

OFFICIAL PROPOSALS

Bids: April 22

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building four sections of State Highway, as follows:

Carroll County, Contract C1-20: One section of Littlestown Pike from Town Limits of Westminster toward Union Mills, for a distance of 2.01 miles. (Concrete.)

Frederick and Washington Counties, Contract W-16A: One section of State Highway from Knoxville to Harpers Ferry, for a distance of 3.51 miles. (Concrete.)

Howard County, Contract Ho-12: One section of Clarksville Pike from Highland to Clarksville, for a distance of 2.51 miles. (Concrete.)

Kent County, Contract K-12: One section of Rock Hall to Swan Creek Road, near Edesville, for a distance of 3.03 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 3rd day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 21.

Storm Sewers

Highland Park, N. J.

Sealed proposals will be received by the Council of the Borough of Highland Park, at a meeting thereof to be held at the Fire House on Raritan Avenue, Highland Park, New Jersey, on Monday, April 21st, 1919 at 8 p.m., for the construction of Storm Sewers and drains in accordance with plans and specifications prepared for the same by John T. Hopkins, Borough Engineer, approved by said Council. Copies of said plans and specifications may be procured by application to said Borough Engineer at his office in said Fire House.

Said work will be divided in two contracts and bidders may submit proposals for one of said contracts or both of them. Such proposals must be submitted on separate blanks and each proposal must be accompanied by a certified check payable without condition to the order of said Borough of Highland Park for the sum of one thousand ($1000) dollars.

Council reserves the right to reject any and all bids.

ROBERT B. CRAIG,
Borough Clerk.

Bids Close		See Eng. News-Record
Apr. 28	Dredging — New York, N. Y.	Apr. 3
Apr. 28	Cold Storage Building — Spec. 3685 — Cape May, N. J.	Apr. 17
Apr. 28	Officers Quarters — West Point, N. Y. Adv. Apr. 3 and 10.	Apr. 3
Apr. 28	Dormitory — Bismarck, N. D.	Apr. 10
Apr. 29	Dredging — New York, N. Y. Adv. Apr. 10 and 17.	Apr. 24
Apr. 29	Foundation—Pamlico Sound, N. C.	Apr. 10
Apr. 30	Levee Work—St. Louis, Mo. Adv. Apr. 3 to 24.	Apr. 3
Apr. 30	Accumulators, etc.—Louisville, Ky. Adv. Apr. 3 to 24.	Apr. 10
Apr. 30	Wharf and Seawall—Chelsea, Mass.	Apr. 24
May 1	Wharf—Boston, Mass.	Apr. 3
May 1	Removing Wreck — New York, N. Y.	Apr. 17
May 3	Dredging — Jacksonville, Fla. Adv. Apr. 3 to 24.	Apr. 3
May 3	Dredging—Boston, Mass. Adv. Apr. 24.	Apr. 24
May 5	Dredging—Wilmington Del. Adv. Apr. 17 and 24.	Apr. 10
May 5	Sewer Discharge Pipe — Spec. 3267 — Pensacola, Fla.	Apr. 17
May 5	Fence — Spec. 3789 — Charleston, W. Va.	Apr. 17
May 5	Discharge Pipe—Spec. 3267 —Washington, D. C.	Apr. 24
May 5	Buildings — Spec. 3818 — Hampton Roads, Va.	Apr. 24
May 5	Additional Buildings—Spec. 3823—Hampton Roads, Va.	Apr. 24
May 6	Lock and Abutment—Cincinnati, O. Adv. Apr. 3 to 24.	Apr. 10
May 6	Alteration to Post Office—Bridgeport, Conn.	Apr. 17
May 8	Marine Railway — Ft. Mifflin, Pa. Adv. Apr. 10 to 24.	Apr. 10
May 8	Post Office—Mount Pleasant, Tex.	Apr. 10
May 9	Rock Crusher — Florence, Ala. Adv. Apr. 10 to 24	Apr. 10
May 9	Dredging — New York, N. Y. Adv. Apr. 10 to 24.	Apr. 10
May 12	Dredging — New York, N. Y. Adv. Apr. 10 to 24.	Apr. 10
May 12	Torpedo Storage Building —Spec. 3767 — Newport, R. I.	Apr. 24
May 12	Storehouse — Spec. 3842 — Charleston, S. C.	Apr. 24
May 12	Conduit System—Spec. 3846 —Pensacola, Fla.	Apr. 24
May 15	Rip Rap—Baltimore, Md. Adv. Apr. 10 to 24.	Apr. 17
May 15	Dredging — New Bedford, Mass. Adv. Apr. 10 to 24.	Apr. 17
May 19	Dry Dock—Spec. 3858—Charleston, S. C.	Apr. 24
May 21	Dredging—Duluth, Minn. Adv. Apr. 24.	Apr. 24
May 21	Derricks—Florence, Ala. Adv. Apr. 24.	Apr. 24

MISCELLANEOUS

Bids Close		See Eng. News-Record
Apr. 24	Heating and Plumbing, etc. —Erie, Pa.	Apr. 24
Apr. 28	Paving Material — Minneapolis, Minn.	Apr. 24
Apr. 28	Cranes—Providence, R. I.	Apr. 17
Apr. 28	Repairing and Repainting Courthouse — Lancaster, Pa. Adv. Apr. 10.	Apr. 10
Apr. 29	Freight Shed—New York, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 29	Meter Pipes—Toledo, O. Adv. Apr. 10.	Apr. 10
May 1	Granite Curbing—Cranston, R. I.	Apr. 24
May 2	Wharf—Victoria, B. C.	Apr. 17
May 2	Tracks—New York, N. Y.	Apr. 24
May 5	Asphalt—Lansing, Mich. Adv. Apr. 24.	Apr. 24
May 12	Tower — Prince Rupert, B. C.	Apr. 24

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

WATERWORKS

Conn., Milford—Milford Water Co., 24 Broad St., plans to improve plant. About $100.000.

Conn., New London—Water & Sewer Dept., Municipal Bldg., plans to issue $341.000 bonds to improve and extend water mains. G. K. Crandall, city engr.

S. C., North Augusta—City receives bids in summer extending mains, building wells and 1,500,000 gal. reservoir; also installing deep-well and pressure pumps, chlorinating apparatus and air compressor. About $50,000. E. G. Smith, 400 Harrison Bldg., Augusta, Ga., engr.

Ga., Swainsboro—See "Sewers."

Ga., Washington—See "Sewers."

Mont., Polson—City plans to build 8 in. water mains in G St. from 4th to Cedar Sts.; 6 in., in G St. from 4th to 8th Sts.; 3rd St. from G to M Sts.; Hawthorne St. from G to I Sts.; 5th St. from G to D Sts.; D St. from 3rd to 4th Sts.; 1st St. from G to F Sts.; Cedar St. from G to F Sts. and 4 in. in I St. from Hawthorne to 1st Sts. Bond for $15,000 voted for project. F. F. Faucett, Polson, engr.

Okla., Altus—City soon lets contract building and extending waterworks system. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs. Noted Feb. 2.

Okla., Tar River—City soon receives bids building waterworks system. About $50,000. J. F. Gates, 405 James Bldg., Miami, engr.

Ariz., Somerton—City having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, building water system. About $70,000.

Cal., Harper—Newport Mesa Irrigation Dist. voted $50,000 bonds to build water system. Address S. W. Clark, secy.

Cal., Sacramento—City election in May, to vote on $2,400,000 bonds to purchase site and build filtration and pump plants and caisson in Sacramento River. F. C. Miller, city engr.

N. S., Lunenburg—Town plans to lay 1 mi. 4 in. watermains, also build concrete sidewalks, curb and gutters. G. H. Love, clk.

Que., Matane—See "Sewers."

BIDS DESIRED

Pa., Tamaqua—Until May 29, by Comrs. of Water Works, building reservoir on Owl Creek, Rahn Twp., Schuylkill Co. Work involves 57,000 cu.yd. embankment and 2000 cu.yd. mass and reinforced concrete, J. Harris, secy.; adveristed in this issue.

Minn., Brainerd—Until May 8, by city, building water system. Work involves (a) distribution system (1) furnishing pipe and castings, f. o. b. Brainerd, (2) fire hydrants, (3) valves and boxes, (4) laying pipe; (b) open well, 40 ft. diam., 28 ft. deep; (c). buildings including pumping station, pump houses, pump pits and manholes for 2 tubular well groups also 800,000 gal. rein.-con. reservoir; (d) pumping plant including removal of two 6-in. motor-driven centrifugal pumps to new pumping station and furnishing and installing 2 motor and engine-driven centrifugal pumps for well system together with necessary pipe and fittings; (e) rein.-con. water tower and appurtenances or steel water tower consisting of 300,000 gal. steel tank on 90 ft. tower. L. P. Wolff, Guardian Life Bldg., St. Paul, consult. engr.

Minn., New Ulm—Until Apr. 28, by W. P. Bocker, city clk., furnishing and laying 3045 ft. 6 in. and 30 ft. 4 in. c. i. pipe, seven 4 in. gate valves and boxes completed, one 14 in. sleeve, two 6 x 6 in. crosses, one 6 x 14 in. cross, three 6 in. plugs, 5 fire hydrants, 1460 ft. ¾ in. lead pipe and 75 service valve cocks and boxes.

Utah, Salt Lake City—Until May 5, by S. A. Cannon, city engr., trenching and laying 3400 ft. 36-48 in. cement pipe. Noted Jan. 30.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Minn., Minneapolis—City will lay 12 mi. 6-12 in. water mains. About $12,000. Work will be done by day labor.

★Okla., Picher—See "Sewers."

Sewers

PROPOSED WORK

Conn., Bridgeport—City soon lets contract building concrete and vitr. sewers in Lincoln, Wood and Hillside Aves., also Evergreen and Grand Sts. About $20,000. J. A. McElroy, city engr. Noted Feb. 13.

N. Y., Buffalo—City soon lets contract laying vitr. pipe sewer encased in concrete quicksand bed, in Washington St. between Virginia and Carlton Sts., involving 700 ft. 20 in vitr. pipe and 2100 cu.yd. earth trenching. About $15,000. G. H. Norton, city engr. Noted Dec. 5.

N. Y., Geneva—Bd. Pub. Wks. plans to extend sewer in South Exchange St. About $15,000. J. W. Brennan, city engr.

Pa., Beaver Falls—See "Streets and Roads."

Ga., Swainsboro—City voted $50,000 bonds to build sewerage and waterworks systems. Noted Apr. 3.

Ga., Washington—City election Apr. 28 to vote on $55,000 bonds to enlarge and improve sewerage and waterworks systems. K. A. Wilheit, mayor.

Fla., Plant City—City plans to build sewers in various streets. About $10,000.

Mich, Detroit—City soon lets contract furnishing material and building complete lateral sewer system for Tireman Park subdivision, involving 14,124 ft. 12-24 in. vitr. pipe, and 43 brick manholes. About $30,000. G. Jerome, 1331 Majestic Bldg., engr.

Ariz., Somerton—City having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for sewerage system. About $30,000.

Wash., Seattle—Bd. Pub. Wks. soon lets contract building sewers in 42nd St., Ave. S. and Empire Way, et al. Work involves storm water over flow, catch basins, 1228 ft. 48-72 in. concrete and 1228 ft. 48-72 in. rein.-con. pipe, etc. Bids will be taken on concrete, brick, rein.-con., etc. A. H. Dimock, city engr.

Cal., Pasadena—City will join with South Pasadena and Alhambra in constructing sewage treatment works on tri-city sewer farm. Bonds will be voted for project. R. V. Orbison, city engr.

Que., Matane—City soon receives bids building sewerage and waterworks systems. About $70,000. J. F. Greneo, Chicoutimi, engr.

Que., Three Rivers—City plans to build sewers. About $15,000. A. Bolivar, clk.

Alta., Medicine Hat—City plans to build brick sewage disposal plant. F. Blackburn, clk.

BIDS DESIRED

Conn., New Haven—Until Apr. 20, by city, building storm water and overflow sewer and appurtenances in Munson St. and in adjacent Beaver Park lands between Canal and Crescent Sts. F. L. Ford, city engr.

N. J., Newark—Until May 13, by Passaic Valley Sewerage Comn., 820 Essex Bldg., building portion Garfield-Wallington-Passaic branch sewer in Passaic and Garfield, known as Garfield River Crossing. Work involves 30 in. c. i. pipe, 60 cu. yd. brick masonry, 10,000 lb. steel reinforcing bars, 130 cu. yd. concrete masonry, 500 tons riprap, 5000 lin. ft. timber piles, 300 cu. yd. earth and 20 cu. yd. rock excav. W. M. Brown, 31 Clinton St., engr.

Pa., Erie—Until May 20, by City Council, for completion of Mill Creek Flood Control Project. Contract will be let in 3 sections, involving following major items of work, covering 8000 lin.ft. rein.-con. conduit; Sect. 3, involving 95,000 yd. earth and shale excav., 19,000 yd. rein.-con.; Sect. 4, 73,000 yd. earth and shale rock excav., 17,000 yd. rein.-con.; Sect. 5, (intake), 25,000 yd. earth and rock excav. and

Sewers (Continued)

2000 yd. plain and rein.-con. F. G. Lynch, city engr. Gannett, Seelye & Fleming, 204 Locust St., Harrisburg, consult. engrs.; advertised in this issue.

O., Akron—Until May 19, by H. S. Morse, dir. pub. serv., Delaware Bldg., building sewer in East Ave. from Maple St. to Wooster Ave. Work involves 3900 ft. 12-24 in. vitr. pipe, 4700 ft. 30-66 in. trunk sewer and 35 manholes; advertised in this issue.

O. Akron—Until May 21, by H. S. Morse, dir. pub. serv., Delaware Bldg., building sewer in West Exchange St. from Bowery to Maple Sts. Work involves 3200 lin.ft. 12-24 in. vitr. pipe, 5700 lin.ft. 30-120 in. trunk sewer and 42 manholes; advertised in this issue.

Mich., Detroit—Until Apr. 30, by Dept. Pub. Wks., furnishing labor and material for building and completing 1251 ft. sewer in Harper and Gratiot Aves., brick or monolithic concrete or combination of materials. About $60,000. C. W. Hubbell, city engr.

Mich., Pontiac—Until May 12, by C. W. Ham, city clk., building sewage treatment works to include 2052 lin.ft. outfall sewer, grit chamber, 2 story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge and appurtenances and involves 34,710 cu.yd. excav., 4078 cu.yd. rein.-con., 15,700 cu.yd. filter stone and 35 ton c.i. piping. C. W. Hubbell, 2348 Penobscott Bldg., Detroit engr.; advertised in this issue. Noted Jan 16.

Wis., Elkhart Lake—Until Apr. 28, by Village, excavating and laying 1800-1900 ft. 10-12 in. sewer and connecting water mains in Main and Division Sts. About $12,500.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Comr. Pub. Wks. let contract building sewer in Alger St., South Boston, involving 540 ft. 10 in. vitr. and 534 ft. concrete pipe, 1200 cu.yd. earth trenching, 4.5 ton reinforcing steel, 235 cu.yd. rein.-con., to A. Baruffaldi, Somerville, $10,144; in Mt. Ida Rd. extension (Dorchester), 604 ft. 12 in. pipe, 400 cu.yd. earth trenching, to Daddario & Booth Co., Mattapan, $2666; in Charles St., 2306 ft. 12 in. vitr., 643 ft. 15-24 in. vitr. clay and 38 ft. 2 ft. 6 in. concrete pipe, 2000 cu.yd. earth trenching, 2 tons steel, 545 cu.yd. concrete, to C. M. Callahan Co., 25 South Fairview St., $27,655; in Northampton and Fellows Sts., Roxbury, 50 ft. 12 in. vitr., and 831 ft. concrete pipe, 500 cu.yd. earth trenching, to W. R. Trap Rock Co., West Roxbury, $19,517.

★Pa., Phila.—Dept. Pub. Wks. let contracts building sewers in Pratt St. from Saul to Rutland Sts., to Whiting-Turner Co., Stewart Bldg., Baltimore, Md., cost, $45,000; in Godfrey Ave. from 10th to Broad Sts., to E. Pascuzzi, 601 Lincoln Bldg., $75,000; in Limekiln Pike from 66th to Andrew Sts., to D. McMahon Estate, Germantown and Chelton Aves., $26,000; in Broad St. from 68th Ave to Summit St. and 7th St. from Bristol to Cayuga, to P. Ellis, 3342 North 11th St., $9700; in Pollock St. from 26th to 30th Sts., to E. H. Vare, 1120 Race St., $175,000.

★O., Cleveland—City let contract to George Bros., 1148 Bolivar Rd., building sewers in sections of East 140th St., $10,607, Clermont Rd., $6203, Larchmont Rd., $11,095, involving 5430 ft. 12-24 in. pipe and 1360 ft. No. 3 C brick sewer; to A. J. Galvin, Lennox Bldg., East 135th St., $1582, East 129th St., $1950, Chapleside Ave., $6120, East 132nd St., $1465, Lorenzo Ave., $2730, East 134th St., $3325, involving 5220 ft. 12-24 in. pipe; to D. Pfahl, 724 Guardian Bldg., East 139th St., $3522, Dove Ave., $5830, involving 2600 ft. 12-24 in. pipe; to Gallagher-Burke Co., 1339 Irene Ave., Dunlap Ave., $2550, Continental Ave., $3602, involving 1390 ft. 12-18 in. pipe; to River Constr. Co., 12109 Mayfield Rd., Bessemer Ave., $4911, involving 700 ft. 12-24 in. pipe; to Water & Sewer Impvt. Co., The Arcade, Daniel Ave., $1965, Greenwich Ave., $3959, Eliot Ave., $1989, involving 2330 ft. 12-20 in. pipe; to Iannetta Bros., 2064 East 125th St., East 97 Pl., $771, involving 220 ft. 12 in. pipe; to Frederick & Hosaine, 635 Bradley Court, West 11th St., involving 1360 ft. 12-15 in. pipe, $4147; to H. Hahn, 2973 East 78th St., Calcutta Ave., 1290 ft. 12-18 in. pipe, $3804; to G. Sam, 2418 Central Ave., Ridpath Ave., $1981, Trafalger Ave., $9560, involving 2060 ft. 12-26 in. pipe; to N. Salem, 237 Bradley Court, East 160th St., 690 ft. 12 and 15 in. pipe, $1638; to A. C. Hattendorf, 13601 6th Ave., Griffing Ave., $5800, East 135th St., $1975, East 157th St., $1484, East 156th St., $3697, involving 3550 ft. 12-18 in. pipe; to W. P. Gibbons, 340 Leader-News Bldg., East 160th St., $735, Arbor Ave., $3457, East 163rd St., $763, East 170th St., $1697, involving 2620 ft. 12-18 in. pipe; to W. McDowell, 10319 Miles Ave., East 105th St., $1491, East 108th St., $2712, East 30th St., $58,947, Meich Ave., $3857, involving 2080 ft. 12-20 in. pipe and 1810 ft. No. 3-6 C brick sewer. All vitr. pipe.

★Mich., Detroit—Dept. Pub. Wks. let contract trenching, backfilling and laying 4786 ft. 5 ft. 6 in. cylindrical sewer in Alter Rd. and Mack Ave., to J. M. Affeld, Ford Bldg., $77,040; 2158 ft. 24 in. vitr. crock sewer arms in Livernois Ave., to R. D. Baker. 1454 Penobscot Bldg., $6000. Noted Apr. 10.

★Kan., Douglas—City let contract building sanitary sewerage system, to Burt Constr. Co., Hutchinson, $34,055. Noted Apr. 3.

★Okla., Picher—City will build storm sewerage system. Plans include concrete, segmental block or bitulithic sewers and c. i. water mains. About $250,000. Work will be done by day labor under the supervision of McIntosh-Walker Eng. Co., Oklahoma. City will furnish material. Noted Mar. 20.

★Idaho, Moscow—City let contract installing vitr. clay salt-glazed sewer pipe, to Washington Brick & Lime Co., South 151 Washington St., Spokane, Wash. About $14,000. Noted Mar. 20.

★Cal., San Luis Obispo—City let contract building cement pipe storm drain in Marsh St., et al., to M. Chutuk, 1506 Pleasant St., Los Angeles, $16,809. Work involves 6348 ft. 10-24 in. concrete pipe, 13 manholes and 45 catch basins. Noted Feb. 6.

★Que., Sherbrooke—City will build sewers in various streets. About $40,000. Work will be done by day labor under supervision of T. Tremblay, city engr.

Bridges

PROPOSED WORK

N. Y., Leroy—City having estimates made and plans prepared for rein.-con. bridge over Oatka River, 20 ft. drive roadway and 6 ft. sidewalks, to connect Lake and Church Sts. City plans election soon to vote on bonds for project. Address D. J. O'Shea, Leroy.

Ill., Chicago—See "Streets and Roads."

Okla., Miami—Comrs. Ottawa Co. plan to build bridge over Spring River. About $16,000.

Ariz., Clifton—City and Greenlee Co. each voted $5000 bonds to build bridge over Chase Creek here. Noted Feb. 27.

Wash., Walla Walla—Walla Walla Co. (Walla Walla) and Franklin Co. (Pasco) voted $230,00 bonds to build concrete bridge over Snake River between Burbank and Pasco. Noted Mar. 27.

Ore., Moro—State Highway Comn., Portland, soon lets contract building 7 steel plate girder bridge over Deschutes River near Miller Sta., involving 600 cu.yd. class A concrete, 400 cu.yd. class B concrete, 70,000 lbs. reinforcing steel and 1250 lin.ft. reinforced concrete rail. S. Benson, chn. Noted Jan. 2.

Ore., Moro—State Highway Comn., Portland, soon lets contract building bridge over John Day River, consisting of two 126 ft. wooden truss spans, involving 400 lin. ft. wood piling, 350 cu.yd. class B concrete. 250 lin.ft. wooden approaches. Alternate bids for 80 tons structural steel. S. Bensen, chn. Noted Jan. 2.

Cal., San Diego—City voted against proposition to construct steel bridge over San Diego River at Old Town. About $60,000. Noted Feb. 6.

Que., Ste. Anne De La Perade—City soon lets contract building concrete and steel bridge, 75 ft. long, 18 ft. wide, over Gendron River. I. E. Vallee, Parliament Bldg., Quebec, engr. Noted Apr. 10.

Que., St. Valerien—City had plans prepared for 3 concrete and steel bridges. I. E. Vallee, Parliament Bldg., Quebec, engr.

Ont., Timmons—Town and Temiskaming and Northern Ontario Ry. Comn., 56 Church St., Toronto, having plans prepared for steel bridge on 5th Ave. About $40,000. Cost will be borne equally by town and railway. H. E. Montgomery, Timmons, engr.

BIDS DESIRED

Mass., North Adams—Until May 3, by J. L. Temple, comr. pub. wks., building 108 ft. rein.-con. arch bridge on West Main St., 28 ft. wide, consisting of 80 ft. clear span single arch.; advertised in this issue.

Pa., Pittsburgh—Comrs. Allegheny Co. receiving bids repairing floor of bridge over Allegheny River, at entrance to Highland Park, involving 30,000 ft. B. M. white oak lumber. About $15,000. Plans now being figured by bidders. J. G. Chalfont, Room 301, Courthouse, engr.

N. C., Beaufort—See "Excavation and Dredging."

Ga., Thomasville—Until May 16, by Comrs. Thomas Co., building rein.-con. bridge, 4½ mi. from here. About $63,000. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, engrs. Noted Mar. 13.

Ga., Valdosta—Until May 15, by Comrs. Lowndes Co. building rein.-con. bridge over Withlacoochee River. About $58,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs. Noted Apr. 10.

Illinois—See "Streets and Roads."

Ia., Denison—Until Apr. 30, by Bd. Supervs. Crawford Co., building 12 concrete box culverts, 2 I beam bridges on concrete abutments and 2 pony truss bridges on concrete abutments. About $27,000. H. B. Fishell, co. engr.

Ia., Leon—Until Apr. 29, by Bd. Supervs. Decatur Co., building 2 concrete box culverts, 2 concrete slab bridges and 3 I-beam bridges. About $17,900. Work involves 8655 cu.yd. rein.-con., 10 tons structural and 23½ tons reinforcing steel and 2992 lin.ft. wooden piling. O. Sjolander, co. engr.

Mo., St. Louis—Until May 13, by Bd. Pub. Serv. building rein.-con. bridge over Oak Hill branch of Missouri Pacific Ry. tracks on Southwest Ave. About $35,000. L. R. Bowen, city engr. Noted Jan. 30.

Ark., Jonesboro—See "Excavation and Dredging."

Ariz., Cottonwood—Until May 19, by State Highway Comn., Phoenix, building bridge over Verde River here. About $40,000. T. Maddock, state engr.; advertised in this issue.

Ont., Owen Sound—Until Apr. 28, by J. Johnson, supt. Grey Co. Rds., building steel bridge with 73 ft. span, in Normandy Twp. abutments and concrete flooring. Project includes removal of fallen arch; also filling sinkhole on Toronto and Sydenham Rd. 2 mi. north of Mardale, involving 12,000 cu. yd. R. McDowall, co. engr.

Sask., Canora—Dept. Highways, Regina receiving bids building steel bridge 104 ft. long with concrete abutment, over Assinboine River, east of Tadmore. S. J. Latta, minister highways.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

S. C., Marion—See "Streets and Roads."

★Ia., Davenport—Comrs. Scott Co. let contract building 13 concrete box culverts, 1 I beam, 1 concrete deck girder and 2 concrete slab bridges, to G. Sheldon, 841 21st St., $24,798. Work involves 1055 cu.yd. rein.-con., 7½ tons structural and 31 tons reinforcing steel and 816 lin.ft. wooden piling.

★Ia., Des Moines—Comrs. Polk Co. let contract building 19 concrete box culverts and 1 extension to concrete arch, to G. F. Lambert Co., 405 Utica St., $15,298. Work involves 602 cu.yd. rein.-con. and 17 tons reinforcing steel.

Ia., Eldora—Comrs. Hardin Co. let contracts building 1 I beam bridge and 1 deck girder bridge, to Fifield Constr. Co., Waterloo, $5286; 1 concrete slab bridge, 1 I beam bridge and 1 deck girder bridge, T. J. Wagner, Swea City, $9092; 2 concrete deck girder bridges, 1 concrete slab bridge and 1 concrete box culvert, A. Olson Constr. Co., Waterloo, $12,722; 1 rainbow

Bridges (Continued)

arch bridge and 1 pony truss bridge, N. M. Stark & Co., 1215 Mulberry St., Des Moines, $30,570. Work involves 2392 cu.yd. rein.-con., 72 tons structural and 92 tons reinforcing steel and 10,784 lin.ft. wooden piling. Noted Apr. 3.

★**Ia., Grundy**—Comrs. Grundy Co. let contracts building 7 concrete box culverts and 1 concrete slab bridge, to F. Fuller & Son, Grundy Center, cost $3157; 3 concrete box culverts, 3 I beam bridges and 1 pony truss bridge, to Des Moines Bridge & Iron Co., Tuttle St. between 9th and 11th Sts., Des Moines, $15,656. Work involves 667 cu.yd. rein.-con., 36½ tons structural and 20½ tons reinforcing steel.

★**Ia., Jefferson**—Comrs. Green Co. let contracts building 55 x 16 ft. pony truss bridge, to R. E. Shackleton, Perry, $5300; two 24 x 18 ft. concrete slab bridges and two 40 x 18 ft. spans deck girder bridges, F. E. Marsh & Co., Center St. Dam, Des Moines, $15,115. Work involves 699 cu.yd. rein.-con., 11 tons structural and 26 tons reinforcing steel and 3840 lin.ft. wooden piling.

★**Minn., Wabasha**—Comrs. Wabasha Co. let contract building Bridge No. 2991, 40 ft. span, No. 2992, 30 ft. span, and No. 2993, 60 ft. span, to Independent Bridge Co., 1001 Metropolitan Life Bldg., Minneapolis, $13,084.

Wash., Adna—Comrs. Lewis Co., (Chehalis), received bids Apr. 7, building 220 ft. steel span bridge with 500 ft. approach, 16 ft. wide, over Chehalis River, here, from Portland Bridge Co., Yeon Bldg., Portland, $29,800; Union Bridge Co., Portland, $30,890 without concrete piers; $31,590 with concrete piers. Noted Mar. 20.

★**Ont., Ottawa**—Dept. Pub. Highways, Toronto, let contract building 192 concrete culverts and 12 bridge abutments, here, to L. Allen, Belleville. About $125,000. Noted Mar. 27 under "Streets and Roads."

Structural Steel

BIDS DESIRED

N. J., Newark—See "Sewers."
Ia., Leon—See "Bridges."
Minn., Brainerd—See "Waterworks."
Sask., Canora—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Ia., Eldora—See "Bridges."
Ia., Grundy—See "Bridges."

Reinforced Concrete

PROPOSED WORK

Pa., Pittsburgh—See "Industrial Works."
Ill., Chicago—See "Industrial Works."
Ariz., Jerome—See "Buildings."
Wash., Walla Walla—See "Bridges."
Que., St. Valerien—See "Bridges."

BIDS DESIRED

Ga., Thomasville—See "Bridges."
Ga., Valdosta—See "Bridges."
Ia., Denison—See "Bridges."
Ia., Leon—See "Bridges."
Minn., Brainerd—See "Waterworks."
Mo., St. Louis—See "Bridges."
Tex., Dallas—See "Streets and Roads."
B. C., Prince Rupert—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—See "Industrial Works."
★**R. I., Providence**—See "Miscellaneous."
★**Ill., Chicago**—See "Industrial Works."
Wis., Two Rivers—See "Industrial Works."
Ia., Davenport—See "Bridges."
Ia., Des Moines—See "Bridges."
Ia., Eldora—See "Bridges."
Ia., Grundy—See "Bridges."
Minn., Cloquet—See "Buildings."
★**Ont., Ottawa**—See "Bridges."

Streets and Roads

PROPOSED WORK

Conn., Middletown—City voted $15,000 bonds to tar macadam various streets. J. M. Lucey, city engr.

N. Y., Amsterdam—City soon receives bids paving East Main St. from Market to Hamilton Sts., creosoted wood block, cost $16,000; Fonda, Johnstown & Gloversville R. R. required to pave with concrete 2 ft. on each side of rails. A. Fitzgerald, clk.

N. Y., Buffalo—City soon lets contract repaving Main St., 58 ft. wide, involving 10,574 sq.yd. asphalt on 6 in. concrete base, cost $59,000; Bird Ave., 30 ft. wide, 20,042 sq.ft. asphalt on 6 in. concrete base, $110,000; Smith St., 28 ft. wide, 4008 sq.yd. asphalt on 6 in. concrete base, $22,000; Indiana St., 26 ft. wide, 1756 sq.yd. asphalt on 6 in. concrete base, $10,000; Norwood St., 30 ft. wide, 3625 sq.yd. asphalt on 6 in. concrete base, $20,000; repaving and repairing curbs on Curtiss St., 30 ft. wide, 16,114 sq.yd. asphalt on 6 in. concrete base, etc., $90,000; paving Edgewood St., 26 ft. wide, 4135 sq.yd. asphalt on 6 in. concrete base, $23,000; Alleghany St., 24 ft. wide, 2676 sq.yd. asphalt on 6 in. concrete base, $15,000. G. H. Norton, city engr. Noted Jan. 30.

N. Y., Green Island—Troy P. O.—Village trustees plan to issue bonds to repave Albany Ave. and Arch St. About $22,000.

N. Y., Little Falls—City having plans prepared paving various streets. Election will be held to vote on $100,000 bonds for project. G. I. Oakley, city engr.

N. Y., Rochester—City plans to pave Iceland Park, cost $18,500; Randolph St., $45,000; and concrete walks in Kossuth and Maple Sts., $16,800. A. C. Poole, city engr.

N. Y., St. Johnsville—Village soon receives bids paving South Division St., 27 ft. wide, cost $9257; Hough St., 24 ft. wide, $8216; East Liberty St., 20 ft. wide, $6420, all 6 in. concrete with asphalt top and artificial curbing. A. Kornburst, pres. village bd. A. Vroomans, St. Johnsville, engr.

N. Y., Salamanca—City election Apr. 29, to vote on $60,000 bonds to improve and pave roads. G. H. Elliott, city clk.

N. Y., Syracuse—City having plans prepared extending Kirkpatrick, Solar, Bear, North Geddes and Leavenworth Sts. Work consists of grading, paving, sewer and water extensions and several other head crossings. Cost between $350,000 and $400,000. H. C. Allen, city engr.

N. Y., Syracuse—City had plans prepared paving Ruskin Ave. from Summit St. to Clairemont Ave., Portland cement concrete, cost $8103; Claredon St., bituminous concrete, $2510; Bear St. from North Salina St. to Sunset Ave., asphalt, $14,000; Leavenworth Ave. from Tracy to Wilkinson Sts., bituminous concrete, $4330; Tracy St. from Plum to Van Rensselaer Sts., vitr. block, $32,910; Glenwood Ave. intersection, bituminous concrete, $4730. H. C. Allen, city engr.

N. Y., Troy—City plans to improve Hill St., entrance to Prospect Park. About $20,000. A. E. Roche, city engr.

N. J., Jersey City—Bd. Freeholders Hudson Co. plan to improve Paterson Plank Rd. from Summit to Palisade Aves., granite block. About $25,000.

N. J., Jersey City—City having plans prepared for grading, paving and building sewer in Johnston Ave. between Grand St. and Corneilson Ave., chipped paving block. About $10,000.

N. J., Woodcliff—Town plans to improve 30th and 35th Sts., asphalt and bituminous surface. About $25,000 each.

Pa., Beaver Falls—City election June 28 to vote on $125,000 bonds to pave and improve various streets and build sewage disposal plant.

Md., Towson—Baltimore Co. plans to improve 3.05 mi. Hanover Rd. from Glyndon to Carroll Co. line, concrete or macadam. State will appropriate half of cost. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

W. Va., Edgewood (Wheeling P. O.)—City Council receives bids about June paving and curbing 12,000 sq.yd. Hawthorn, Heiskell, Vista, Elm, North and South Parks Sts., 30 ft. wide, vitr. brick, bituminous macadam or concrete. About $30,000. Kohler & Conrad, Wheeling, engrs.

S. C., York—York Co. election May 10 to vote on $60,000 bonds to improve roads.

Ga., Brunswick—City voted $150,000 bonds to pave streets. Noted Feb. 27.

Ga., Jefferson—Jackson Co. election May 3 to vote on $100,000 bonds to build roads.

Ga., Rome—Floyd Co. plans to build concrete road from here to Lindale. About $100,000. Government will appropriate $50,000 toward cost.

Ga., Thomasville—Thomas Co. plans election Apr. 29 to vote on $700,000 bonds to build roads and bridges. S. L. Heald, clk.

Fla., Daytona—City plans election soon to vote on $300,000 bonds to pave, drain and build sewers in 9 mi. principal streets. Coquina rock with asphalt surface will probably be used.

Fla., Pensacola—Comrs. Escambia Co. plan to build road from Millview to Lillian Bridge, thereby connecting Pensacola with adjoining land in Baldwin Co., Ala.

Miss., Rolling Forks—Bd. Supervs. Sharkey Co. plans to build 37 mi. road. About $500,000. E. L. Fontaine, Lyons, engr.

Miss., Tunica—Comrs. Tunica Co. rejected bids received Apr. 14 grading, graveling and draining 13 mi. roads in Bd. Dist. No. 3. New bids soon. Noted Mar. 20.

La., Lake Providence—East Carroll Parish Police Jury plans election to vote on $325,000 bonds to build roads to include 40 mi. highway from Arkansas to Madison Parish line. Government will appropriate $325,000, if election carries.

Ind., Terre Haute—Bd. of Wks. soon lets contract grading and paving ½ mi. Poplar St., 36 ft. wide. Work involves 11,500 sq.yd. asphalt, 8 in. concrete, wood block or 415,000 brick on 5 in. concrete base, 6000 cu.yd. grading and 950 sq.ft. 4 in. concrete sidewalks. R. E. Koerner, Terre Haute, engr.

Mich., Detroit—City soon lets contract resurfacing roadways in Belle Isle Park, involving 50,000 sq.yd. sheet asphalt. About $100,000. W. T. Dust, Farwell Bldg., comr.

Mich., Oakwood (Oxford P. O.)—City plans to pave and shape 1 mi. Fort St. from Rouge River Bridge to city limits, 18 ft. wide, concrete. About $24,500. H. L. Russel, 505 Moffat Bldg., Detroit, engr.

Ill., Chicago—City voted $1,250,000 bonds to finish widening 12th St., to include viaduct and bridge. J. Ericson, city engr.

Ill., Chicago—Cook Co. soon lets contract building 16,124 lin.ft. Lincoln Highway, extending east from Matteson Village, (a) bituminous concrete, (b) Portland cement concrete, 18 ft. roadway, 6 ft. earth shoulders, cost, (a) $102,840; (b) $82,253; 10,241 lin.ft. Chicago-Waukegan-Milwaukee Rd., extending north from Milwaukee Ave., Niles Village, (a) $65,687; (b) $50,497; 31,784 lin.ft. Lincoln Highway extending east from South Chicago Heights, (a) $216,189; (b) $175,596; 22,729 lin.ft. Chicago-Waukegan-Milwaukee Rd. extending north from Dempster St. in Morton Grove Village, (a) $136,042; (b) $106,872. B. D. Barker, County Bldg., supt. highways. Noted Mar. 20.

Wis., Superior—City soon receives bids paving 74 blocks with concrete. About $250,000. E. A. Banks, city engr.

Ia., Carroll—Bd. Supervs. Carroll Co. soon receives bids paving 13 mi. Lincoln Highway, 18 ft. wide, concrete or monolithic brick. About $216,376. G. E. Hill, co. engr.

Ia., Denison—Comrs. Crawford Co. soon receives bids paving 7 mi. Lincoln Highway, 18 ft. wide, monolithic brick on 5 in. concrete base. About $250,000. H. B. Fishell, co. engr.

Ia., Jefferson—Bd. Supervs. Greene Co. soon receives bids paving 5 mi. Lincoln Highway and 2 mi. Mill Rd., 18 ft. wide, concrete or monolithic brick. About $175,000. H. W. Thompson, Courthouse, Grand Junction, engr.

Ia., Spencer—Bd. Supervs. Clay Co. soon receives bids paving 8 mi. Lake Okoboji Rd., 18 ft. wide, concrete or monolithic brick. About $240,000. V. McCown, co. engr.

Minn., Carlton—Comrs. Carlton Co. soon receive bids grading and graveling 8 mi. Federal Aid Project No. 17, 24 ft. wide. About $38,000. P. D. Mold, Carlton, engr. Noted Apr. 10.

Minn., Duluth—City plans to pave 2 mi. Woodland and Wallace Aves., 42 ft. wide. About $200,000. L. A. Ayers, city engr.

Minn., Duluth—Comrs. St. Louis Co. plan to issue $6,000,000 bonds to build 250 mi. highways. R. W. Acton, 212 Courthouse, engr.

Streets and Roads (Continued)

Minn., Faribault—Comrs. Rice Co. plan to grade 14 mi. road, 24 ft. wide and gravel 9 mi., involving 10,000 cu.yd. surfacing and 113,000 cu.yd. excav. About $64,000. W. P. Chapman, co. engr.

Minn., Virginia—City plans to pave 1 mi. Chestnut St., 30 ft. wide, and 2 alleys on either side, 18 ft. wide. About $30,000. E. F. Johnson, city engr.

Kan., Wellington—Comrs. Sumner Co. plan to hard surface 8.5 mi. Meridian Highway from Wellington to South Haven Twp. J. W. Mavity, co. engr.

Mont., Butte—City plans to pave Excelsior St., bitulithic or wood block. Cost between $11,000 and $17,000. W. H. Ellis, Butte, engr.

Mont., Libby—Lincoln Co. plans to build roads. About $10,000 available. S. S. Craig, engr.

Mont., Terry—Prairie Co. plans to grade 30 mi. road and build several short span timber bridges. About $18,000 and $8000 respectively. W. Mackin, Terry, engr.

Mont., White Sulphur Springs—Meagher Co. plans to grade 15 mi. road from White Sulphur Springs to Sheep Creek, cost $15,000; 10 mi. Deep Creek Rd., $10,000; 12 mi. road from Copperopolis to Martinsdale, $10,000, and 20 mi. road from White Sulphur Springs to Ft. Logan, $10,000. E. R. Lausted, White Sulphur Springs, engr.

Mo., St. Louis—Bd. Pub. Serv. soon receives bids building boulevard from 12th St. and Chouteau Ave. to 12th St. and Park Ave., 80 ft. wide. About $240,000. W. W. Horner, city engr

Mo., St. Louis—City having plans prepared widening 1 mi. Vandeventer Ave. from Chouteau Ave. to Market St., from 60 to 80 ft., and redressing with granite block, cost $170,000; extending Skinker Ave. from Delmar to Hodaimont Aves., ¾ mi. long, 80 ft. wide, $44,000; Outer Belt Project, also Dillon Ave from Forest Park to River des Peres Project. W. W. Horner, city engr.

Arizona—State Highway Comn., Phoenix, plans to build roads to cost $1,750,000 (part of this is contingent on equal appropriation by various counties). T. Maddox, state engr.

Ariz., Bisbee—City plans to spend $200,000 to pave streets. P. H. Halleck, city engr.

Ariz., Clifton—Greenlee Co. voted $200,000 bonds to build highways between Morenci and Metcalf and through Wards canyon. $50,000 federal funds will be appropriated for project. Noted Feb. 27.

Ariz., Phoenix—City receives bids about May 15 paving 3rd Ave. between Van Buren and Fillmore Sts., 2½ in. bituminous concrete base and 1½ in. bitulithic wearing surface. About $25,368. Work involves 8569 sq.yd. paving, 8569 sq.yd. grading, 3806 lin.ft. combination curb and gutter, 528 lin.ft. single curb, 26 lin.ft. single and 201 lin.ft. valley gutter. L. B. Hitchcock, city engr.

Ariz., Phoenix—Comrs. Maricopa Co. plan election in May to vote on $4,000,000 bonds to repair, improve and build 272 mi. hard surfaced road. R. C. Perkins, co. engr.

Wash., Colfax—Comrs. Whitman Co. soon receive bids hard surfacing with crushed rock or gravel 9¾ mi. Highway No. 6-A, southwest of Colfax and 8.4 mi. Highway No. 16, northwest of Oakesdale. A. L. Maxwell, co. aud.

Wash., Seattle—King Co. plans to pave 2 mi. McDougall Rd., 16 ft. wide, involving 18,000 sq.yd. concrete and 3000 cu.yd. earth excav., cost $56,000; 3 mi. Sunnydale-Sylvester Rd., 16 ft. wide, involving 29,000 sq.yd. concrete or brick and 7000 cu.yd. earth excav. S. J. Humes, co. engr.

Wash., Spokane—City plans to pave 5 blocks on Cedar St. About $13,190. A. D. Butler, city engr.

Wash., Vancouver—City plans to hard surface East 7th St., connecting with River Rd. at city limits on east. W. Schwarz, city engr.

Wash., Vancouver—Clarke Co. plans to pave 7 mi. Pacific Highway from Salmon Creek bridge to Pioneer and 5 mi. from Sara to Tenny Schoolhouse.

Ore., Eugene—Lane Co. Comn. plans to improve 19 mi. Cascade Summit Military Rd. via Upper Willamette River, from Rigdon Pl. to Crescent Lake.

Ore., Portland—City plans to improve 72nd St. (including car tracks) from 61st St. to Foster Rd.; 67th St. from Powel Valley to Foster Rd., 25 ft. center strip. O. Laurgaard, city engr.

Ore., Portland—City plans to change grade of East 72nd St. from center line East Glisan St. at 257.5 ft.; center line Oregon St. 260.2 ft. to center line East Glisan St. at 257.5 ft.; at 133 ft. north of north line East Glisan St. at 259 ft.; at center line Oregon St. at 260.2 ft. G. R. Funk, city aud.

Ore., Portland—City had plans prepared improving Foster Rd. from East 52nd to 72nd Sts. About $113,000. A. O. Laurgaard, city engr.

Ore., Portland—City soon lets contract improving Denver Ave. from Kinningsworth Ave. to Portland Blvd.; Ainsworth Ave. from Denver Ave. to Campbell St.; Dwight St. from Lombard St. to Willis Blvd., artificial stone or asphaltic sidewalks on concrete foundation not less than 3 in. deep; Ladd Ave. from northwesterly boundry of unnamed circular driveway around Central Park in Ladd's addition to Hawthorne Ave., involving excavating and replacing with 1 in. binder and 2 in. asphaltic concrete top, No. 1 or 2 or sheet asphalt pavement. G. R. Funk, city aud.

Ore., Salem—Marion Co. Market Rd. Com. and Pomona Grange Com. plan election to vote on $840,000 bonds to hard surface market roads. Address W. M. Hamilton, chn. Ways & Means.

Ore., Salem—Marion Co. Market Rds. Com. plans to hardsurface 9.5 mi. Aurora-Donald-Champoeg Rd.; 3 mi. Aurora-Butteville Rd.; 1320 ft. Brooks-Pacific Highway; 5.5 mi. Broadacres-Hubbard Rd.; 16.5 mi. Woodburn-St. Paul-Newberg Bridge Rd.; 10.5 mi. Woodburn-Mt. Angel-Silverton Rd.; 6 mi. Mt. Angel-Scotts Mills Rd.; 2 mi. Mommitor-Norton Corner Rd.; 3 mi. Parkerville-Pacific Highway; 4.2 mi. Silverton-Pine Tree-Four Corners Rd.; 5 mi. Silverton-Willard Rd.; 1320 ft. Gervais-Pacific Highway; 5 mi. Salem-Wheatland Rd.; 9 mi. Salem-Silverton Rd.; 2.5 mi. Salem-Pratum Rd.; 4.2 mi. Salem-Geer Rd.; 7 mi. Turner-Marion Rd.; 12 mi. Salem-Macleay Rd.; 2 mi. Liberty-Rosedale Rd.; 17.2 mi. Salem-Stayton Rd.; 2 mi. Jefferson-Green Bridge Rd. and 3 mi. Salem-Livesley Rd.

Cal., Bakersfield—City rejected bids grading, paving, draining, etc., in 17th, Q and Cedar Sts. About $75,000. Plans will probably be revised and new bids taken. R. H. Hubbard, city engr. Noted Feb. 20.

Cal., Fresno—City soon receives bids paving 7 blocks Platt Ave., 4 blocks Kerckhoff Ave. and 5 blocks Balch Ave. C. Dillon, city clk.

Cal., Grass Valley—City plans to grade 1.4 mi. South Auburn and East Main Sts., 12-26 ft. wide, involving 14,600 sq.yd. concrete. About $30,000.

Cal., Merced—Bd. Supervs. Merced Co. having plans prepared by A. E. Cowell, co. surv. grading and paving with concrete and building culverts and bridges on 20.45 mi. road from Gustine to Los Banos road via Middle, Centinella, Los Banos and Volta Rds., 2.79 mi. from Dos Palos to South Dos Palos via Blossom St. and Lexington Ave.; 4.27 mi. road from Dos Palos to intersection with proposed Pacheo Pass State Highway, 6.18 mi. road from Stanislaus Co. line to proposed Milliken bridge, via Irwin and Hilmar, 25 mi. road from Mariposa Co. line to State Highway near Bear Creek bridge via Merced Falls, Snelling, Hopeton, Cox Ferry bridge, thence parallel to Yosemite Valley Ry. to Amsterdam and Shaffer Rds. and Cox Ferry. Bonds for $1,250,000 sold for project. P. J. Thorton, co. clk.

Cal., Okeechobee—Okeechobee Co. election May 3, to vote on $300,000 bonds to improve roads.

Cal., San Diego—Property owners organizing district and plan to improve streets on Point Loma, to include concrete, asphalt and macadam pavements, concrete gutters and curbs, cement walks and sanitary sewers. Plans include 1400 ft. timber bridge over railway tracks. About $350,000. Work to be done under supervision of city. Property owners on Inspiration Heights also plan to organize to pave Sunset Blvd. and other streets. G. Cromwell, city engr.

Cal., Yuba City—P. J. Wulff, engr. Bureau Rds., U. S. Dept. Agriculture, Wash., D. C., recommended that Bd. Supervs. Sutter Co. construct 100 mi. concrete paved roads, 8 ft. wide, crushed rock shoulders on either side. Bd. Supervs. may call election to vote on $1,250,000 bonds for project.

N. S., Halifax—City plans to spend $605,900 to pave streets.

N. S., Lunenburg—See "Waterworks."

Que., St. Lambert—City plans to spend $50,000 to pave streets and build roads.

Que., Ste. Rose—Laval Co. soon lets contract building 5 mi. road, running from eastern limits of St. Vincent de Paul Village, to Terrebonne Bridge, in Parish of St. Francois de Sales, macadam with asphaltic oil top. H. Chapleau, Ste. Rose, engr.

Ont., Brantford—City voted $83,654 bonds to build roads.

Ont., Listowel—J. Roger, engr., Council Chambers, soon lets contract building 7106 ft. road, 24 ft. wide, involving 7000 sq.yd. concrete. About $20,000.

Ont., St. Catharines—Lincoln Co. plans to expend $237,750 to build 29¼ mi. tar macadam roads in Caistor, Gainsboro, South Grimsby, North Grimsby, Clinton, Niagara and Granthan Twps.

Ont., Sarnia—City voted $81,000 bonds to resurface various streets with asphalt. J. D. Stewart, clk.

Ont., Toronto—Comr. Dept. Pub. Wks., Toronto, recommended that various streets be paved with asphalt and concrete. Plans include Silverthorn St., Davenport Rd., Davisville and Prescott Aves. About $230,000. R. C. Harris, City Hall, engr.

Man., Parkdale—City of St. Andrews having plans prepared building 48 mi. road from here to Winnipeg Beach.

BIDS DESIRED

New Hampshire—Until Apr. 30, by F. E. Everett, comr. state highway, Concord, building 3913 ft. Central Trunk Line, 17 ft. wide, Sunapee Twp., involving 7400 sq.yd. bituminous macadam and 1320 cu.yd. excav. About $14,000. C. P. Riford, Concord, engr.

N. Y., Elmira Heights (Elmira P. O.)—Until Apr. 27, by N. Shock, village clk., improving 14th St. Work involves 10,500 sq.yd. vitr. shale brick pitch filled pavement, 3075 lin.ft. straight concrete curb with protection bar, 380 lin.ft. curved concrete curb with protection bar and 700 lin.ft. 5 in. medina headers; advertised in this issue.

N. Y., Patchogue—Until May 9, by E. B. Woodruff, village clk., paving and curbing North Ocean Ave. and Oak St., involving 13,000 sq.yd. concrete pavement and 3400 lin.ft. concrete curbing. E. A. May, civil engr.; advertised in this issue.

N. Y., S. I., St. George—Until Apr. 28, by C. D. Van Name, pres. Richmond Boro., building concrete curb with steel guard and laying vitr. brick gutter on concrete foundation, Andros Ave. from Richmond Terrace to Davidson St., involving 980 lin.ft. concrete curb and 140 sq.yd. vitr. brick gutter.

N. Y., S. I., St. George—Until Apr. 29, by C. D. Van Name, pres. Richmond Boro., regulating and repaving with granite block, Wave St. from Bay St. to Staten Island Rapid Transit Ry., involving 1050 sq.yd. granite block.

N. Y., S. I., St. George—Until May 2, by C. D. Van Name, pres. Richmond Boro., regulating and repaving with concrete, Forest Hill Rd. from Farm Colony Rd. to Rockland Ave., involving 6550 sq.yd. concrete.

New Jersey—Until May 7, by State Highway Comn., Broad St. Bank Bldg., Trenton, surfacing 37,750 sq.yd. State Highway Route No. 14, Rio Grande-Wildwood Junction Sect., and 21,384 sq.yd. State Highway Route No. 14, Wildwood Junction-Cape May Court House, both concrete, Cape May Co. A. L. Grover, ch. clk.

New Jersey—Until May 12, by State Highway Comn., Broad St. Bank Bldg., Trenton, surfacing 40,900 sq.yd. State Highway and Route No. 3, Elwood-DaCasta Sect., and 61,954 sq.yd. State Highway Route No. 3, Egg Harbor-Elwood Sect., both concrete, Atlantic Co. A. L. Grover, ch. clk.

N. J., Burlington—Until May 7, by Bd. Freeholders Burlington Co., building Camden Co. line-Marlton-Medford Rd., Evesham and Medford Twps., involving 75,000 sq.yd

Streets and Roads (Continued)

sheet asphalt surface on macadam foundation; Moorestown-Mt. Holly Rd., Chester, Mt. Laurel, Lumberton and Northampton Twps., 75,000 sq.yd. sheet asphalt surface on macadam foundation; River Rd., from Palmyra to Broad Sts., Palmyra, Cinnaminson, Delran, Beverly and Burlington Twps., 75,000 sq.yd. sheet asphalt surface on macadam foundation; Sect. 2 Moorestown-Camden Pike, Chester Twp., 5717 sq. yd. sheet asphalt surface on concrete foundation; advertised in this issue.

N. J., Morristown—Until May 14, by Bd. Freeholders Morris Co., building Sussex St. from Blackwell to Clinton Sts., Dover Twp., Warrenite on concrete base, 32 ft. wide, cost, $70,000; Myrtle Ave., Warrenite pavement on repaired macadam base, 18 ft. wide, Booton Twp.; Main St. from Lackawanna R. R. to point 200 ft. from Sussex Co. line, amiesite on concrete base, Netcong Twp., $25,000.

N. J., Salem—Until May 12, by Bd. Freeholders Salem Co., building 2nd Sect. Penn Grove-Pennsville Rd., Upper Penns Neck and Lower Penns Neck Twps., involving 10,400 sq.yd. concrete pavement. I. C. Smashey, clk.; advertised in this issue.

Pa., Export—Until Apr. 30, by Boro., grading, curbing and paving Westmoreland St. Work involves 1500 cu.yd. excav., 1200 lin.ft. curbing and 2600 sq.yd. paving. J. Lindsay, secy.

Pa., Pittsburgh—Until May 15, by Allegheny Co., building 5700 ft. Painters Run and McLaughlin Run Rds., Bridgeville Boro., to point at or near overhead crossing of Beadling branch of Pittsburgh, Cincinnati, Chicago and St. Louis Ry., 18 ft. wide, concrete or asphaltic concrete. R. V. Warren, co. engr.

Maryland—Until May 6, by State Rds. Comn., 601 Garrett Bldg., Baltimore, paving 1.18 mi. Monroe St. from Eagle to Mosher Sts., asphalt, Baltimore City, Contr. B C-29A; 2.5 mi. State Highway from Grove to Bureau, concrete, Caroline Co., Contr. Co-18; 1.76 mi. State Highway through Rockville, concrete, Montgomery Co., Contr. M-17; advertised in this issue.

Md., Upper Marlboro—Until May 6, by Comrs. Prince Georges Co., building 1.10 mi. State Aid Highway along Cottage and Rhode Island Aves., 16 ft. wide, 8 in. concrete. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

Va., Norfolk—Until May 9, at office of C. E. Ashburner, city mgr., improving 27,000 sq.yd. Class A streets and 17,000 sq.yd. Class B, sheet asphalt; advertised in this issue.

N. C., Beaufort—See "Excavation and Dredging."

O., Akron—Until May 19, by H. S. Morse, dir. pub. serv., Delaware Bldg., paving East Ave. from Wooster Ave. to Maple St. Work involves 9800 cu.yd. excav., 8900 lin.-ft. sandstone and 1100 lin.ft. granite circle curb, 15,250 sq.yd. brick, asphalt or asphaltic concrete pavement and 1750 sq.yd. Hillside brick pavement, 53,600 sq.ft. artificial stone walks, 51 street inlets and 1460 lin.ft. 12 in. inlet pipe; advertised in this issue.

O., Akron—Until May 21, by H. S. Morse, dir. pub. serv., Delaware Bldg., repaving West Exchange St. from Bowery to Maple Sts. Work involves 5200 cu.yd. excav., 1000 lin.ft. sandstone and 670 lin.ft. granite circular curb and 5800 lin.ft. curb, redressed and reset., 14,100 sq.yd. stone block or vitr. brick pavement, 37,000 sq.ft. artificial stone walks, 32 street inlets and 700 lin.ft. 12 in. inlet pipe; advertised in this issue.

O., Edgerton—Until May 6, by Village Council, paving Michigan Ave. from Hull to Sargent Sts. (except between intersections of Indiana and Vine Sts.); Michigan Ave. and Clarksville Rd. from Sargent St. to south corporation line and Hicksville Rd. from Clarksville Rd. to south corporation line. Work involves 14,391 sq.yd. pavement, 6850 cu.yd. grading, 3185 lin.ft. 10-27 in. pipe sewer, 10 manholes and 20 catch basins, 470 lin.ft. circular and 5310 lin.ft. straight curb. Cost, $55,430. E. M. Gabriel, clk.

O., Toledo—Until Apr. 29, by Pub. Serv. Dir., 225 Valentine Bldg., building 93,180 sq.ft. cement sidewalk and 214,890 sq.ft. stone sidewalk. About $70,000. H. C. McClure, city engr.

Ind., Terre Haute—Until May 3, by Bd. Pub. Wks. grading and paving 300 lin.ft. alley between 7th and 8th Sts. from Cherry to Mulberry Sts., 20 ft. wide, involving 670 sq.yd. concrete, asphalt, wood block or 24 000 brick on 4 in. concrete base and 200 cu.yd. grading, cost $1800; 300 ft. alley between 4th and 5th Sts. from Cherry to Mulberry Sts., 16 ft. wide, involving 530 sq.yd. 7 in. concrete, asphalt, wood block or 19,000 bricks and 370 cu.yd. grading $13,000; 770 lin.ft. alley between 6th and 7th Sts. from Cherry to Mulberry Sts., 16 ft. wide, involving 1375 sq.yd. wood block, 7 in. concrete, asphalt or 50,000 bricks on 5 in. concrete base and 870 cu.yd. grading. R. A. Koerner, Terre Haute, engr.

Illinois—Until May 1, by State Highway Comn., Springfield, paving roads in following counties; Clark Co., 2000 ft. Sect. E, Route 7, 10 ft. wide, involving 2222 sq.yd. concrete, 1722 cu.yd excav., cost excluding cement, $8083;

Greene Co., 3173 ft. Sect. H, Route 3, 24 ft. wide, 7875 cu.yd excav., $8542; 5200 ft. Sect. F, Route 5, 24 ft. wide, both earth paving, 3150 cu.yd. excav., $4365;

De Witt Co., 16,698 ft. Sect. F, Route 11, 24 ft. wide, 13,098 cu.yd. excav., $9304; 9000 ft. Sect. G, Route 10, 24 ft. wide, both earth paving, 3169 cu.yd. excav., $2662;

Knox Co., 9300 ft. Sect. J, Route 6, 24 ft. wide, earth paving, 5230 cu.yd. excav., $4294;

Clay Co., 4100 ft. Sect. F, Route 6, 24 ft. wide, 2560 cu.yd. excav., $2140; 2705 ft. Sect. G, Route 6, 24 ft. wide, both earth paving, 2400 cu.yd excav., $3036;

Ogle Co., 7254 ft. Sect. F, Route 10 and 11, 10 and 16 ft. wide, 11,798 sq.yd. concrete, 4476 cu.yd. excav., $19,428;

Menard Co., 2000 ft. Sect. E, Route 4, 16 ft. wide, 3556 sq.yd. concrete, 2709 cu.yd. excav., $6380;

Cook Co., 20,276 ft. Sect. 58, Route 11C and 6B, 18 ft. wide, 40,743 sq.yd. concrete, 13,774 cu.yd. excav., $69,826; 5413 ft. Sect. 57, Route 1, 18 ft. wide, 10,826 sq.yd. concrete, 1882 cu.yd. excav., $17,820;

Marion Co., 3240 ft. Sect. G, Route 7, 10 ft. wide, 3600 sq.yd. concrete, 1950 cu.yd. excav., $7630;

Lawrence Co., 3950 ft. Sect. D, Route 5 and 6, 10 ft. wide, 4256 sq.yd. concrete, 2330 cu.yd. excav., $9113;

Mason Co., 4000 ft. Sect. B, Route 1, 16 ft. wide, 7111 sq.yd. concrete, 1022 cu.yd. excav., $11,804;

Cass. Co., 1063 ft. Sect I, Route 2, 10 ft. wide, 1181 sq.yd. concrete, 600 cu.yd. excav., $1914; 2806 ft. Sect. J, Route 7, 10 ft. wide, 3118 sq.yd. concrete, 2600 cu.yd. excav., $6223;

White Co., 4484 ft. Sect. D, Route 5, 10 ft. wide, 4982 sq.yd. gravel, 5145 cu.yd excav., $6690;

Champaign Co., 3440 ft. Sect. K, Route 2, 10 ft. wide, 3822 sq.yd. brick, 2225 cu.yd. excav., $13,556; 5532 ft. Sect. L, Route 5, 10 ft. wide, 6147 sq.yd. brick, 2956 cu.yd. excav., $20,521. C. Older, ch. highway engr.

Illinois—Until Apr. 30, by State Highway Comn., Springfield, paving roads in following counties: Schuyler Co., 2571 ft. Sect. F, Route 1, 10 ft. wide, involving 2587 sq.yd. concrete, 1087 cu.yd. excav., cost excluding cement, $5209; 2192 ft. Sect. G, Route 2, 10 ft. wide, 2436 sq.yd. concrete, 2498 cu.yd. excav., $5581;

Warren Co., 3741 ft. Sect. G, Route 11, 16 ft. wide, 7109 sq.yd. concrete, 2155 cu.yd. excav., $13,972;

Hancock Co., 13,000 ft. Sect. I, Route 1, 24 ft. wide, 6687 cu.yd. excav., $7296; 12,600 ft. Sect. J, Route 13, 24 ft wide, both earth paving, 4462 cu.yd. excav., $8624;

Lake Co., 6060 ft. Sect. J, Route 6, 18 ft. wide, 12,120 sq.yd. concrete, 9371 cu.yd. excav., $21,400;

Cumberland Co., 11,300 ft. Sect. E, Route 1, 10 ft. wide, 12,555 sq.yd. gravel, 4773 cu.yd excav., $18,852;

Christian Co., 9500 ft. Sect. I, Route 9, 15 ft. wide, 4383 cu.yd. excav., $4703; 1800 ft. Sect. J, Route 15, 15 ft. wide, 8585 cu.yd. excav., $5271; 4500 ft. Sect. K, Route 23, 15 ft. wide, 2224 cu.yd. excav., $4806; 7073 ft. Sect. L, Route 20, 15 ft. wide, 3830 cu.yd. excav., $5283; 10,400 ft. Sect. M, Route 3, 15 ft. wide, oiled earth paving on all, 4730 cu.yd. excav., $5241;

Stephenson Co., 5300 ft. Sect. F, Route 1, 10 ft. wide, 5889 sq.yd. brick, 3486 cu.yd. excav., $20,400;

Bureau Co., 3456 ft. Sect. F, Route 4, 15 ft. wide, 5760 sq.yd. concrete, 1850 cu.yd. excav., $10,990; 4000 ft. Sect. G, Route 1, 15 ft. wide, 6667 sq.yd. concrete, 2466 cu.yd. excav., $11,486;

Will Co., 10,001 ft. Sect. G, Route 13, 18 ft. wide, 20,275 sq.yd. concrete, 3605 cu.yd. excav., $30,318;

Bond Co., 1783 ft. Sect. E, Route 6, 10 ft. wide, 2120 sq.yd. brick, 3000 cu.yd. excav., $9226;

Carroll Co., 2825 ft. Sect. D, Route 8, 4978 sq.yd. concrete, 960 cu.yd. excav., $9752;

Edwards Co., 1550 ft. Sect. D, Route 2, 10 ft. wide, 1722 sq.yd. gravel, 1500 cu.yd excav., $3430;

Adams Co., 4459 ft. Sect. E, Route 5, 15 ft. wide, 7432 sq.yd. waterbound macadam, 9653 cu.yd. excav., $12,037.

Marshall Co., 22,810 ft. Sect. F, Route 9, 24 ft. wide, earth paving, 22,462 cu.yd excav., $17,820;

Pope Co., 9 concrete bridges, Sect. D, Route 1 and 3, $2370;

Hamilton Co., 1 concrete bridge, Sect. C, Route 6, $5250;

Scott Co., 1 concrete bridge, Sect. H, Route 1A, $3050;

Massac Co., 5 concrete bridges, Sect. G, Route 3, $4190. C. Older, ch. highway engr.

Wis., Manitowoc—Until Apr. 28, by Pitz & Pentzein, engrs., 8th and Jay Sts., building 31,100 sq.ft. curb and sidewalks and 13,700 sq ft. curb and house walks, involving 44,000 lin.ft. concrete curb and gutter and 44,700 lin.ft. concrete sidewalk, cost, $35,000; also 25,000 ft. curb and gutter, crushed stone and macadam pavement and 12,000 cu yd. asphalt pavement, involving 8000 lin.ft. concrete curbing, 12,000 sq.yd. asphalt and 9930 sq.yd. concrete, $25,000.

Wis., Sheboygan—Until May 1, by G. W. Ubbelohde, engr., 1613 North 7th St., grading and paving 3.23 mi. Plymouth-Sheboygan Falls Rd., 20 ft. wide, involving 20,000 sq. yd. concrete and 5315 cu. yd. earth excav., etc. About $30,000.

Minn., Austin—Until May 14, by O. J. Simmons, aud. Mower Co., building Job. No. 1901, State Rd. No. 3, involving 14,230 cu.yd. graveling and 4000 cu. yd. stripping, cost, $17,234; Job No. 1902, State Rd. No. 2, 2047 cu.yd. graveling and 800 cu.yd. stripping, $3182; Job No. 1903, State Rd. No. 8, 5184 cu.yd. graveling and 1800 cu.yd. stripping, $5988. A. X. White, Austin, engr.

Minn., Detroit—Until May 6, by J. A. Narum, aud. Becker Co., grading 2 mi. and graveling 4 mi. Federal Aid Project. No. 59, State Rd. No. 1, involving 20,769 cu.yd earth excav., cost $15,000; 5 mi. Federal Aid Project No. 15, 24 ft. wide, 18,000 cu yd. gravel surfacing, $25,000. H. W. Teague, Detroit, engr.

Minn., Hastings—Until May 15, by Dakato Co. paving 6 mi. Federal Aid Project No. 23, 20 ft. wide. About $180,000. C. L. Methren, Hastings, engr.

Minn., Long Prairie—Until May 7, by Aud. Todd Co., and State Highway Dept., St. Paul, grading and graveling 5 mi. Federal Aid Project No. 26, 24 ft. wide, involving 30,000 cu.yd. earth excav. and 6000 cu. yd. gravel-surfacing. About $25,000. A. M. Graves, Long Prairie, engr. Noted Apr. 10.

Minn., Windom—Until May 20, by Cottonwood Co., grading and graveling 17 mi. Federal Aid Project No. 43, 24 ft. wide. About $80,000. D. R. Savage, Windom, engr.

Neb., David City—Until May 12, by M. L. Bouse, clk., Butler Co., grading Osceola-David City Rd., 24 ft., wide; Butler and Polk Counties. Work involves 37.68 mi grading, 7751 sq.yd. concrete paving and 171,611 cu.yd. earth excav. About $80,000. G. E. Johnson, Lincoln, state engr. Noted Feb. 13

Neb., Gage—Until May 13, by G. L. Mumford, clk. Beatrice Co., grading 29.7 mi. Beatrice-Fairbury Rd., 24 ft. wide, in Gage Co., (Beatrice), and Jefferson Co., (Fairbury). About $60,000.

Neb., Humphrey—Until May 14, by J. A. Zavadil, city clk., paving 14,000 yd. Bids will be received on brick and asphalt, 5 in. concrete base and concrete on 6 in. concrete base. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Neb., Nebraska City—Until May 14, by G. R. Sayles, clk. Cass Co., grading Nebraska City-Plattsmouth Rd., 24 ft. wide, Otoe and Cass Counties, involving 144,000 cu.yd. earth excav. About $55,000. G. E. Johnson, Lincoln, state engr. Noted Feb. 13.

Neb., Rushville—Until May 15, by W. C. Mounts, clk. Box-Butte Co., grading Alliance-Antioch Rd., 24 ft. wide, Box-Butte and Sheridan Counties. Work involves 14.8 mi. grading, 9 mi. sand-clay surfacing, 72,200 cu.yd. earth excav., etc. About $43,000. G. E. Johnson, Lincoln, state engr. Noted Feb. 13.

Neb., St. Paul—Until May 12, by J. E. Steeple, city clk., paving 16,000 yd. Bids will be received on brick and asphalt, 5 in. concrete base and concrete on 6 in. concrete base. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Streets and Roads (Continued)

Neb., Wahoo—Until May 12, by J. B. Hines, clk. Saunders Co., grading 30.3 mi. Fremont-Ceresco Rd., 24 ft., wide, in Dodge and Saunders Counties, involving 145,750 cu.yd. earth excav. About $55,000. G. E. Johnson, Lincoln, state engr. Noted Feb. 13.

Arkansas—Until May 7, by State Highway Dept., Little Rock, building 93 mi. gravelled roads radiating from Arkadelphia, Rd. Dist. No. 1, Clark Co. Work has been divided into 5 sections ranging from 10 to 30 mi. Lund & Hill, 527 Southern Trust Bldg., Little Rock, engrs.; advertised in this issue.

Utah—Until Apr. 29, by State Rd. Comn., Salt Lake City, hard surfacing 6.05 mi. Midland Trail between Price and Helper, 14 ft wide, concrete, 4 ft.. dirt shoulders; also grading 4.4 mi. Fisher Pass section of Lincoln Highway, 20 ft. wide, rock, $10,000. I. R. Browning, state engr.

Washington—Until Apr. 28, by State Highway Bd., Olympia, grading, draining and gravel surfacing 6.2 mi. North Central Highway, between Harrington and Mohier, Lincoln Co. J. Allen, state highway comr.

Wash., Colfax—Until May 5, by Comrs. Whitman Co., grading, draining, bridging and surfacing with crushed rock or gravel 7.75 mi. Improved Rd. No. 2 from end of Highway No. 9 toward Palouse. A. L. Maxwell, co. aud.

Cal., Manhattan Beach—Until May 7, by city, improving 14 blocks Ocean Ave., concrete and asphalt paving, cement curbs and sidewalks, etc.

Cal., Santa Barbara—Until May 1, by S. B. Taggart, city clk., improving Sola St., et al. Plans include grading, 4 in. concrete paving with 1½ in. Warrenite surface, cement curbs and gutters, 6 in. vitr. pipe sewer connections, etc. A. B. Cook, city engr.

Que., Longueuil—Until May 1, by city building 2 mi. roadway. About $20,000. A. Vincent, St. Alexander St., engr. Noted Apr. 3.

Que., St. Severe—Until June 2, by J. L. Decarie. Parliament Bldg., Quebec. graveling roads. About $25,000.

Ont., Guelph—Until May 1, by F. McArthur, city engr., resurfacing about 10,000 sq.yd. pavement, asphalt, concrete or bituminous concrete. Cost $20,000.

Ont., Owen Sound—See "Bridges."

Ont., Toronto—Until May 16, by city paving Davenport Rd. between Grand Trunk and Ford St., asphalt on 8 in. concrete foundation, concrete curbs and brick block gutters. About $87,995. W. A. Littlejohn, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Massachusetts—State Highway Comn., Capitol, Boston, received bids Apr. 1. building 37,000 ft. State Highway, Petersham Twp., involving 148,000 gal. bituminous macadam, 12,000 cu.yd. earth and 600 cu.yd. rock excav., 5500 cu.yd. borrow and 17,800 ton broken stone, from Lane Constr. Co., 37 Colony St., Meriden, Conn., $143,075; R. H. Newell Co., Uxbridge, $157,261; B. Perrini Co., 15 Court St., Boston, $166,365.

Massachusetts — State Highway Comn., Capitol, Boston, received bids Mar. 25, building State Highway, 18-24 ft. wide, Concord Twp., involving 11,900 gal. bituminous macadam, 10,000 cu.yd. earth and 40 cu.yd. rock excav., 15,000 cu.yd. borrow, 14,200 ton broken stone and 7600 ton trap rock in place, from J. Fannon, 28 Hinckly St., Somerville, $131,853; J. W. McDuff, Summer St., Boston, $142,023; Hanscom Constr. Co., West Medford, $144,555.

Massachusetts—State Highway Comn., Capitol, Boston, received bids Apr. 8, building 10,000 ft. State Highway, 18-24 ft. wide, Danver Twp., from Nelson & Hamlin, Salem, $34,541; Welch & Monahan, South Hamilton, $35,887; J. C. Collins, 33 Pearson St., Andover, $38,773. Noted Apr. 3.

Mass., Boston—Comn. Waterways & Pub. Lands received bids Apr. 2, paving 2900 ft. Drydock Ave., 70 ft. wide, involving 24,500 sq.yd. granite block on 6 in. gravel base, 5950 lin.ft. stone curbing, 2900 sq.yd. brick sidewalk and 3800 cu.yd earth excav., from Coleman Bros., Chelsea, $149,103; McGuire & McGoutry Co., Boston, $164,670; Alco Contg. Co., Boston, $164,890. Noted Mar. 20.

Mass., Fall River—City received only bid building granolithic sidewalk for 1 year, from Beattie & Cornell, 30 North Quarry St., $2.45 per cu.yd.

Mass., New Bedford—City received bids paving 4947 sq.yd. Acushnet Ave., from Simpson Bros. Corp., Devonshire St., Boston, wood block, $4.60 per sq.yd., Hassam, $3.55 per sq.yd.; Warren Bros. Co., Berkeley St., Boston, endurite, $1.99 per sq.yd.

★**Rhode Island**—State Bd. Pub. Rds., Providence, let contract building 2.24 mi. road in Smithfield and Gloucester Twps., to R. H. Newell & Son, Uxbridge, Mass., $82,854. Noted Apr. 10.

★**R. I., Providence**—Water Supply Bd. let contract building 1.8 mi. road in Scituate Twp., (Contr. 4), to Sperry Eng. Corp.. 82 Church St., New Haven, Conn., $54,306; 3.4 mi. road Foster Twp., (Contr. 7), to E. W. Foley Constr. Corp., New York City, $45,762. Noted Mar. 27.

★**N. Y., Buffalo**—City let contract to H. P. Burgard, Fillmore Ave., repaving and renewing curb and sidewalks on 1956 ft. Myrtle Ave., 24 ft. wide, involving 5239 sq.-yd. asphalt on 6 in. concrete base and 2640 lin.ft. sandstone curbing, $26,980; tearing up old pavement and repaving with concrete base and asphalt top, repairing curbs and drives on 2623 ft. West Ferry St., 26 ft. wide, involving 8403 sq.yd. asphalt on 6 in. concrete base and 4149 lin.ft. sand or limestone curbing, $48,540.

★**N. Y., Buffalo**—Erie Co. let contract building 1 mi. Delaware Ave., Kenmore Village, to F. W. Knickenberg; 2.8 mi. Rapids-Greiner Rd., Newstead and Clarence Twps., to Cold Spring Constr. Co., Ellicott Sq., $22,000; 3.8 mi. Center St., Golden Twp., to E. J. Hessell, East Aurora, $53,000; Pontiac-Derby Rd., Evans Twp., to Rossney Contg. Corp., 37 Heath St., $37,900; 3 mi. East Concord-Springfield Rd., Concord Twp., to F. J. Mumm Contg. Co., 176 Best St., $37,700. Noted Feb. 6 and Apr. 3.

★**N. Y., Long Island City**—M. E. Connolly, pres. Queens Boro., let contracts regulating and grading sidewalks and gutter spaces, laying sidewalks, etc., on Barclay St. and Gates Ave. to R. A. Hess Inc., $598 and $1230 respectively; Delaware Ave. to Scott & Kurth, $270; 153rd St. to Peace Bros., 20 Main St., Flushing, $1596; 1st and 2nd Wards, to Sicilian Asphalt Paving Co., Paidge Ave., $13,325. Noted Apr. 10.

★**N. Y., Rochester**—City let contracts to J. E. Crouch, Rochester, repairing Livonia-Conesus, Nunda-Dalton, Kuders Crossing and Springwater Town Line Rds.; Dansville-Mount Morris and Craig Colony Rds., $7857 to R. W. Corp., East Belle Isle Yard, Syracuse, Mount Morris-Geneseo and Mount Morris Village Rds., $44,647.

★**N. Y., Watertown**—City will pave West Main St. between Mill and Leray Sts. Work will be done by day labor.

★**Pennsylvania**—State Highway Comn., Harrisburg, let contracts building roads in counties, as follows: (a) Allegheny Co., Springdale Boro (a1) Hampton and Richland Twps.; (b) Bradford Co., (c) Fulton Co.; (d) Jefferson Co., (e) Pike Co., (f) Lackawanna Co., Moscow Boro., (f1) Dunmore Boro. and Roaring Creek Twp., (g) Somerset Co., (h) Berks Co., (i) Lebanon Co., Jackson, North Lebanon and South Lebanon Twps., (i1) North Lebanon, North Cornwall, Annville, North Annville, South Annville and North Londonderry Twps., to Booth & Flinn, Ltd., 1942 Forbes St., Pittsburgh, (a) $90,563; D. McNeill Co., Jenkins Arcade, Pittsburgh, (a1) $443,307; T. H. Gill Co., Binghamton, N. Y., (b) $146,441; Snyder-Phillips Co., Phila., (c) $131,305; Dale Eng. Co., Mann Bldg., Utica, N. Y., (d) $205,049; H. P. Sproul Constr. Co., 107 South Division St., Peekskill, N. Y., (e) $199,827, (f) $72,831; O'Brien Bros., Division St., Avoca, (f1) $239,592; Vipond Constr. Co., 2222 Beale Ave., Altoona, (g) $59,922; Union Paving Co., 30th and Locust Sts., Phila., (h) $72,480, (i) $59,520, (i1) $69,642. Noted Mar. 27.

★**Pennsylvania**—State Highway Comn., Harrisburg, let contract building 8000 ft. rein.-con. road in Washington and Quincy Twps., Franklin Co., to Burgess & Derrier, Scottsville, Va., $43,959.

★**Pa., Erie**—City let contract to J. McCormick & Sons, 717 West 11th St., paving Holland St. between 26th and 29th Sts., cost, $8072; Liberty St. between 4th and 2nd Sts., $9060; Raspberry St. between 26th and 30th Sts., $10,485; J. and M. Doyle, 29th St. between Peach and Cherry Sts., $22,735; Mayer Bros. Constr. Co., Commerce Bldg., 30th St. between Peach and Cherry Sts., $18,841; Dunn St. between Lake Rd. and 5th St., $4085.

★**Pa., New Kensington**—Boro. let contract grading, paving and curbing Caltalpa St. from Stanton to Ridge Aves., North St. from Taylor Ave. to Freeport Rd. and from Stanton Ave. to Taylor Rd. also Ridge Ave. from end of present paving to Caltalpa St., to State Constr. Co., foot 5th St. About $55,000. Noted Apr. 3.

Pa., Pittsburgh—H. J. Barnes, boro. secy., received bids Apr. 11, improving Pittsburgh St., (a) concrete sidewalk class "A," (b) concrete sidewalk class "B," (c-1) concrete curb, corner bar protection class "A," (c-2) same, class "B," (d-1) concrete curb, structural protection class "A," (d-2) same, class "B," from J. Dick, Scottdale, (a) $43,803, (b) $45,203, (c-1) $46,659, (c-2) $48,059, (d-1) $52,507; J. P. Gary, c/o New Kensington Hotel, New Kensington, (a) $45,809, (b) $44,759, (c-1) $47,849, (c-2) $46,799, (d-1) $51,249, (d-2) $50,199; Booth & Flynn, 1942 Forbes St., (a) $47,428, (b) $46,728, (c-1) $50,828, (c-2) $50,128, (d-1) $53,140, (d-2) $52,440; State Constr. Co., New Kensington, (d-2) $53,050.

Pa., Pittsburgh—J. P. Moore, controller Allegheny Co., received bids Apr. 15, building 5300 ft. Renton Rd. in Plum Twp., 16 ft. wide, (a) waterbound macadam, (b) bituminous macadam, from L. H. Hileman, New Kensington, (a) $64,698, (b) $71,458; R. H. Cunningham, Turtle Creek, (a) $66,411, (b) $71,721; T. Cronin, 17th and Muriel Sts., (a) $67,375, (b) $74,455. Work involves 11800 sq. yd. pavement, 2000 sq. yd. paved gutter, 21,500 cu. yd. earth excav. and 9100 ft. 4-24 in. terra cotta pipe. Noted Apr. 3.

★**Pa., Pittsburgh**—J. P. Moore, controller Allegheny Co., let contract building 10,500 ft. New England Rd., Mifflin Twp., 16 ft. wide, Telford macadam with waterbound macadam wearing surface, to A. Ancarani, Portvue. About $105,030. Noted Mar. 27.

★**Md., Salisbury**—Wicomico Co. will build 7½ mi. road from White Haven to Catch Penny, rolled oyster shell, 16 ft. wide. Work will be done by day labor.

★**S. C., Marion**—Comrs. Marion Co. let contract building 3½ mi. road and several bridges, to Chitwood & Palmer, Columbia, $40,668. Noted Dec. 5.

★**Ga., Cairo**—City let contract paving and curbing 3500 ft. Broad St., 40 ft. wide, to Southern Clay Mfg. Co., Volunteer Life Bldg., Chattanooga, Tenn., $2.75 per yd. Work involves 11,000 sq.yd. vitr. brick and 3500 lin.ft. concrete curbing.

★**Miss., Greenville** — Highway Comn. Washington Co. let contract resurfacing 58.4 mi. concrete and gravel roads, 9 and 12 ft. wide, to C. G. Kershaw, Woodward Bldg., Birmingham, Ala. About $709,000. Work involves 21,000 cu. yd. earth excav. Noted Mar. 13.

★**Ohio**—State Highway Comn., Columbus, let contract grading, building bridges and culverts and paving with monolithic brick, 7.71 mi. Sect. J and 5.43 mi. Sect. Q, Cleveland-Buffalo Rd., Lake Co., to Freshwater & Son, Zanesville, $275,822 and $195,363 respectively; 9550 ft. Sect. F, Steubenville-Cambridge Rd., waterbound macadam, to S. W. Wrightser & Son, Logan, $30,690. Noted Apr. 10.

Ohio—State Highway Comn., Columbus received bids Apr. 17, paving, grading, draining and building bridges on 4.18 mi. Sect. "I," Columbus-Millersburg Rd., Knox Co., waterbound macadam, from L. B. Wilson, Newark, $44,899; E. M. Turner, Logan, $45,401. Noted Apr. 10.

O., Columbus—G. A. Borden, pub. serv. dir., received bids Apr. 13, grading, draining, curbing, paving and laying water mains (a) High St. from Poplar to Cedar Sts.; (b) Chestnut St., from High to 4th Sts.; (c) Neilston St. from Long to Lafayette Sts.; from Franklin Asphalt Paving Co., Columbus, (a) $22,730; (b) $26,153; (c) $5734; A. G. Pugh, Columbus, (a) $23,389; (b) $27,405; (c) brick, $5342; asphalt, $5237; Andrews Asphalt Paving Co., Arcade Bldg., (a) $23,511; (c) asphalt, $5271; Cleveland Trinidad Paving Co., Arcade, Cleveland, (b) $26,625; Federal Paving Co., Columbus, (c) brick, $5106; G. Geilgle & Son, Columbus, (c) brick, $5460. Noted Apr. 3.

O., Toledo—Comrs. Lucas Co. let contract to M. P. Hannin, Valentine Bldg., at $105,272, for 209,850 sq.yd. of surface treatment of from 3 to 5 gal. Tarvia C. T. to sq.yd. without grit cover; also 680,650 sq. yd. of from 3 to 5 gal. Tarvia C. T. to sq. yd. with cover on 99 mi. roads. Noted Apr. 3.

Streets and Roads (Continued)

★Mich., Detroit—See "Proposed Works."

Mich., Detroit—Dept. Pub. Wks. received bids paving following streets and alleys:

(a) Leslie Ave. from Wabash Ave. on North to Oakman Ave., 24 ft. wide;
(b) Waterloo Ave., from Conners to Drexel Aves., 26 ft. wide;
(c) Beuna Vista Ave. from Herman to Ellen Aves., 24 ft. wide;
(d) Alexandrine Ave. from Duboise St. to McDougall Ave., 26 ft. wide;
(e) Fulton St. from Wabash R. R. to southerly end of street, 26 ft. wide;
(f) Grand Ave. from Herman Ave. to 12th St., 24 ft. wide;
(g) Waverly Ave. from Herman to 12th St., 24 ft. wide;
(h) Tyler Ave. from Herman Ave. to 12th St., 24 ft. wide;
(i) Leland St. from St. Aubin Ave. to Chene St., 26 ft. wide;
(j) Huron St. from Ottawa to Bagg Sts., 20 ft. wide;
(k) 12th St. Sect. 1, from alley north of Virginia Park to Webb Ave., 42 ft. wide less 18 ft. track space;
(l) Van Court Ave. from Warren to Tireman Aves., 26 ft. wide;
(m) Drexel Ave. from pavement south of Mack to Mack Ave., 26 ft. wide;
(n) Highland Ave. from Highland Park line to 12th St., 24 ft. wide;
(o) Monterey Ave. from Herman Ave. to 12th St., 24 ft. wide;
(p) Military Ave. from Plumer to Federal Sts., 26 ft. wide; all asphaltic concrete.
(q) Alley No. 979, T alley between Hamilton, Meadowbrook and Jefferson Aves., 18 ft. wide;
(r) Alley No. 980, between Seyburn, Van Dyke, Canfield and Forest Aves., 20 ft. wide;
(s) Alley No. 981, between Helen, Canfield and Forest Aves. and East Grand Blvd., 20 ft. wide;
(t) Alley No. 982, between Glover and Hilger Aves., south of Edlie Ave., 16 ft. wide;
(u) Alley No. 983, between Burns, Fisher, St. Paul and Kercheval Aves., 18 ft. wide;
(v) Alley No. 984, between Avery, Commonwealth, Forest and Hancock Aves., 20 ft. wide; all alleys with 1 course concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg.

(a) $30,857; (b) $28,341; (c) $23,207; (d) $25,408; (e) $14,366; (f) $15,378; (g) $14,952; (h) $14,670; (i) $13,824; (j) $11,206; (k) $120,831; (l) $38,204; (m) $14,983; (n) $15,395; (o) $14,501; (p) $7858.

Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $30,699; (b) $28,993; (c) $23,117; (d) $25,898; (e) $14,570; (f) $15,155; (g) $14,749; (h) $14,478; (i) $14,059; (j) $11,524; (k) $116,690; (l) $38,551 ;(m) $15,322; (n) $15,163; (o) $14,219; (p) $7952.

W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $31,271; (b) $29,188; (c) $23,562; (d) $26,611; (e) $14,825; (f) $15,443; (g) $15,016; (h) $14,734; (i) $14,463; (j) $11,738; (k) $115,490; (l) $38,959; (m) $15,382; (n) $15,449; (o) $14,502; (p) $8186.

Liberty Constr. Co., Penobscot Bldg., (q) $5004; (u) $3650.

T. E. Currie, 20 McGraw Bldg., (q) $4937; (t) $1202; (u) $3610.

Otis Cement Constr. Co., 806 Hammond Bldg., (q) $4976; (r) $4973; (s) $4853; (u) $3650; (v) $2277.

Talbot Co., 400 Penobscot Bldg., (r) $5074.

E. Meredith Co., 145 Harper Ave., (r) $5171; (s) $4853; (t) $1278.

R. J. Powelson Co., 1577 Iroquois Ave., (s) $5089; (t) $1298.

Oakwood Constr. Co., Ford St. and Wabash R. R., (v) $2277.

Lennane & McIlvenna, Union Trust Bldg., (v) $2156. Noted Apr. 10.

★Ill., Bellville—St. Clair Co. let contract earth grading and building culverts on 13,800 ft. East St. Louis-Caseyville Rd., to H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, $13,007.

★Wis., River Falls—City let contract paving 16,000 sq.yd. road 24 ft. wide, to Johnson & Drake Co., 905 Plymouth Bldg., Minneapolis. About $34,000.

Wis., Sheboygan—City received bids (a) grading and paving with concrete 8.9 mi. Green Bay Rd., Cedar Grove Village, 20 ft. wide; (b) 5.75 mi. Upper Fall Rd., Sheboygan Twp., Kohler Village, 20 ft. wide; (c) 7.8 mi. Waldo-Cascade Rd., Hyndon Twp., 20 ft. wide, from Jorgenson Constr. Co., Elm St., Denmark, (a) $0.81 for grading, $1.79 for paving; (b) $0.82 grading, $1.80 paving; (c) $0.84 grading, $1.84 paving; J. Theume, Main St., Cedar Grove, (a) $1.05 grading, $2.10 paving; J. Braur Constr. Co., South 12th St., Sheboygan, (b) $0.66 grading, $1.87 paving; Dear Constr. Co., Grand Ave., Milwaukee, (b) $1.15 grading, $1.86 paving; F. Radloff, Division St., Plymouth, (c) $0.94 grading, $2.17 paving; Pestur-Nauman, North 9th St., Sheboygan, (c) $0.90 grading, $2.25 paving. Noted Apr. 17.

★Ia., Cherokee—Comrs. Cherokee Co. let contract grading, clearing, grubbing and placing 1080 lin. ft. temporary culverts on 11.7 mi. road, to G. W. Condon, 415 Farnam Bldg., Omaha, Neb., $30,507. Work involves 1080 lin. ft. culverts at $0.40 per lin. ft., 82,500 cu. yd. earth and 500 cu. yd. loose rock excav., $0.36 and $0.75 per lin. ft., respectively.

★Ia., Clinton—Comrs. Clinton Co. let contract grading, clearing, grubbing and building culverts on 5½ mi. Lincoln Highway, to Fuller Bros. & Co., Muscatine, $0.45 cu.yd., total cost, $23,131. Work involves 2450 cu.yd. borrow, 45,750 cu.yd. earth and 610 cu.yd. ditch. excav.

★Ia., Denison—Comrs. Crawford Co. let contracts grading 11½ mi. Vail, Byer, Shelby, Ida Grove, Kenwood and Hill Rds.; 154,048 cu.yd., to W. R. Grinnell, 2150 Ingersoll Ave., Des Moines, $0.37 to $0.385 per cu.yd., total cost, $57,858; 41,668 cu.yd., to G. W. Condon, 415 Fornam Bldg., Omaha, Neb., $0.37 per cu.yd., total cost, $14,792.

★Ia., Logan—City let contract building 60,000 sq. yd. concrete or monolithic brick pavement, 40,000 lin.ft. concrete curb and gutter and storm sewerage system, to E. A. Wickham Co., Council Bluffs., $211,188. Noted Apr. 3.

★Ia., Primghar—Comrs. O'Brien Co. let contract paving with concrete 6-8 in. thick, curbing, guttering and excavating on 4½ mi. streets in Sanborn Twp., 20-60 ft. wide, to Dearborn Constr. Co., Waterloo Savings Bldg., Waterloo, $203,000. Work involves 70,000 sq.yd. concrete 20-40 ft. wide, at $2.33 per sq.yd. and 40-60 ft. wide, $2.57 sq.yd. and 39,000 lin.ft. concrete curb at $0.59 to $0.69 lin.ft.

★Minn., Fergus Falls—Comrs. Ottertail Co. let contract grading and graveling 19.5 mi. Federal Aid Project No. 29, 29 ft. wide and building extension to culvert, to Winston Bros., 801 Globe Bldg., Minneapolis, $98,353, and $297 respectively; furnishing concrete sectional pipe to Concrete Products Co., Elk River, $3705. Noted Apr. 3.

★Minn., Redwood Falls — Comrs. Redwood Co. received no bids grading and surfacing State Rd. No. 10, Job Nos. 1702A and 1702B; State Rd. Nos. 13 and 14, Job No. 1901. Bonding Co. will complete work. Noted Apr. 3.

★Minn., Wabasha—Comrs. Wabasha Co. let contract to A. Guthrie & Co., 366 Jackson St., St. Paul, building 14 mi. Federal Aid Project No. 21, State Rd. No. 1 and 2, 24 ft. wide, cost, $36,984; surfacing 22 mi. Federal Aid Project No. 46, State Rd. No. 1 and 2, 24 ft. wide, $40,387. Noted Apr. 3.

★Neb., Lincoln—Lancaster Co. let contract grading 4 mi. West Emerald Rd., 24 ft. wide, to Cook-O'Brien Constr. Co., Kansas City, Mo., $16,250. Work involves 50,000 cu.yd. earth excav. Noted Mar. 27.

N. D., Jamestown—Comrs. Stutsman Co. received bids grading Federal Aid Project No. 24, (a) Sect. 1, involving 14,607 cu.yd. turnpike and 71,863 cu.yd. earth excav., (b) Sect. 2, 20,737 cu.yd. turnpike, 87,555 cu.yd. earth and 19 cu.yd. loose rock excav., (c) Sect. 3 (concrete culverts and bridges), 265 cu.yd. Class A concrete, 6983 lbs. metal reinforcement and 1410 cu.yd. structural excav., from Stevens Bros., St. Paul, Minn., (a) $32,547, (b) $41,010, (c) $9320; W. H. Noel, Jamestown, (a) $32,068, (b) $42,689; C. Humphrys & Stanley Bros., St. Cloud, Minn., (a) $33,383, (b) $42,630; C. C. Jackson, Jamestown, (c) $8587; J. A. Jardine, 1123 1st Ave., S., (c) $9363. Noted Mar. 20.

Mont., Billings—City received only bid Apr. 1, paving 95,000 sq.yd. North 31st St., from Warren Constr. Co., Journal Bldg., Portland, Ore., $42,161. Noted Mar. 20.

★Mont., Great Falls—Cascade Co. will surface Sand Coulee-Stockett Rd. and grade Bird Tail Rd. and Sullivan Hill. Work will be done by day labor. About $50,000. R. G. Day, Great Falls, engr.

Mo., St. Louis—Bd. Pub. Serv. received lowest bid improving Slevin Ave. from Euclid to Kennerly Sts., involving 2400 sq. yd. brick paving and 1560 lin.ft. curbing, from Skrainka Constr. Co., Security Bldg., $10,841; paving Labadie Ave. from Belt to Clara Sts., 2315 sq.ft. asphalt paving and 1620 lin.ft. granite curbing, also Thelka St. from Partridge Ave. to Minika St., 3315 sq.ft. asphalt paving and 2605 lin.ft. granite curbing, from F. P. McCormick, $12,216 and $18,857 respectively. Noted Mar. 20.

★Okla., Okmulgee—City Comrs. let contract paving various streets, to Park-Moran Co., Okmulgee, $45,782. Apr. 17.

Utah—State Rd. Comn., Capitol, Salt Lake City, received bids Apr. 8, building 11.12 mi. State Highway between Midvale and Lehi, 18 ft., wide, from J. W. Mellen, Auditorium Bldg., $329,010, P. J. Moran, Felt Bldg., $332,227, Hensser, Packard & Co., Atlas Bldg., $342,124; 4.85 mi. State Highway from Mogna east to Murray, 18 ft. wide, from P. J. Moran, Felt Bldg., $133,478, O. H. Gray, University Club, $137,326, H. G. Gilkerson, 26 Richards St., $138,210; 5.36 mi. State Highway from Murray south to Midvale, 18 ft. wide, from Campbell Bldg. Co., New House Bldg., $121,330, Stange Maguire Paving Co., Utah Savings and Trust Bldg., $124,552, P. J. Moran, Felt Bldg., $125,488. All contractors of Salt Lake City. Noted Mar. 20.

★Ariz., Phoenix—City let contract paving 17th Ave. between Adams and Van Buren Sts. and Munroe St. between 15th and 17th Aves., to Southwestern Contg. Co., O'Neil Bldg. Work involves 8569 sq.yd. paving, $2 per sq.yd.; 8569 sq.yd grading, $0.25; 3806 lin.ft. combination curb and gutter, $1.25; 528 lin.ft. single curb, $0.70; 26 lin.ft. single gutter, $0.70; 201 lin.ft. valley gutter, $1.10; grading 7 street intersection terminations, $10 each. and 4 alley intersection terminations, $7 each.

★Wash., Bellingham—Comrs. Whatcom Co. let contract grading and hard surfacing 5 mi. Everson-Noonsack Rd., 16-40 ft. wide, concrete, to Riddle & Hawkins, Bellingham, $96,354.

★Wash., Seattle—Bd. Pub. Wks. let contract grading, filling and paving 1 mi. West Spokane St., 34 ft. wide, concrete, to Independent Asphalt Paving Co., Seattle, $161,025. Noted Mar. 13.

★Ore., Astoria—City let contracts to Miller & Bauer, Astoria, paving Franklin Ave. from 12th to 9th Sts., cost $18,421; Florence Ave., from Oregon to Taylor Sts. and Oregon St. from Florence to Alameda Sts., $32,067; 3rd St. from Klaskine to Lexington Sts., $29,031; Rivington Ave., $14,601; Commercial St. from 17th to 22nd Sts., $36,219, all bitulithic on 5 in. concrete base; to J. Slotte, Astoria, Franklin Ave. from 5th to 2nd Sts., bitulithic with 12 ft. brick center strip, $17,668; to H. Makela, 253 Alameda St., building plank roadway, wood sidewalk, fill and concrete retaining wall on Exchange St. from 13th to 14th Sts., $16,284. Noted Feb. 27.

★Cal., Pasadena—City let contract improving Marengo Ave., from Colorado to Walnut Sts., to Bryant & Austin, 1656 Compton Ave., Los Angeles, $13,097. Noted Mar. 6.

Railways

PROPOSED WORK

New York—See "Industrial Works" under Lake Placid.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pennsylvania—W. S. Twining, dir. dept. city transit, Mershon Bldg., let contract building 6 mi. line from Frankford to Bustleton, to Amer. Ry. Contr. Co., 53 West Jackson Blvd., Chicago, $370,892. Work involves 175,000 lbs. steel, 20,000 cu.-ft. excav., 35,000 lbs. c.i. tubing, 2000 sq.yd. macadam paving, 6000 ft. lumber, 2000 lbs rein. steel and large quantity of girder and T rails. Noted Apr. 10.

Excavation and Dredging

PROPOSED WORK

Conn., Bridgeport—Dredging—Bd. Pk. Comrs., Security Bldg., rejected only bid received Apr. 11, dredging 40,000 cu.yd. for filling at Fayerweather Island, Seaside Park. B. F. Cooney, clk. Noted Apr. 3.

Md., Baltimore—Dredging—See "Industrial Works."

BIDS DESIRED

N. Y., New York—Dredging—Until Apr. 28, by M. Hurlburt, comr. docks, Pier A, Foot Battery Pl., North River, furnishing labor and material for dredging 5000 cu. yd. north side Pier 53; 16,200 cu.yd. north and south sides Pier 57; 9000 cu.yd. north side Pier 58; 19,500 cu.yd. north and south sides Pier 60; 33,000 cu.yd. north and

Excavation and Dredging (Continued)

south sides Pier 61; 10,000 cu.yd. easterly and westerly sides Pier 33; 6500 cu.yd. westerly side Pier 36; 600 cu.yd. East 106th St.; 1200 cu.yd. northly side of Pier East 117th St.; 1500 cu.yd. East 132nd St.; 1000 cu.yd. East 134th St., Manhattan; 25,000 cu.yd. Pier at 52nd St., Brooklyn.

N. C., Beaufort—Drainage—Until June 2, by Virginia-Carolina Farms Co., building 17 mi. main canals, 66 mi. laterals, 117 mi. sub-laterals; also enlarging 10 mi. existing main canals, 28 mi. laterals and 35 mi. sub-laterals. Work involves about 1,500,000 cu. yd. excav., grading 110 mi. roads and building 210 wooden bridges requiring from 700 to 2200 ft. B. M. lumber per bridge. G. S. Speer, pres. B. M. Potter, New Bern, engr.; advertised in this issue.

Ark., Jonesboro—Drainage—Until Apr. 29, by Bd. Comrs. Little Bay and Whitemans Creek, D. D. No. 20, building drainage canals and steel bridges. Work involves 87,700 cu.yd. earth excav. and 785,500 cu.yd. floating dredge work, 10 steel I-beam bridges, (20-30 ft. spans), one 60 ft. steel truss and 150 lin.ft. wood pile trestle. Cobb & Lee, Jonesboro, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Freehold—Dredging—State received bids dredging section canal connecting Barnegat Bay with Manasquan River, from Hill Dredging Co., Atlantic Ave. and Somerset Pl., Atlantic City, $0.22 per cu.yd., Coast & Inland Dredging Co., Atlantic City, $0.26 per cu.yd., Matthews Bros., East Front St., Red Bank, $0.295 per cu.yd.

Ore., Portland—Dredging—Port of Portland received bids for 17,000 cu.yd. rock and earth dredging in front of Albina dock, from Pacific Foundation Co., Portland, $.95 per yd.; Pacific Bridge Co., foot of Salmon St., $1 per yd. Noted Apr. 10.

Industrial Works

PROPOSED WORK

Mass., Cambridge—T. G. Douglas, c/o F. S. Boyd, 579 Massachusetts Ave., had plans prepared building 1 story, 77 x 133 ft. brick and concrete garage, on Blancke and Green Sts. About $30,000.

Mass., Campello (Brockton P. O.)—A. E. Keith Co. soon lets contract building 64 x 71 ft. power plant, 40 ft. high. About $56,000. Jenks & Ballon, 735 Grosvenor Bldg., Providence, R. I., engr. Noted Jan. 16.

Mass., Chelsea (Boston P. O.)—McMannus Box Co., Vale St., had plans prepared by W. H. Taylor, archt., Chelsea, for 2 story brick and concrete factory. About $75,000.

Mass., Chicopee—Paper Makers Chemical Co., Holyoke, plans to build 1 and 2 story, 300 x 500 ft. mill construction paper factory, concrete foundation, on Grattan St., here. About $100,000. R. M. Snell, mgr.

Mass., Pittsfield—Victory Textile Co. plans to build 3 story, 80 x 280 ft. brick mill here. Cost, including equipment, $80,000. L. Hollingsworth, pres. and secy.

Mass., Worcester—A. Z. Manzi, 162 Shrewsbury St., had plans prepared by S. H. Pitcher, archt., 44 Front St., building 1 story, 72 x 72 ft. brick garage. About $35,000.

Conn., Waterbury—City plans to sell $100,000 bonds to build garage and comfort station.

N. Y., Brooklyn—Lasky Motor Car Corp., 17 Graham Ave., soon lets contract building 2 story, 100 x 100 ft. brick and steel auto service station, rein.-con. flooring, concrete foundation, on Montrose Ave. and Leonard St. About $75,000. Shampan & Shampan, 772 B'way., archts. Noted Mar. 6.

N. Y., Brooklyn—Lehn & Fink, 120 William St., New York City, soon receive bids building 8 story, 40 x 100 ft. rein-con. and steel factory, rein.-con. flooring, concrete foundation, on Irving & Columbia Sts. here. Buchman & Kahn, 56 West 45th St., New York City, archts. Noted Mar. 13.

N. Y., Buffalo—J. Geigad, archt., 346 Herman St., soon lets contract building 1 story, 80 x 100 ft. steel foundry, concrete foundation, on East Ferry St., for M. Hayman & Co., East Ferry St. About $25,000.

N. Y., Buffalo—United States Alloys Corp., River Rd., soon lets contract building 1 story, 60 x 65 ft. steel and 40 x 150 ft brick and steel machine shop and office building, concrete foundation, on Witmer Rd. About $40,000. Address H. I. Wheat, c/o owner, engr.

N. Y., Cambridge—Rice Seed Co., had plans prepared for 75 x 275 ft. storehouse and shipping building, adjacent to Delaware & Hudson R.R. About $35,000.

N. Y., Lake Placid—George & Bliss plan to rebuild rein.-con. and steel boat factory terminal, shipway and marine railway, recently destroyed by fire. About $40,000.

N. Y., Malden Bridge—Gatti-McQuade Paper Co., 200 5th Ave., New York City, purchased Peaslee Mills, here, and are having plans prepared repairing and altering same. About $25,000.

N. Y., New York—Cuneo & Posta, 73 Washington Sq., had plans prepared by F. E. Vitolo, archt., 56 West 45th St., building 5 story, 100x130 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 541-551 West Bway. About $100,000.

N. Y., New York—Eagle Pencil Co., 703 East 13th St., soon receives bids building 6 story, 75x200 ft. rein.-con. and steel addition to factory, rein.-con. flooring, concrete foundation, on Ave. D. between 13th and 14th Sts. Buchman & Kahn, 56 West 45th St., archts. Noted Feb. 27.

N. Y., New York—New York Central R. R., Grand Central Terminal, soon lets contract building 1 story, 35 x 180 ft. brick and steel garage and warehouse, rein.-con. flooring, concrete foundation, on Webster Ave. and Claremont Pkway., Bronx. About $75,000. Ewing & Allen, 101 Park Ave., archts. Central Fdry. Co., 90 West St., lessee. Noted Mar. 27.

N. Y., Niagara Falls—United States Light & Heat Corp., 3215 Highland Ave., soon lets contract building 1 and 2 story, brick and steel plant, concrete foundation, on Highland Ave. Mills, Rhines, Bellman & Nordhoff, 1234 Ohio Bldg., Toledo, O., engrs.

N. Y., Rochester—Industrial Development Com., Chamber of Commerce, having plans prepared for large shipyard on lower Genesee River near lake harbor.

N. Y., Rochester—Rochester Ry. & Light Co., 34 Clint Ave., N., authorized by Pub. Serv. Comn. of 2nd Dist. to issue $500,000 preferred stock to improve and extend electrical and gas departments.

N. Y., West Coxsackie—Amer. Valve Co., River St., Coxsackie, purchased site here and are having plans prepared for 2 story, brick factory covering 75,000 sq.ft. floor space. About $40,000. Address D. G. Greene, pres.

N. J., Newark—Riverside Steel Castings Co., Passaic Ave. and Kearney Meadows, purchased a 254 x 720 ft. site at 326-344 Riverside Ave. and plans to build several 1 and 2 story rein.-con. buildings. A. Kinne, mgr.

N. J., Phillipsburg—Canister Co. plans to build plant. About $60,000.

Pa., Phila.—F. T. Uezzell, archt., 717 Walnut St., receives bids about May 15, for 3 story, 140 x 240 ft. rein.-con. factory. Owners name withheld.

Pa., Pittsburgh—T. Donaldson having plans prepared by Hunting-Davis Co., archts., Century Bldg., building 1 and 2 story, 100 x 227 ft., rein.-con., steel and brick garage, rein.con. flooring, concrete foundation, on Weston and Bidwell Sts., to be known as Donaldson Commercial Truck Garage. About $75,000.

Pa., Pittsburgh—A. Goldbloom, 1215 Locust St., having plans prepared for 2 story, 80 x 220 ft., fireproof garage, rein.-con. flooring, concrete foundation, on Atwood St., Oakland Dist. About $60,000.

Pa., Pittsburgh—Painter-Dunn Co., Center Ave., soon lets contract building 1 story, 100 x 150 ft., rein.-con. addition to garage, rein.-con. flooring, concrete foundation. About $35,000. Hunting-Davis Co., Century Bldg., archts.

Pa., Pittsburgh—Wolverine Supply & Mfg. Co., Paige and Fontella Sts., having plans prepared by Hunting-Davis Co., archts., Century Bldg., for 5 story, 70 x 100 ft. factory on Paige St. Cost to exceed $50,000.

Md., Baltimore—See "Buildings."

Md., Baltimore—Weyerhaeuser Timber Co., White Bldg., Tacoma, Wash., purchased tract between Northwest Harbor and Curtis Bay, and plans to establish lumber yard. Work involves dredging 35 ft. deep water channel and building pier head.

Md., Hagerstown—Amer. Agricultural Chemical Co., 1015 Fidelity Bldg., Baltimore, plans to build fertilizer factory here on 129 acre site. About $100,000.

Md., Hagerstown—Poole Eng. & Machine Co., Woodberry Sta., Baltimore, plans to convert Hagerstown plant, known as Maryland Pressed Steel Co., into factory for manufacturing airplanes. Cost between $50,000 and $100,000. S. P. Brady, pres.

Md., Highlandtown (Baltimore P. O.)—Jones & Lamb Co., Pennsylvania and Fulton Aves., Baltimore, plans to remodel plant of Monumental Brewery Co. and construct several rein.-con., steel and brick buildings, rein.-con. flooring, rein.-con. foundation, on Lombard St., same to be used as meat packing plant and oil refinery. About $500,000. C. C. Comstock, 110 West 40th St., New York City, engr.

Fla., Tallahassee—City plans to rebuild electric light and power plant recently destroyed by fire. Loss, $50,000. C. S. Hammatt, 1943 Main St., Jacksonville, engr.

O., Cleveland—Purity Ice Cream Cone Co., 5119 Euclid Ave., plans to build 4 story, concrete, steel and brick factory at 8804 Hough Ave. About $100,000.

Ill., Chicago—G. W. Shaw, 607 Rush St., plans to build 4 story, 60 x 125 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on 29th Pl. and Calumet St. About $90,000. C. W. Westerlind, 179 West Washington St., archt.

Wis., Sheboygan—Bemmis-Riddel Fibre Co., c/o G. Riddel, 2202 North 6th St., soon lets contract building 4 story, 60x150 ft., rein.-con., brick and steel factory, rein.-con. flooring, brick foundation, on South 15th St. About $55,000. Juul & Smith, Imig Bldg., archts.

Wis., Sheboygan—Raab-Thieman Co., 816 Niagara Ave., plans to build 2 story, 60 x 100 ft., garage. About $55,000.

Wis., Sheboygan—Wadhams Oil Co., Michigan and 13th Sts. plans to build 2 story oil station. About $30,000.

Wis., Waupaca—F. H. Josslyn, Algoma Blk., Oshkosh, had preliminary plans prepared by E. Orbison, engr., Appleton, building 150 hp. hydroelectric power plant on Little Wolf River. About $200,000.

Mont., Billings—G. L. Tracy Co. plans to build 2 story brick and concrete warehouse. About $25,000.

Mo., Carondolet (St. Louis P. O.)—Mineral Refining & Chemical Corp. receives bids about June 1, building rein.-con. and steel paint and pigment plant, concrete foundation, on Mississippi River front. Plans include chemical laboratory, mineral milling, power and packing plants. About $2,500,000. M. Alayo, vice-pres.

Mo., St. Joseph—Swift & Co., Union Stock Yards, Chicago, plans to build 2 story, 40 x 51 ft. concrete and brick addition to boiler room, concrete foundation. About $90,000.

Mo., St. Louis—Columbia Taxicab Co., 4533 Delmar Blvd., having preliminary plans prepared by L. W. Childress, engr., c/o owner, for 1 story, 128 x 200 ft. garage at 3319-37 Lawton Ave., About $100,000.

Mo., St. Louis—A. M. Lane, archt., 4121 Forest Park Blvd., soon receives bids building factory on Penrose St., for Monarch Metal Weather Strip Co., 4121 Forest Park Blvd. Cost to exceed $50,000.

Mo., St. Louis—St. Louis Wholesale Cut Flower Co., 1410 Pine St., having plans prepared by Grewe Constr. Co., archts., Century Bldg., for 2 story, 50 x 109 ft. rein.-con. and brick storage plant, concrete foundation, at 1406-8 Pine St. About $50,000. D. Geddis, pres.

Wash., Seattle—Pacific Net & Twine Co., Pier 8, plans to build 2 additional stories, 120 x 134 ft., to factory now under construction on Pier 8. About $60,000. J. Graham, Manufacturers' Bldg., archt.

Wash., Seattle—Queen Anne Candy Co. plans to build 4 story, 60 x 103 ft., concrete factory, rein.-con. flooring, concrete foundation, at 120 Westlake Ave., N. About $45,000. Beezer Bros., Seaboard Bldg., archts.

Ore., Eugene—City and local capitalists plan to build meat packing plant and develop extensive hog farm near here. W. M. Strickland, Chamber of Commerce, promoter of plan.

Ore., Portland—B. O'Hara, 9th and Everett Sts., plans to build 1 story, 100 x 100 ft. brick and rein.-con. warehouse. Stokes & Zeller, Chamber of Commerce, archts.

Ore., Sutherlin—Sutherlin Cannery Co., Inc., having plans prepared building 2½ story, 60 x 80 ft. and 1 story 60 x 134 ft. timber canneries, cement flooring. About $50,000.

Industrial Works (Continued)

Ore., St. Helens—Island Lumber Co. plans to build sawmill on Sauvies Island with loading docks on slough side, 60,000 ft. capacity. About $50,000.

Cal., Fresno—Don Lee Automobile Co., 1020 J St., plans to construct garage and sales building. About $160,000.

Cal. Hanford—California Peach Growers Inc., Malaga St., Fresno, having plans prepared by Glass & Butner, archts., Republican Bldg., Fresno, building 1 and 2 story, 90 x 250 ft., rein.-con. and brick packing and shipping plant. Cost between $50,000 and $75,000.

Cal., Stockton—California Cedar Products Co. having plans prepared by Davis & Keller, engrs., Stockton, building 2 story, rein.-con. factory and warehouse.

Que., Westmount—Arena Co. plans to build 110 x 500 ft. garage on St. Catherine St., Wood and Western Aves. About $100,000. J. S. Archibald, 318 Dorchester St., W., Montreal, archt.

Ont., Toronto—Canadian Ice Mchy. Co., 82 Chestnut St., had plans prepared by A. Chapman, archt., Harbor Bldg., building brick factory. About $50,000. Noted Dec. 5.

Ont., Windsor—B. H. Marsh having plans prepared by J. C. Pennington, archt., La Belle Bldg., for candy factory. About $40,000.

Ont., Wingham—Aero Tire Co. plans to build plant. About $50,000.

B. C., Port Alberni—Watson Bros., 141 Front St., Vancouver, plans to build cannery here. About $75,000.

BIDS DESIRED

R. I., Providence—Until Apr. 28, by W. G. Richards, archt., 17 Exchange St., building 80 x 140 ft. brick, steel and concrete garage, concrete foundation, on Dorrance and Eddy Sts., for B. B. Knight Estate, Broad St. About $30,000. Noted Apr. 3.

N. Y., Brooklyn—Until Apr. 30, (change of date) by H. J. Nurick, archt., 957 Bway., New York City, building 1 story, 100 x 165 ft. brick and steel warehouse, garage and workshop, rein.-con. flooring, concrete foundation, on Jefferson St., Wykoff and Flushing Aves., for Magid, Katzman & Strober, 58 Boerum St. About $50,000. Noted Mar. 27.

N. Y., Brooklyn—Until Apr. 30 (change of date), by H. J. Nurick, archt., 957 Bway., building 2 story, 120 x 160 ft. brick and steel garage, warehouse and workshop, rein.-con. flooring, concrete foundation, on Varick Ave. and Meserole St., for J. H. Werbelovsky, 83 Meserole St. About $50,000. Noted Mar. 27.

N. J., Newark—Until Apr. 30, by R. G. Cory, archt., 39 Cortlandt St., New York City, building 4 story, 80x400 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Thomas St. for O. Heineman Co., Inc., 145 Jackson St. About $500,000.

Pa., Altoona—Until Apr. 26, by R. W. Nash, pres. Altoona Grocery Co., 200 Chestnut Ave., building 2 story, 110 x 120 ft. brick bakery on 9th Ave. and 28th St. About $90 000. McCormick Bros., Pittsburgh, archts.

Pa., Pittsburgh—C. Bickel, archt., May Bldg., receiving bids for 3 story, 80 x 155 ft., fireproof or brick and steel garage, concrete foundation, at 513-523 Water St., for K. Solomon, Frick Annex. About $125,000. Noted Mar. 13.

Wis., Sheboygan—Until May 10, by Juul & Smith, archts., Imig Bldg., building 1 story, 50 x 191 ft., rein-con., brick and steel machine shop, rein.-con. flooring, brick foundation on Niagara and 8th Sts., for Jenkin Machine Co., 315 North 8th St. About $75,000.

Minn., Bemidji—Until May 15, by T. S. Ervin, pres., Beltrami Elevator & Milling Co., building 3 story, rein-con., brick and steel elevator, 150,000 bu. capacity. About $30,000.

Minn., Minneapolis—Minneapolis Steel & Mch. Co., 2854 Minnehaha Ave., receiving bids building 2 story, 130 x 220 ft. rein.-con. and brick warehouse, brick foundation, on Snelling Ave. and 32nd St. About $60,000. Johnson & Drake Co., 905 Plymouth Bldg., archts.

Ont., Toronto—Until May 15, by Gardiner & Mercier, archts., 827 Birks Bldg., building foundry and boiler plant on Railway St. for Mainland Eng. Co.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—W. Louden, 18 Tremont St., will build 2 story, 100 x 175 ft. rein.-con. sales and assembly factory on Commonwealth Ave. About $250,000. Work will be done by day labor. Excavation started.

★Mass., Boston—E. L. Snider, 18 Tremont St., will build 6 story, 60 x 170 ft. rein.-con. garage on Westland Pl. About $250,000. Work will be done by day labor.

★Mass., East Boston (Boston P. O.)—Mead Morrison Mfg. Co., 125 Prescott St., let contract building 1 story brick addition, to C. A. Dodge, Erie and Albany Sts., Cambridge. About $50,000.

★Mass., Somerville—E. F. Kemp, Skelton Ave., let contract building 2 story, 20x60 ft. brick and concrete factory, to J. E. Locatello, 46 Cornhill St., Boston. About $75,000.

★Mass., Springfield—A. C. Wigglesworth, Chestnut and Franklin Sts., will build 1 story brick garage, service station and showrooms, rein.-con. flooring, concrete foundation. About $60,000. Work will be done by day labor.

★R. I., Pawtucket—Royal Weaving Co., Central Ave. let contract building 2 story, 80 x 80 ft. brick and concrete addition to mill, rein.-con. flooring, concrete foundation, on Woodbine and Sabin Sts., to Wilmarth-Mackillop Inc., Freeman St. About $35,000. Noted Jan. 2.

★R. I., Providence—J. C. Doran & Sons, 150 Chestnut St., let contract building 1 story, 60 x 100 ft. and 18 x 35 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Elbow St., to C. I. Bigney Constr. Co., 898 Westminster St. About $25,000.

★Conn., Hartford—Hartford Rubber Wks., Park and Bath Aves., let contract building 1½ story, 60 x 79 ft. brick and steel factory, concrete foundation, on Batholomew Ave., to J. H. Grozier Co., 721 Main St. About $34,000.

★Conn., Hartford—Older & Rosenberg, 1212 Main St., will build 4 story, 64 x 128 ft. steel, concrete and brick garage, rein.-con. flooring, concrete foundation, on Main St. About $95,000. Work will be done by day labor. Noted Apr. 10.

★Conn., Stamford—C. E. Slawson, Canal St., let contract building 3 story, 128x150 ft. brick and steel warehouse, rein.-con. flooring, concrete foundation, to Thompson-Binger, 280 Madison Ave., New York City. About $150,000. Noted Apr. 10.

★N. Y., Brooklyn—Drive Stone Impvt. Co., 620 Saratoga Ave., will build 1 story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Sandford St. and Willoughby Ave., About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Florida Realty Co., 16 Court St., will build 1 story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on 29th St. and 3rd Ave. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Lehman Sons, 56 Forest St., will build 1 story, 60 x 75 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 43 Jamaica Ave. About $27,000. Work will be done by day labor.

★N. Y., Brooklyn—Lurwall Realty Co., 49 Graham Ave., will build 1 story, 90 x 200 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on North 1st St. and Bedford Ave. About $55,000. Work will be done by day labor. Noted Mar. 13.

★N. Y., Brooklyn—C. Marcusci, 135 West 3rd St., will build 2 story, 21 x 25 x 150 ft. brick and steel factory, rein.-con. flooring, concrete foundation, at 143 3rd St. About $30,000. Work will be done by day labor. Noted Apr. 10.

★N. Y., Brooklyn—Rhoda Realty Co., 13 Herzl St., will build 1 story, 100 x 150 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on East New York Ave. and Harzl St. About $30,000. Work will be done by day labor.

★N. Y., Brooklyn—Roselle Realty Co., 187 Montague St., will build 1 story, 90 x 158 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 2544 Atlantic Ave. About $25,000. Work will be done by day labor.

★N. Y., Buffalo—J. H. Williams & Co., 400 Vulcan St., let contract building 1 story, 80 x 320 ft. addition to plant, to J. W. Ferguson, United Bank Bldg., Paterson, N. J.

★N. Y., Gowanda—H. H. Shults Co., Inc., 14 Jamestown St., let contract building 90 x 180 ft. and 40 x 100 ft. timber factory, to D. B. Furbush, Gowanda. About $35,000.

★N. Y., Long Island City—Loft, Inc., Broome and Centre Sts., New York City, let contract building 5 story, 150x200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Vernon Ave between Dayton and Hamilton Sts., here, to J. H. Carl, 510-1st Ave., New York City. About $850,000.

★N. Y., New York City—Lansing Co. of Delaware, 288 West St., let contract building 6 story, 49x100 ft. brick and steel warehouse, rein.-con. flooring, concrete foundation, at 28-30 Vandam St., to York Bldg. Co., 103 Park Ave. About $60,000.

★N. Y., New York—Van Dam Warehouse Co., Inc., 29 Bway., let contract building 7 story, 100 x 161 ft. brick and steel factory and show room., rein.-con. flooring, concrete foundation, at 1658 Bway., to Miller-Reed Co., 103 Park Ave. About $50,000.

★N. Y., Thiells—F. A. Vanderlip, pres. bd. mgrs. Letchworth Village, 7 Wall St., New York City, let contract building addition to central heating plant, to G. B. Wright Co., Garnerville, $32,200. Noted Mar. 13.

★N. J., Newark—G. J. Crossman, c/o J. B. Allen, archt., 1091 Sanford Ave., Irvington, let contract building concrete and brick factory, concrete foundation, on Astor St., to Essex Constr. Co., 85 Academy St., $40,500. Plans include 3 story, 42 x 100 ft. main building, 1 story, 25 x 32 ft. engine and boiler room and 1 story, 22 x 100 ft. storage building.

★Pa., Johnstown—Johnstown Auto Co. and Cadillac Auto Agency let contract building 3 story, 65 x 120 ft. rein.-con., steel and brick garage, rein.con. flooring, concrete foundation, on Main St., to H. Shenk, 132 7th St. About $125,000.

★Pa., Phila.—Van Straaten & Harvey, 1815 Bristol St., let contract building 4 story, 56 x 115 ft. brick mill, wood and cement flooring, rock foundation, at 137 Berkley St., to J. S. Rogers Co., Drexel Bldg. About $60,000.

★Pa., Pittsburgh—Pittsburgh Model Engine Co., Lexington Ave. and McPherson St., let contract building 1 story, 40 x 160 ft. and 2 story, 60 x 320 ft. factories; also 3 story 64 x 180 ft. office with 16 x 60 wing, brick rein.-con. and steel, rein.-con. flooring, concrete foundation, on Lexington Ave. along tracks of Pennsylvania R. R., to Austin Co., 16112 Euclid Ave., Cleveland. About $200,000.

★Pa., Pittsburgh—W. S. Rubin, New York City, let contract building 7 story, 100 x 180 ft., concrete and steel garage, rein.-con. flooring, concrete foundation, on 7th St. here, to D. T. Riffle, Keenan Bldg. About $150,000.

★Md., Baltimore—City Baking Co., 500 Equitable Bldg., let contract building 4 story, 58x110 ft., rein.-con., steel and brick addition to bakery, rein.-con. flooring, brick and concrete foundation, on North Gay St., to J. F. Kunkel, 29 South Linwood Ave. About $50,000. Noted Mar. 27.

★Md., Baltimore — Mangels-Herold Co., 1620 Gough St., let contract building 3 story, 50x168 ft., brick and steel factory, rein.-con. flooring, brick and concrete foundation, on Key Highway and Harvey St., to Consolidated Eng. Co., 243 Calvert Bldg. About $55,000. Noted Apr. 10.

★Md., Canton—(Baltimore P. O.) Roberts Bros., 427 East Lexington St., Baltimore, let contract building 1 story, 140x150 ft., brick, concrete and steel cannery, concrete foundation, on East Ave. and Toone St., to J. W. George, 506 Munsey Bldg. About $60,000.

★O., Cleveland—J. J. Weiner Eng. & Serv. Co., 10101 Quincy Ave., let contract building 1 story, 50 x 125 ft., brick, steel and concrete plant, rein.-con. flooring, brick foundation, to O'Connell & Laws, 11304 Quincy Ave. About $25,000. Noted Apr. 17.

★Mich., Detroit—Schlieder Mfg. Co., East Grand Blvd. and Oakland Ave., let contract building 3 story, 80x135 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, to Hazleton & Clark, Ford Bldg. About $80,000, cost plus percentage basis. Noted Apr. 3.

Industrial Works (Continued)

★**Ill., Chicago**—Krasberg Eng. & Mfg. Co., 536 Lake Shore Dr., let contract building 7 story, 109 x 200 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, on Ohio St. near Lake Shore Dr., to Bulley & Andrews, 25 North Dearborn St. About $300,000. Noted Feb. 13.

★**Wis., Green Bay**—Northern Corrugating Co. let contract building 2 story, 100 x 100 ft. rein.-con. and steel plant to H. J. Selmer, McCartney Natl. Bank Bldg. About $50,000.

★**Wis., Manitowoc**—Aluminum Goods & Mfg. Co., 15th and Franklin Sts., let contract building 6 story, 70x430 ft., rein.-con. and steel factory and office, to W. W. Oeflein, 136 Hanover St., Milwaukee. About $500,000.

★**Wis., Menasha**—Gilbert Paper Co. let contract building 60 x 167 ft. power house to C. R. Meyer Sons, 50 State St., Oshkosh. About $75,000.

★**Wis., Plymouth** — Wisconsin Cheese Products Assn. let contract building 4 story, 40x85 ft., brick warehouse and office, on East Division St., to F. Radloff, Sheboygan. About $55,000. Noted Apr. 10.

★**Wis., Sheboygan**—Badger State Tannery Co., South Water St., let contract building 2 story, 100x250 ft., rein.-con. brick and steel tannery, rein.-con. flooring, brick foundation, to H. Loesing, 914 Superior Ave. About $60,000. Noted Mar. 20.

★**Wis., Sheboygan**—W. Loeffer, St. Clair Ave., let contract building 1 story, 80 x 100 ft., brick machine shop, rein.-con. flooring, brick foundation, on 17th St., to M. Stubenrauch, 1426 Maryland Ave. About $30,000.

★**Wis., Two Rivers**—Aluminum Goods Mfg. Co., 15th and Franklin Sts., let contract building two 3 story, 43x137 and 60x300 ft., rein.-con. factories, to W. W. Oeflein, 136 Hanover St., Milwaukee. About $500,000.

★**Minn., St. Paul**—A. M. Ramer Co., 151 East 2nd St., Winona, let contract building 6 story, rein.-con. and brick factory, rein.-con. flooring, on Grove and Olive Sts., to Butler Bros., 1006 Exch. Bank Bldg. About $300,000.

★**Mo., St. Louis**—Busch-Sulzer Bros., Diesel Engine Co., 2nd and Utah Sts., let contract building 2 story, 137 x 184 ft. rein.-con. steel and brick addition, concrete foundation, to Austin Co., 2nd and Utah Sts., $70,300.

★**Mo., St. Louis**—Ever-Tight Piston Ring Co., 1600 Kingsland Ave., let contract building 1 story, 42 x 175 ft. concrete, steel and brick factory, rein.-con. flooring, concrete foundation, at 1600 Kingsland Ave., to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $40,000.

★**Cal., San Jose**—Herbert Packing Co., Lincoln Ave., let contract building brick and timber packing plant, on 4th and Keyes Sts., to F. L. Hoyt, 566 North 16th St. Cost including equipment, $125,000.

Buildings

PROPOSED WORK

Me., Orono—Church—Methodist congregation, Belfast, plans to build church here. About $90,000. Address H. B. Sellers, Belfast.

Mass., Greenfield—Stores and Offices—F. L. Burnham plans to erect store and office building, on Main and Wells Sts. About $50,000.

Mass., New Bedford—Hospital—J. S. Mc Intyre, archt., 22 Clifford Bldg., receives bids about Apr. 25, building brick and rein.-con. hospital, rein.-con. flooring, concrete foundation, on Mt. Pleasant, Van Buren, Jefferson and Myrtle Sts. for city. Plans include 3 story, 46 x 178 ft. ward building, 1 story, 60 x 180 ft. operating building and 2 story, 30 x 54 ft. power house and laundry. About $125,000. H. T. Borden, 154 Fair St., chn. Noted Feb 6.

Mass., Tewksbury—Hall—Town having plans prepared by Kilham & Hopkins, archts., 9 Park St., Boston, building 2 story, 40 x 90 ft. brick, concrete foundation, on Main St. About $150,000.

Conn., Ansonia—Armory—State Legislature, Hartford, appropriated $150,000 to build armory on Main St., here. Noted Mar. 6.

Conn., Bristol—Auditorium—City voted $100,000 bonds to build auditorium in honor of soldiers and sailors.

Conn., Middletown—Armory—State Legislature, Hartford, appropriated $150,000 to build armory here. Noted Feb. 27.

Conn., New Britain—Church—St. Marks Episcopal congregation, 21 Washington St., plans to build new church. About $100,000. S. Sutcliffe, pastor.

Conn., New Britain—Home—Childrens' Home, 103 West Main St., plans to build home on Rackliffe Heights. About $100,000.

Conn., New London—Church—Methodist Episcopal congregation. Hempstead St., plans to build church on Broad St. About $100,000. Address M. E. Genter, pastor.

Conn., Preston (Norwich P. O.)—Hospital—State Legislature, Hartford, appropriated $74,500 to improve and alter Norwich State Hospital for the Insane, here.

Conn., Saybrook—Armory—State Legislature, Hartford, appropriated $60,000 to build armory here.

Conn., Stonington—Armory—State Legislature, Hartford, appropriated $60,000 to build armory here.

Conn., Storrs—Hall, etc.—State Legislature, Capitol, Hartford, appropriated $155,555 bonds to build dining hall, faculty cottage, land drainage, equip and build temporary chemical laboratory, poultry plant and students' infirmary for Connecticut Agricultural College here.

Conn., Waterbury—Armory—State Legislature, Hartford, appropriated $300,000 to build new armory here. Noted Feb. 13.

N. Y., Brooklyn—Theatre—J. Manheimer, 1693-49th St., plans to build 3 story, 203x302 ft. brick and steel, concrete foundation, on Flatbush Ave. and Albemarle Rd.

N. Y., Canandaigua—Memorial Community—City plans election soon to vote on $100,000 bonds to erect memorial community building.

N. Y., Canton—Hotel—W. Woodhead, pres., Business Men's Assn., having plans prepared by A. F. Lansing, archt., Sherman Bldg., Watertown, for hotel. About $80,000.

N. Y., Cohoes—High School—City having plans prepared building high school. Bonds for $100,000 voted for project.

N. Y., Deerfield—School—Bd. Educ., Utica, purchased site here and is having estimates made and plans prepared by J. Kemper, engr., Utica, for brick and concrete school. About $100,000.

N. Y., Massena—Church—Sacred Heart congregation having plans prepared for church. About $75,000. Address T. P. Holland, pastor.

N. Y., New Hartford—School—Bd. Educ. voted to expend $84,500 to build school on J. T. Hoffman site, adjacent to present school. Address C. R. Dewey, chn. school bldg. com.

N. Y., New York—Bank—Seabord Natl. Bank, 18 Bway., having plans prepared, by A. C. Bossom, archt., 366 5th Ave., for 3 story, 80 x 94 ft. brick and steel, concrete foundation, on Broad and Beaver Sts.

N. Y., New York—Office, etc.—Natl. Assn' Bldg. Corp., 25 West 45th St., soon receives bids building 20 story, 142x200x50x200 ft. brick and steel office, arcade and store, concrete foundation, at 27 West 43d St., through to 26-28 West 44th St. About $800,000. G. T. Lee, pres. Starrett & Van Vleck, 8 West 40th St., archts.

N. Y., New York—Store and Loft—Musher Bros., 140 Liberty St., soon lets contract building 6 story, 49x100 ft. brick and steel, concrete foundation, at 255-257 5th Ave. About $190,000. S. B. Eisendrath, 18 East 41st St., archt. Noted Mar. 27.

N. Y., Ogdensburg—Temple—Ogdensburg and Acacian Lodge, F. & A. M., having plans prepared for temple, on McGillis property. About $80,000.

N. Y., Pyrites—School—De Grasse Paper Co. and town plans to issue $50,000 bonds to build brick and concrete school.

N. Y., Rochester—Music Hall, etc.—G. Eastman having plans prepared for brick and concrete musical hall and moving picture theater, on Main St. E., and Gibbs St. About $250,000. Noted Feb. 27.

N. Y., Rochester—Y. M. C. A. Bldg. Comn. plans to erect branch building in southeastern section of city. About $80,000. Address G. G. Ford, 129 Dartmouth St.

N. Y., Seneca Falls—Hotel—L. J. Stauff soon lets contract building hotel to replace Hoag Hotel, recently destroyed by fire. About $150,000. Noted Dec. 5.

N. Y., Syracuse—Y. M. C. A., Montgomery St., plans to acquire site north of present building and construct building. About $60,000.

N. Y., Utica—Bank—Utica Trust & Deposit Co. having plans prepared for brick and marble addition to present bank at 166-168 Genesee St. About $200,000. Address C. W. Hitchcock, asst. to pres.

N. Y., Watertown—Sanatorium—Calkins & Farmer, Cleveland Bldg., purchased site on Stone St. and are having plans prepared for 1 story brick, concrete and marble. About $80,000.

N. J., Elizabeth—Exchange—New York Telephone Co., 16 Dey St., New York City, had plans prepared by McKenzie, Voorhees & Gmelin, engrs., 1123 Bway., New York City, building 3 story, 100x100 ft., brick and steel, concrete foundation, at 1196 East Grand St., here.

N. J., Jersey City—Police and Fire Headquarters—City plans to build combined police and fire headquarters on Boland and Montgomery Sts. About $100,000.

N. J., Trenton—Hotel—C. F. Hilderbrecht, 12 Parkside Ave., having plans prepared by W. Hankin, archt., 542 Carteret Ave., building 6 story, 50 x 240 ft., concrete, brick and steel, on West State St. About $300,000. Noted Jan. 2.

Pa., Farrell—Bank—Colonial Trust Co., Bway., had plans prepared by A. C. Bossum, archt., 366 5th Ave., New York City, for 3 story, 55 x 125 ft., steel and brick, concrete foundation. About $75,000. J. Stevenson, pres. Noted Mar. 20.

Pa., Wesleyville — School — School Bd plans to build school. About $100,000.

Pa., Williamsport—Hospital—Dirs. Williamsport Hospital plan to rebuild hospital destroyed by fire. About $150,000.

Md., Baltimore—Post Office and Garage—J. S. Bridges, 325 East Oliver St., having plans prepared by E. L. Palmer, Jr., archt., 513 North Charles St., building 150 x 400 ft., brick and concrete, concrete foundation, on Maryland Ave. and Oliver St. Plans include concrete sidewalks, spur for street railway mail service and chute from station to railroad car. About $200,000. U. S. Government, lessee.

N. C., Raleigh—Museum—State Bd. Agriculture plans to build 96 x 140 ft., on Halifax and Edenton Sts. About $250,000. Address State Bldg. Comn.

S. C., Rock Hill—Hotel—Chamber Commerce plans to build 4 story rein.-con and brick. About $65,000.

Ga., Milledgeville—Home—Trustees Georgia State Sanitorium receive bids about May 15, building 3 story brick home for nurses. About $160,000. A. T. Brown, 717-720 Forsyth Bldg., Atlanta, archt. Noted Jan. 30.

Fla., Miami—Hotel—J. F. Alexander soon receives bids building 4 story hotel on Central Ave.

Fla., Miami—Hotel—Elks' Club, Ave. A and 12th St., plans to build 8 story. About $250,000.

Ala., Birmingham—Sunday School—First Methodist Church of Birmingham had preliminary plans prepared by Miller & Martin, archts., Title Guarantee Bldg., for 3 story on 6th Ave. between 18th and 19th Sts. G. R. Stewart, pastor. About $75,000.

O., Cleveland—Office—Cleveland Welfare Federation, c/o S. C. Kingsley, Electric Bldg., plans to build 10 story, rein.-con., steel and brick. About $500,000.

O., Cleveland—Office—East 9th Euclid Co., c/o C. H. Beardsley, 734 Euclid Ave., having preliminary plans prepared by W. S Ferguson Co., engrs., 1900 Euclid Bldg., remodeling 8 story, 79 x 163 ft., at 9th St. and Euclid Ave. About $100,000. Noted Feb. 27.

O., Cleveland — Sales — Van Aken & Strock, 6523 Euclid Ave., soon receives bids building 4 story, 80 x 270 ft., concrete, steel and brick, on East 66th St. and Euclid Ave. About $250,000.

O., Parma—Schools—Bd. Educ. soon receives bids for 3 story, concrete, steel and brick, cost $100,000; 1 story, concrete steel and brick, $75,000 and 2 story, rein.-con., steel and brick, $90,000. Wright & Hohl, 407 Amer. Trust Bldg., Cleveland, archts.

O., Toledo—Schools—Bd. Educ., Southard St. and Linwood Ave., having plans prepared for Norwood School, cost $400,000, and Navarre School, $270,000. Bonds have been sold for project.

Mich., Detroit — Mercantile — Smith, Hinchman & Grylls, archts., 710 Washington Arcade, receive bids about May 1, building 10 story, 100 x 135 ft. rein.-con., rein.-con. flooring, concrete foundation, on Woodward Ave., for E. Kern Co., 146 Woodward Ave. About $650,000. Noted Feb. 27.

Buildings **(Continued)**

Mich., Detroit — School — Grand River Methodist Episcopal congregation, Grand River Ave. and McGraw St., having plans prepared by Van Leyen, Schilling & Keough, archts., 1121 Union Trust Bldg., for 2 story, 70 x 180 ft. brick and rein.-con., rein.-con. flooring, concrete foundation, on Grand River and Quincy Aves. About $130,000.

Ill., Chicago—Bank and Office—Lake View State Bank, 3160 North Clark St., having plans prepared by I. Viehe-Naess, archt., 64 East Van Buren St., building 3 story, 90 x 158 ft. brick and timber, concrete foundation, on Clark St. and Belmont Ave. About $750,000.

Ill., Chicago—Office—W. D. Boyce, 508 North Dearborn St., had plans prepared by C. A. Eckstorm, archt., 5 North La Salle St., building 15 story, 40 x 90 x 185 ft. brick and steel, concrete foundation, at 26 North Dearborn St., also 3 story 40 x 90 ft. top addition to present Boyce Bldg. About $750,000.

Wis., Appleton—High School—School Bd. having plans prepared by Child & Smith, archts., 64 East Van Buren St., Chicago, building 2 story, 60 x 150 ft. About $200,000.

Wis., Manitowoc—Office—See "Industrial Works."

Wis., Plymouth—Office—See "Industrial Works."

Minn., Albert Lea—Schools—Bd. Educ. having plans prepared for two 2 story, concrete schools, brick foundation. About $50,000 each. C. C. Baker, supt. schools.

Minn., Duluth—Grade School—Bd. Educ. receives bids in June, building 1 story, 64 x 250 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, at Park Point. About $80,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts.

Minn., Duluth—Grade School—Bd. Educ. receives bids about May 15, building 2 story, 64 x 180 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation on Riverside St. About $95,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts.

Minn., Duluth—Grade School—Bd. Educ. receives bids about May 15 building 1 story, 55 x 64 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation on Liberty St. About $50,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts.

Minn., Duluth—Grade School—Bd. Educ. receives bids in June building 2 story, 80 x 120 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Franklin St. About $70,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts.

Minn., Faribault—Dormitory—City soon lets contract building 3 story, 44 x 132 ft., rein.-con. and brick, womens dormitory. About $75,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Minneapolis—Bank and Office—Northwestern Natl. Bank, 411 Marquette Ave., plans to build 12-15 story bank and office. E. D. Decker, pres.

Minn., Minneapolis—Hotel—Twin City Amusement Trust, Palace Theater, having plans prepared for 20 story, 128 x 208 ft. hotel and theater on Hennepin Ave. About $1,500,000. I. N. Ruben, trustee.

Minn., Minneapolis—Sanitarium—Comrs. Hennepin Co. plan to build 2 story, 30 x 120 ft., brick sanitarium, brick foundation, in Len Lake. About $50,000. Rose & Harris, 471 Auditorium Bldg., engrs.

Minn., Northfield—Hall—Norwegian Lutherian congregation, St. Olof's College, having plans prepared for science hall. About $200,000. M. P. Lyon, trustee.

Minn., St. Paul—Hotel for Office and Theater—Twin City Amusement Trust, Palace Theater, Minneapolis, having plans prepared for 15 story, 125 x 200 ft., hotel or office and theater, on St. Peter St. About $1,000,000. I. N. Ruben, trustee.

Minn., St. Paul—School—City soon receives bids building 2 story on Edgecumbe Rd. and Field Ave. About $80,000. C. A. Hausler, city archt.

Minn., Virginia—Courthouse—Comrs. St. Louis Co., (Duluth) plan to build 3 story, rein.-con. and brick, rein.-con. flooring, concrete and rock foundation, here. About $150,000. W. H. Bargen, co. aud.

Minn., Wanamingo—Grade School—City plans to build 2 story, 58x93 ft., concrete and brick, concrete foundation. About $50,000. Magney & Tusler, 450 Builders Exch., Minneapolis, archts.

Kan., Parsons—High School—Bd. Educ. plans to build 2 story rein.-con. and brick. About $80,000. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, archts.

Neb., York—Hospital—Lutheran Hospital Assn. receives bids about May 1, building 2 story, 37 x 90 rein.-con. addition. O. Batz., secy. W. F. Gernandt, 634 Keeline Bldg., Omaha, archt.

Mont., Lewiston—Auditorium—City defeated $60,000 bonds to build auditorium. Noted Feb. 6.

Mo., St. Louis—Hotel—E. J. Mack, Jr., 4011 Lafayette Ave., plans to build 8 story, rein.-con., steel and brick, rein.-con. flooring, concrete foundation, at 5364-72 Pershing St. About $660,000.

Mo., St. Louis—Theatre—W. Wedemeyer, archt., Wainwright Bldg., receives bids about July 1 building 196 x 270 ft. on Gravois Ave. and De Lore St., for Woodland Amusement Co. About $100,000.

Mo., Springfield—School—State Legislature appropriated $100,000 to build practice school at Springfield State Normal School, here.

Okla., Tulsa—Church—Tigert Memorial Methodist congregation plans to build church. About $200,000.

Ariz., Jerome — High School — School Trustees having preliminary plans prepared by C. L. Wilson, archt., Monrovia, Cal., building 2 story, rein.-con. school including manual training departments and auditorium. Bonds will be voted for project.

Ariz., Phoenix—Auditorium and Lodge—Trustees El Zaribah Temple soon receive bids building 3 story, 120 x 140 ft., rein.-con. and brick, concrete foundation, on North Central Ave. About $150,000. Lescher & Kibbey, Bank of Arizona Bldg., archts.

Ariz., Phoenix—School—School Dist. No. 1, election Apr. 29, to vote on $100,000 bonds to purchase site and build school. L. D. Dameron, clk.

Ariz., Yuma—School—Trustees Yuma School Dist. having plans prepared by N. F. Marsh, archt., 211 Bway. Central Bldg., Los Angeles, building 2 story, brick, concrete foundation, to include auditorium, manual training and domestic science departments. About $125,000.

Wash., Seattle—Schools—Bd. Educ. plans election in June or July to vote on $3,500,000 bonds to build schools. F. B. Cooper, supt. schools.

Ore., Portland—Hotel—C. V. Everett, mgr. Alcazar Theatre and C. Starr, plan to build 8 or 10 story, concrete, on B'way and Madison St. About $250,000.

Cal., Berkeley—Schools—City voted $3,000,000 bonds to build high school, 3 grade schools and additions to existing schools. Address C. H. Cheney.

Cal., Emeryville—School—Trustees School Dist. plan to build 2 story, rein.-con. J. Hawley, 47th St. and San Pablo Ave., Oakland, clk. F. Soderberg, 1st Natl. Bank Bldg., Oakland, archt.

Cal., Fowler—School — Trustees Union High School Dist. plan to build 12 room high school and auditorium. About $100,000. E. Gower, clk. Noted Apr. 10.

Cal., Los Angeles—Hotel—Wilshire Blvd. Hotel Co. had plans prepared for 4 story, rein.-con. and brick hotel on Wilshire Blvd., 8th, Fedora and Catalina Sts., main building to be "H" shaped with wings 500 ft. long. Plans include casino, garage, tea house, private school for guests' children and bungalows. About $1,250,000. Bids will soon be received for portion of above work. California Hotel Corp., Maryland Hotel, Pasadena, lessee. Noted Dec. 19.

Cal., Los Angeles—University—University of Southern California, 35th St. and University Ave. having plans prepared by J. Parkinson, archt., 420 Title Insurance Bldg., for group of 6 or more university buildings, (administration building to be erected first). About $3,000,000.

Cal., Modesto—Lodge, Store and Office—Moose Lodge having sketches prepared for 5 story, on 10th and K Sts. About $90,000. P. T. Durham, dictator.

Cal., Orange—Auditorium, etc.—City defeated $150,000 bonds to build auditorium and other buildings in Orange Union School Dist. Noted Mar. 27.

Que., Shawenegan Falls—Church—A. L. Dusablon, curate Polish congregation, receives bids in May or June building church. About $100,000.

Ont., Chapleau—School—Bd. Educ. plans to build 3 story, 80 x 100 ft., school for native Indian population, here. About $100,000. Dept. of Pub. Wks., Ottawa, archt.

Ont., Orillia—Hospital—Power & Son., archts., Brock St., Kingston, soon receive bids building brick and concrete hospital for town. About $100,000.

Ont., Ottawa—Office—H. B. McGiverin, 361 Daly Ave., Ottawa, plans to build 4 story, steel and brick, concrete foundation, on Bank St. About $50,000.

Ont., Sarnia—School—School Bd. receives competitive plans until May 1, for 30 room school for collegiate institute. About $300,000. A. Goodison, chn.

Ont., Toronto—Schools—School Bd. soon lets contracts building brick additions to following schools: Norway School, cost $45,000, Duke Connaught School, $45,000, Kitchener School, $90,000, Bedford Park School, $50,000, Ogden and Brant Sts. School, $70,000, Keele St. School, $130,000, Parkdale School, $60,000, Carlton School, $25,000 and Earl Gray School, $50,000. J. Noble, secy. bldg. com.

Ont., Windsor—School—School Bd. soon receives bids building school. About $125,000. A. H. McPhail, Windsor, archt. Noted Feb. 13.

Man., Winnipeg — Orphanage — Jewish Children's Aid & Orphanage Society of Western Canada, 1280 Main St., soon receives bids building orphanage. About $55,000. Woodman & Cubbidge, 302 Lindsay Bldg., archts. Noted Jan. 23.

Sask., Saskatoon — Exhibition — Winter Fair Bd., Saskatoon, plans to build exhibition building here. About $175,000.

BIDS DESIRED

Conn., Bridgeport—Home—Until May 5, by E. B. Caldwell, Jr., archt., 886 Main St., building 4 story, 80 x 100 ft. brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and Thomas Sts., for Baptist Christian Union, Inc., Thomas St. About $100,000. Noted Jan. 2.

N. Y., Brooklyn—Theater—Until Apr. 30, by R. T. Short, archt., 370 Macon St., building 1 and 2 story, 80 x 180 ft. brick and steel, rein.-con. flooring, concrete foundation, on Flatbush Ave. and Farragut Rd for A. H. Schwartz, 815 Flatbush Ave About $60,000. Noted Mar. 20.

N. Y., Lackawanna (Buffalo P. O.)—School—Until Apr. 26, by A. A. Post, archt., Brisbane Bldg., Buffalo, building 2 story, 130 x 150 ft. brick and steel school and auditorium, rein.-con. flooring, concrete foundation, on South Park Ave. and Ridge St., for Our Lady of Victory congregation. About $125,000.

N. Y., Long Island City—High School—Until May 6, by C. B. J. Snyder, supt. school bldgs., Municipal Bldg., New York City, building 3 story, 100x100 ft. brick and steel addition to Bryant High School, rein.-con. flooring, concrete foundation, on Wilbur Ave. About $500,000.

N. Y., Salisbury Center—Hospital—Until May 8, by G. W. Boyle, purch. agt. Herkimer Co., (Herkimer) building brick and concrete tuberculosis hospital on Heller Farm, here. About $100,000. Noted Apr. 10.

N. J., Bayonne—School—Until May 6, by Bd. Educ., building school on Prospect Ave. between 29 and 30th Sts.

N. J., Lakewood—Hotel—Until Apr. 30, by Shampan & Shampan, archts., 772 Bway., Brooklyn, N. Y., building 5 story, 100 x 175 ft., brick and steel, concrete foundation, for Hotel Elisberg Constr. Co., 55 Liberty St., New York City. About $500,000.

Pa., Phila.—Stations—Until Apr. 29, by Dept. City Transit, 1211 Chestnut St., building brick, steel and rein.-con. station, on northeast and southwest corners of Kensington and Allegheny Aves.; also removing existing buildings on these sites, Contr. No. 551; also on southwest and southeast corners of Kensington Ave. and Somerset St., and removing existing buildings on these sites, Contr. No. 552, Frankford Elevated Ry. W. S. Twining, dir.; advertised in this issue.

Wis., Port Washington—Bank—Until May 15, by Port Washington State Bank, building 2 story, 45 x 100 ft., brick bank on Main St. C. Hill, pres.

Minn., Campbell—School—Until Apr. 28, by Bd. Educ. building 2 story, brick school, brick foundation. About $50,000.

Minn., Hawley—High School—Until May 12, by E. Morton, clk. bd. educ., building 2 story, 67 x 118 ft., brick, brick foundation. About $50,000. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt. Noted Mar. 20.

Buildings (Continued)

Minn., St. Paul—School—School Bd. receiving bids for concrete and brick addition to school, brick foundation. About $50,000. C. A. Hausler, city archt.

Minn., Victoria—School—Until May 8, by J. Duthlem, clk., bd. educ., building 2 story, 54 x 108 ft., school for Consolidated School Dist. No. 16. About $52,000. Magney & Tusler, 450 Builder's Exch. Minneapolis, engrs. Noted Jan. 30.

Minn., Winnebago—High School—Until May 15, by E. F. Arndt, clk. bd. educ., building 2 story, 107 x 112 ft., rein.-con. and brick, brick foundation. About $60,000. K. T. Snyder, 923 Plymouth Bldg., Minneapolis, archt. Noted Jan. 30.

S. D., Aberdeen—Hospital—Holmes & Flinn, archts., 8 South Dearborn St., Chicago, receiving bids building 4 story, rein.-con. and brick addition, concrete foundation, for St. Luke's Hospital, here. About $125,000.

Wyo., Green River—Hotel—Until Apr. 25, by J. W. Hawk, building 3 story, 60 x 140 ft., brick. About $60,000. W. J. Cooper, Boston Bldg., Salt Lake City, Utah, engr.

Utah, Hiawatha—School—Until Apr. 29 by Carbon Co. School Bd. (Price) building 1 story, 80 x 140 ft., brick and terra cotta. About $60,000. Connen & Fitzer, Templeton Bldg., Salt Lake City, engrs.

Que., Chicoutimi—Church—Until May 3, by Bishop of Chicoutimi, building church. About $300,00. O. Beaule, Quebec, archt.

Ont., Ft. William—Collegiate—Until May 7, by R. E. Mason, archt., Victoria Blk., building 4 story, steel and brick, concrete foundation, for Bd. Educ. About $80,000.

Ont., London—Office—Until Apr. 30, by Watt & Blackwell, archts., Bank of Toronto Bldg., altering and building brick addition to office building for Huron & Erie Mortgage Corp., 422 Richmond St. About $75,000. Noted Feb. 13.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Lynn—Hotel—J. Grossman, 401 Grossman Bldg., Roxbury, will build 7 story brick and stone, rein.-con. flooring, concrete foundation, on Lynn Shore Dr. and Wade St., here. About $250,000. Work will be done by day labor. Noted Mar. 6.

★Conn., Hartford—Theater—S. Z. Poli, 24 Church St., New Haven, will build 3 story, 120 x 158 ft. brick and steel, brick foundation, on Main St. here. About $125,000. Work will be done by day labor under supervision of T. W. Lamb, archt., 644 8th Ave., New York City. Noted Jan. 9.

★Conn., New Haven—Hotel—Adelman Bros., 10 Garden St., will build 5 story brick and steel, rein.-con. flooring, concrete foundation, on Whaley Ave. About $165,000. Work will be done by day labor. Noted Mar. 27.

★N. Y., Brooklyn—Theater—Beverly Amusement Corp., 220 Bway., New York City, let contract building 1 and 2 story, 55 x 70 ft. brick, rein.-con. flooring, concrete foundation, on Church Ave. near Gravesend Ave., to M. Shapiro & Son, 52 Vanderbilt Ave., New York City. About $55,000.

★N. Y., Manlius—Dormitory—St. John's School let contract building brick dormitory to O'Brien Constr. Co., 1722 Park St., Syracuse. About $100,000.

★N. Y., New York—Bank—Corn Exch. Bank, 13 William St., let contract building 3 story, 75 x 100 ft. brick and steel, concrete foundation, at 76 Grove St., to W. V. Kienhle Co., 1035 Stebbens Ave.

★N. Y., New York—Dispensary—New York Infirmary for Women & Children, 321 East 15th St., let contract building 44 x 60 ft. brick and steel, concrete foundation, on Livingston Pl. and 15th St., to M. Eidlitz, 30 East 42nd St. About $155,000; cost plus percentage basis.

★N. Y., New York—Showroom—See "Industrial Works."

★N. Y., New York—Store—R. H. Macy, Bway. and 34th St., let contract building 17 story, 50 x 200 ft. brick and steel addition, concrete foundation, at 149-155 West 34th St., to M. Eidlitz, 30 East 42nd St. About $500,000.

★N. Y., New York—Theatre—823 Trinity Ave. Corp., 7 East 42nd St., will build 2 story, 92x130 ft. brick and steel, concrete foundation on Fordham Rd. and Valentine Ave., (Bronx Boro.). About $75,000. Work will be done by day labor.

★N. Y., New York City—University—Columbia University c/o Dobbs & Co., agents, 244-5th Ave., let contract for brick and steel interior and exterior alterations, at 2 West 50th St., to T. J. Murphy, 405 Lexington Ave. About $50,000.

★Pa., Brookville—School—Bd. Educ. let contract building school, to J. H. Carr Brookville. About $60,000.

★Pa., Pittsburgh—Office—See "Industrial Works."

★Md., Annapolis—School—Severna Preparatory School, Severna Park, let contract building 3 story, 85x120 ft., concrete and brick, concrete and brick foundation, at Severna Park, to J. M. Appleton, Pasadena. About $60,000.

★Md., Baltimore—Church—Emmanuel Protestant Episcopal congregation, c/o H. D. Harlan, 9 West Biddle St., let contract building 1 story, 25x65 ft., brick and rein.-con., addition, concrete and rock foundation, with 133 ft. tower, on Cathedral and Read Sts., to Morrow Bros., 1201 Fidelity Bldg. About $125,000.

★N. C., Charlotte—High School—Bd. Educ. let contract building 2 story, 58 x 222 ft., rein.-con. high school with 50 x 62 ft., auditorium, to J. A. Jones, 800 Realty Bldg., $114,500. Noted Mar. 20.

★Fla., Miami—Hotel—Urmey Hotel, 13th St. and Ave. B, let contract improving and building 2 story, 60 x 75 ft. addition to Wolf & Ewing Constr. Co., 11th St. and Ave. F. About $100,000.

★Ala., Athens—Court House—Comrs. Limestone Co. rescinded contract let to Little-Clecker Constr. Co., Anniston, and relet same, to Johnson, Chambers & Co., Athens. About $155,000.

★La., Edgard—Church—St. John Baptist congregation let contract building 55 x 135 ft., brick and concrete, to R. G. Favorsworth, New Orleans. About $89,850. Noted Mar. 13.

Mich., Lansing—Library, etc.—Bd. State Auditors received bids Apr. 2, building 6 story brick and rein.-con. library office and steam heating plant, concrete foundation, from W. E. Wood Co., 1805 Ford Bldg., $682,643; Du Boise Constr. Co., Flint, $699,779; Hoertz & Son, Grand Rapids, $692,225. Noted Mar. 20.

★Minn., Cloquet—High School—Bd. Educ. let contract building 3 story, 86 x 200 ft., rein.-con., concrete foundation, to Laurence Constr. Co., 544 Builders' Exch., Minneapolis, $167,000. Noted Apr. 10.

★Minn., Mankato—Grade School—City let general contract building 3 story, 75 x 163 ft. to E. Carlstrom, Mankato, $86,912; heating and plumbing to C. M. Masters, Mankato, $40,650.

★Minn., Wilmar—High School—Bd. Educ. let general contract building story, 100 x 150 ft., concrete and steel addition to high school, brick foundation, to J. H. Olsen & Co., Wilmar, $98,685; plumbing and heating, to B. Benson, Wilmar, $37,853. Noted Apr. 17.

Kan., Sterling—Auditorium and Conservatory—Cooper College let contract building 2 story, 76 x 99 ft. rein.-con. and brick, to J. Cuthbert & Sons, 18th St. and Topeka Ave., Topeka. About $60,000.

★Cal., Fairfield—Hospital—Bd. Supervs. Solano Co. let contract building 1 story, 100 x 300 ft., brick and frame, to E. E. Etherton Co., Monadnock Bldg., San Francisco, $100,552. Noted Mar. 20.

★Que., St. Anges—Church—Roman Catholic congregation let contract building church, to Labbe & Roberge, Valley Junction. About $71,000. Noted Apr. 17.,

★B. C., Esquimalt—Hospital—Dominion Government, Ottawa, let contract building two 2 story, 80 x 100 ft. and one 1 story, 50 x 90 ft. additions to Military Hospital here, to form 2 new active treatment pavilions, with additional story to Hydrotheropenic building, to R. Moncrieft, 3820 11th St., W., Vancouver. About $140,000. Noted Feb. 20.

Federal Government Work

PROPOSED WORK

Pa., Philadelphia—Foundation—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build foundation for aircraft storage building, here; Spec. 3867. About $260,000.

Del., Wilmington—Dredging—U. S. Eng. Office, Old Federal Bldg., rejected bids received Mar. 24, dredging Smyrna River, same being in excess of appropriation. Noted Feb. 27.

Va., Craddock—School—O. M. Eidlitz, dir. U. S. Housing Corp., 413 G St., N. W., Wash., D. C., had plans prepared by Mitchell & Co., Ltd., archt., Paul-Gale-Greenwood Bldg., Norfolk, for pressed brick and stone school, here. About $100,000.

Va., Ft. Monroe—Theatre—A. H. Lloyd, maj. of engrs., constr. quartermaster, Ft. Monroe, soon receives bids building Liberty Theater, type F, here.

Va., Hampton Roads—Motor Generator Sets and Switchboard—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install at Submarine Base, here; Spec. 3872. About $60,000.

Va., Hampton Roads—Steel Water Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3868. About $25,000.

Va., Truxtum—School—O. M. Eidlitz, dir U. S. Housing Corp., 413 G St., N. W. Wash., D. C., had plans prepared by Mitchell & Co., Ltd., archt., Paul-Gale-Greenwood Bldg., Norfolk, for pressed brick and stone school, here. About $50,000.

Fla., Pensacola—Crane—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 20 ton electric traveling bridge crane in wet basin boat shed, here; Spec. 3869. About $10,000.

Mont., Missoula—Roads Work—Bureau Pub. Rds., U. S. Dept. Agriculture, plans to build various trails and minor roads in Montana National Forests. About $65,000 and $75,000 respectively. G. H. Loutz, dist. engr.

Wash., Ft. Flagler—Dock—Constr. Div., War Dept., Wash., D. C., plans to build dock with concrete approach, here. About $30,000.

Cal., Garden Valley—Water Supply System, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build water supply system to supply water to Mare Island Navy Yard and federal housing colony here. About $1,000,000.

Cal., Mare Island—Yard Improvements—Bureau Yards & Docks, Navy Dept., Wash., D. C., authorized improvements to yard, here, including slips and piers, doubling capacity of power plant, new buildings and oil tanks, and railway through Vallejo from causeway to connect with Southern Pacific Ry. About $2,500,000.

P. I., Cavite—Power Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install, here; Spec. 3871. About $90,000.

BIDS DESIRED

Mass., Boston—Dredging—Until May 3, by U. S. Eng. Office, Boston, dredging at Hog Island, Boston Harbor; advertised in this issue.

Mass., Chelsea—Wharf, Dredging and Seawall—Until Apr. 30, by Light House Supt., Boston, building new wharf and seawall and dredging at light house depot, here.

R. I., Newport—Torpedo Storage Building—Until May 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3767. About $203,000; $10 deposit required for plans and specifications. Noted Jan. 23.

D. C., Wash.—Discharge Pipe—Until May 5, by Bureau Yards & Docks, Navy Dept., installing 8 in. submerged discharge pipe here; Spec. 3267. About $12,000.

Va., Hampton Roads—Additional Buildings—Until May 5, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Air Sta.; Spec. 3823. About $560,000; $30 deposit required for plans and specifications. Noted Mar. 6.

Va., Hampton Roads—Buildings—Until May 5, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building additional buildings at Aircraft Station here; Spec. 3818. About $560,000.

Va., Hampton Roads—Storehouse—Until Apr. 28, by Bureau Yards & Docks, Wash., D. C., building 1 story, rein.-con. storehouse, here; Spec. 3861. About $230,000; $10 deposit required for plans and specifications. Noted Apr. 17.

Va., Hampton Roads—Storehouse—Until Apr. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 3 story, rein.-con. aircraft storehouse, here; Spec. 3860. About $837,000; $20 deposit required for plans and specifications. Noted Apr. 17.

Va., Hampton Roads—Storehouse—Until Apr. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 6 story, rein.-con. storehouse, here; Spec. 3859. About $800,000; $20 deposit required for plans and specifications. Noted Apr. 17.

S. C., Charleston—Dry Dock—Until May 19, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building dry dock No. 2, here; Spec. 3858. About $3,500,000; $100 deposit required for plans and specifications. Noted Apr. 10.

Federal Government Work (Continued)

S. C., Charleston—Storehouse—Until May 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building fixed ammunition storehouse, here; Spec. 3842. About $52,000; $10 deposit required for plans and specifications. Noted Apr. 3.

Fla., Pensacola—Conduit System—Until May 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building underground conduit system, here; Spec. 3846. About $114,000; $10 deposit required for plans and specifications.

Ala., Florence—Derricks—Until May 21, by U. S. Eng. Office, Florence, furnishing derricks; advertised in this issue.

Minn., Duluth—Dredging—Until May 21, by U. S. Eng. Office, Duluth, dredging Duluth-Superior Harbor, Minn. and Wis.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Chatham—Septic Tank, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building septic tank, sewage disposal system, grading streets, etc., to H. S. Roberts, 1123 Bway., New York City, $40,925 (75 days). Noted Apr. 17.

Conn., New London—Dredging—U. S. Eng. Office, New London, received only bid Apr. 8, for annual maintenance dredging in Connecticut River below Hartford, from Hartford & New York Transportation Co., 285 State St., Hartford, $0.22 per cu. yd., total $15,400. Noted Mar. 27.

N. Y., Rockaway—Pump House—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 21, building pump house for gasoline system, (work complete) from C. Meades, 38 Park Row, $1664, time as specified; Rangley Constr. Co., 405 Lexington Ave., $1739 (45 days); Post & McCord, 101 Park Ave., $1923 (60 days). Contractors all of New York City. Noted Apr. 10.

Pa., Erie—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids for alterations, here, from E. J. B. Lee, $12,715; Constable Bros. Co., 5th and Sassafras St., $15,661; Kirschner Bros., 437 East 9th St., $18,500. Contractors all of Erie. Noted Apr. 3.

★Pa., Phila.—Crane—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing one 15 ton electric traveling bridge crane, to A. D. Granger Co., 15 Park Row, New York City, $26,519 (180 days). Noted Mar. 20.

★Pa., Phila.—Gasolene System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Navy Yard, here, for seaplane hangars, to Mansfield & Savage, 135 William St., New York City, $10,000, (60 days). Noted Apr. 17.

★Pa., Phila.—Guard House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building guard house at P. R. T. Sta., here, to W. H. McCloskey, 1620 Thompson St., $14,155 (120 days).

★Pa., Phila.—Pumping Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in Navy Yard here, to W. G. Cornell Co., Colonial Trust Bldg., $7286 (45 days). Noted Feb. 27.

★Md., Aberdeen — Warehouse — Constr. Div., War Dept., Wash., D. C., let contract building here, to Aberthaw Constr. Co., Aberdeen, cost plus percentage.

Md., Indianhead—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building county roads, at Naval Proving Ground,

(1) net price and time for work, complete, in accordance with the drawings and specifications;

(2) unit price per linear foot for 20 ft. wide county road (including side walks and parking on one side) in addition to, or less than length shown on drawing;

(3) unit price per linear foot for 18 ft. wide concrete road as shown by Sect. "A-A" on drawing, in addition to, or less than length shown on drawing;

(4) unit price per linear foot for 24 ft. wide concrete road as shown by Sect. "B-B" in addition to, or less than length shown on drawing;

(5) unit price per linear foot for 4 ft. wide concrete sidewalk in addition to, or less than length shown on drawing;

(6) unit price per linear foot for 16 ft. wide gravel road as hereinbefore specified, in addition to, or elss than the length shown on drawing, from

Sutton & Corson Co., 9th and Simpson Sts., Ocean City, N. J., (1) $66,698, (75 days); (2) $11.20, (3) $14, (4) $16.40, (5) $0.85, (6) $3, (7) $70, (8) $1.25.

TABULATION OF BIDS OPENED APRIL 15 BY WAR DEPARTMENT FOR PURCHASE OF ARMY CAMPS

	Entire Camp	Remount Deduct	Hospital Deductions
Camp Beauregard, Alexandria, La.:			
J. W. Alexander, Alexandria, La	$34,175.76	$7,500.00	
J. W. Davis, 6627 Olive St. Rd., St. Louis, Mo	18,100.00	8,000.00	
Camp Bowie, Ft. Worth, Tex.:			
Ft. Worth Chamber of Commerce, Ft. Worth, Tex	21,000.00	1,000.00	10,000.00
H. Marks Sons, Indianapolis, Ind	66,000.00	1,000.00	4,000.00
Camp Colt, Gettysburg, Pa.:			
D. Hauser, 121 Christopher St., New York, N. Y	6,585.00		
Jump Wreck Co., 210 Parkway Bldg., Phila., Pa	2,023.00		
Thomas & Co., Frederick, Md	7,500.00		
John W. Hartley, York, Pa	12,000.00		
Lewis Bros., Rock Island, Ill	18,000.00		
H. L. Krensler, 3301 Pa. Ave., Pittsburg, Pa	13,317.37		
Camp Hancock, Augusta, Ga.:			
Philip Gofarb & Sam'l Brooks	37,550.00	2,000.00	11,025.75
Ruel Wrekcing Co., 737 Story Island, Chicago, Ill	25,000.00		
John P. Mulherin, Augusta, Ga	38,500.00	3,200.00	
New Wrecking Co., Indianapolis, Ind	42,000.00	12,000.00	
John W. Dickey and G. H. Nixon, Augusta, Ga	35,050.00		
Camp Kendrick, Lakehurst, N. J.:			
Geo. C. Demeritt, 153 Remson St., Brooklyn, N. Y	22,000.00		
D. Hauser, New York, N. Y	6,585.00		
Jump Wreck Co., 210 Parkway Bldg., Phila, Pa	3,317.00		
Philip Efros, Lakeland, N. J	13,100.00		
Camp Logan, Houston, Tex.:			
Geo. T. Brown, Houston, Tex	66,000.00		
Camp Polk, Raleigh, N. C.:			
Supt. of Prisons, Raleigh, N. C	8,000.00		
Camp Sevier, Greenville, S. C.:			
New Wrecking Co., Indianapolis, Ind	45,100.00	10,000.00	
Camp North Jackson, Columbia, S. C.:			
Lewis Bros., Rock Island, Ill	17,000.00		
Camp Shelby, Hattiesburg, Miss.:			
New Wrecking Co., Indianapolis, Ind	48,100.00	12,000.00	16,000.00
J. A. McCrary, Atlanta, Ga	52,700.00	3,500.00	16,800.00
J. W. Davis, 6627 Olive St. Rd., St. Louis, Mo	61,000.00	4,000.00	15,000.00
	(If given both Camp Shelby and Camp Beauregard, add $7,500)		
Philip Gofarb & Samuel Brooks	41,550.75	5,000.00	2,000.00
	(If given both Camp Shelby and Camp Hancock, add $500)		
Orleans Demolition Co., New Orleans, La	52,000	21,440.50	16,559.20
L. W. Dantzlin, Gulfport, Miss	51,000.00	43,000.00	39,000.00
	(Exclusive of remount and hospital, $31,000		
S. Steinberg Co., Memphis, Tenn	81,000.00	60,100.00	40,100.00
	(Exclusive of remount and hospital, $15,100)		
Camp Sheridan, Montgomery, Ala.:			
Orleans Demolition Co., New Orleans, La	15,300.00	3,261.04	8,342.19
City of Montgomery, Alabama	10,000.00		
E. W. Hoyle, Montgomery, Ala	12,250.00		
Camp Wadsworth, Spartanburg, S. C.:			
New Wrecking Co., Indianapolis, Ind	46,100.00	10,000.00	15,000.00
Camp Wheeler, Macon, Ga.:			
E. Ness, Savannah, Ga	67,500.00	10,000.00	30,000.00
E. G. Jacobs, Macon, Ga	16,500.00	4,500.00	31,500.00
W. H. Harris, Ft. Valley, Ga	41,000.00	4,500.00	7,500.00
Alternate bids	17,000.00	3,000.00	Add 5,500.00
	18,000.00	3,000.00	1.00
J. A. McCrary, Atlanta, Ga	28,398.00	4,000.00	8,000.00
Macon Salvage Co., Mascon, Ga	25,500.00	6,000.00	4,000.00
Camps Bowie, Wheeler, Hancock, Shelby, Beauregard, Colt, Polk, Sheridan, Kendrick, Logan, Sevier, Wadsworth, and North Jackson:			
Harris Bros. Co., 36th and Iron Sts., Chicago, Ill	($500,000 for all 13 camps)		

*The bidder in each case assumes all land and property damage claims and in addition offers the amounts listed above.

PAVING—WINNETKA, ILL.

Bids were received by Bd. Local Improvements for paving various streets, from (A) Marquette Constr. Co., 133 West Washington St., Chicago, (awarded contract); (B) M. Foley Co., Evanston; (C) Bates & Rogers, 37 West Van Buren St., Chicago. The unit bids were as follows:

	A	B	C
17,400 sq.yd. 6-12-in. concrete pavement and integral curb	$3.05	$3.30	$2.90
6,520 sq.yd. 6-11-in. concrete pavement and integral curb	2.75	3.17	2.80
2,340 sq.yd. 6-12-in. concrete pavement and integral curb	3.00	3.27	2.95
32,600 sq.yd. 6-10-in. concrete pavement and integral curb	2.60	3.06	2.65
36,500 cu.yd. excavation	.80	.60	.93
4 brick manholes, 48-lb. covers	75.00	60.00	100.00
131 brick catch basins, 350-lb. covers	70.00	55.00	80.00
5 brick catch basins, 480-lb. covers	75.00	60.00	90.00
11 brick combination manholes and catch basins	75.00	60.00	85.00
19 brick valve vaults, 480-lb. covers	75.00	60.00	90.00
29 cast iron inlets, 350-lb. covers	30.00	28.00	40.00
3 350-lb. cast-iron covers	25.00	22.00	35.00
29 480-lb. cast-iron covers	25.00	30.00	45.00
2 480-lb. cast-iron covers	25.00	25.00	45.00
19 catch basin covers adjusted	10.00	10.00	25.00
141 manhole covers adjusted	2.00	4.00	25.00
5 fire hydrants adjusted	30.00	30.00	30.00
20 light poles adjusted	22.00	20.00	45.00
1,950 sq.ft. concrete walk approach adjusted	.15	.25	.20
2,010 lin.ft. new concrete walk approach	1.00	1.25	1.15
33,030 lin.ft. 4-in. glazed tile, cinder filling	.30	.37	.40
3,645 lin.ft. 4-in. glazed tile, sand filling	.40	.40	.70
3,675 lin.ft. 8-in. sewer, cinder backfill	.90	1.00	1.20
2,015 lin.ft. 8-in. sewer, sand backfill	1.20	1.00	1.35
1,430 lin.ft. 10-in. sewer, cinder backfill	1.60	1.60	2.00
170 lin.ft. 10-in. sewer, sand backfill	2.10	2.15	2.90
600 lin.ft. soft steel protection plates	.10	.30	.30
Extended totals	$228,957	$245,245	$246,767

Federal Government Work (Continued)

McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $68,207, (90 days); (2) add $15, deduct $10; (3) add $11, deduct $8; (4) add $20, deduct $12; (5) add $1.20, deduct $0.75; (6) add $4, deduct $2.50; (7) $50, (8) $1.

Scott Bros., 120 North Washington St., Rome, N. Y., (1) $73,043, (90 days); (2) $12, (3) $9.25, (4) $12.30, (5) $1.75, (6) $2.40, (7) $75, (8) $0.60. Noted Apr. 10.

★D. C., Wash.—Condensers—Bureau Yards & Docks, Navy Dept., let contract installing condensers in various Navy Yards, items (3), (4), (5) and (6), to Worthington Pump & Machinery Co., 115 Bway., New York City, $73,146. Noted Feb. 27.

D. C., Wash.—Grading—Bureau Yards & Docks, Navy Dept., received bids Apr. 21, grading west extension of Navy Yard, (work complete) from W. F. Cush, 3rd and R. Sts., N. E., $4888, (30 days); G. Hyman, 1116 Morse St., N. E., $5200, (30 days); Hyde & Baxter, 711 13th St., $6930, (45 days). Noted Apr. 17.

★D. C., Wash.—Pumping Equipment—Bureau Yards & Docks, Navy Dept., let contract installing in various Navy Yards, to Alberger Pump & Condenser Co., 140 Cedar St., New York City, items (1), (7), (8), (9), (11), (12), (13), (14), (15), (16), in amount of $164,310, less $771, for (16), in amount of $164,310, less $771, for combined award for 3 items for New Orleans, La., making total net award of $163,539. Pumps, to Mid West Engine Co., Indianapolis, Ind., items (18 to 24 inclusive) $18,456 (90 days.)

★D. C., Wash.—Road Work—Zone Supply Officer, 17th and F Sts., N. W., let contract grading, paving and draining, etc., in southern portion of Arlington Cemetery, to D. C. McAleer Constr. Co., Wash., $44,990. Noted Mar. 27.

D. C., Wash.—Sewage Disposal System—Dist. Comrs., Dist. Bldg., received bids Apr. 21, building superstructure for Rock Creek Pumping Sta., (1) 4200 cu. yd. excav.; (2) 1250 cu. yd. concrete masonry; (3) 14 cu. yd. vitr. block masonry, from P. F. Gormerly, 718 Union Trust Bldg., (1) $4.23 per cu. yd., (2) $14.88, (3) $40.75, W. F. Brenizer, 1st and New York Ave.; (1) $4.50; (2) $15; (3) $50; Hyde & Baxter, 711 13th St., N. W., (1) $5.63; (2) $1842; (3) $30. Contractors all of Wash., D. C. Noted Apr. 3.

D. C., Wash.—Steel Tower—Constr. Div., War Dept., Wash., received bids Apr. 14 furnishing one 250,000 gal. steel tank on 125 ft. steel tower equipped with 48 in. riser pipe, (1) delivered and erected complete at Langley Field, Hampton, Va., including freight, etc.;

(2) F.O.B. points of shipment and erected complete, exclusive of foundations at Langley Field, Government to pay cost of transportation, unloading, etc., from

Amer. Bridge Co., Wilkins Bldg., for 250,000 gal. tank, (1) $21,000 (4½ months); (2) $19,800, (3½ months); 25,000 gal. tank, (1) $5000; (2) $4900, price for 25,000 gal. tank not to apply unless bid for 250,000 gal. tank is accepted.

Memphis Steel Constr. Co., Magee Bldg., Pittsburgh, Pa., 250,000 gal. tank, $18,487, (shipment 75 days, erection 6 weeks); f.o.b. factory, including erection, $17,745; 25,000 gal. tank, (1) $4472 (shipment 40 days, erection 4 weeks); (2) $4352, (bid is conditional upon receiving award of both tanks.)

Pittsburgh-Des Moines Steel Co., Munsey Bldg., (1) $19,300; (2) $18,480 (shipment 6 weeks, erection 7 weeks), 25,000 gal. tank, (1) $4585; (2) $4445 (shipment 4 weeks, erection 4 weeks.)

Chicago Bridge & Iron Co., 30 Church St., New York City, 250,000 gal. tank, (1) $22,950, (5 months); (2) $21,725; 25,000 gal. tank, (1) $4975; (2) $4800 (3 months).

R. D. Cole Mfg. Co., Newman, Ga., 250,000 gal. tank (1) $19,900 (Sept. 15); (2) $19,000 (shipment July 7, erection 8 weeks); 25,000 gal. tank, (1) $3146, (complete July 15; (2) $3146 (shipment June 15, erection 3 weeks). Noted Apr. 10.

Va., Norfolk—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., received lowest 3 bids Apr. 21, installing one 6 ton electric traveling crane and two 1 ton pillar cranes, in galvanizing plant at Navy Yard,

(1) net price and time for 6 ton bridge crane installed complete in accordance with drawings and specifications;

(2) net price and time for 6 ton bridge crane installed complete in accordance with bidder's drawings and specification, which shall accompany his proposal.

(3) net price and time for 2 ton pillar cranes installed complete in accordance with drawings and specifications;

(4) net price and time for two 1-ton pillar cranes installed complete in accordance with bidder's drawings and specifications which shall accompany his proposal, from

Bedford Fdry. & Machine Co., 1107 5th St., Bedford, O., (2) $9,359, (120 days); (4) $4306, (120 days).

V. R. Browning, 17701 Lake Shore Blvd., Cleveland, O., (1) $9606; (3) $5840.60.

Whiting Fdry. & Equipment Co., Harvey, Ill., (2) $11,970, (80 days); (4) $4040, (80 days). Noted Apr. 10.

★Va., Norfolk—Dredging and Filling—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract dredging and filling at Navy Yard, here, to H. P. Converse Co., 31st St. and Colonial Ave., $.2994 per cu.yd. plus $8000. Noted Apr. 17.

Va., Norfolk—Galvanizing Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 21, building at Navy Yard, here,

(1) net price and time for 2 buildings, complete in accordance with drawings and specifications; (a) with rag felt roofing, saturated with asphalt; (b) with asbestos felt roofing saturated with asphalt;

(2) net price and time for galvanizing plant, complete, in accordance with drawings and specifications; (a) with rag felt roofing, saturated with asphalt; (b) with asbestos felt roofing, saturated with asphalt;

(3) net price and time for oxy-acetylene plant, complete, in accordance with plans and specifications; (a) with rag felt roofing, saturated with asphalt; (b) with asbestos felt roofing, saturated with asphalt;

(1c), (2c) and (3c) (referring to (1) (2) and (3), respectively); net price to be added to or deducted from (1), (2) and (3), respectively for each wood pile in excess of, or less than, number indicated on drawings, including both test and bearing, and assuming each pile to be 60 ft. long from point to cut-off;

(1d), (2d) and (3d), (referring to (1), (2) and (3), respectively), net price to be added to or deducted from (1), (2) and (3) respectively, for each linear foot of pile in excess of or less than, 60 lin. ft. per pile, length of pile being considered as distance from point to cut-off;

(1e) and (2e), (referring to (1) and (2), respectively), net price to be added to or deducted from (1) and (2), respectively, if steel purlins, coated with cement mortar, are used instead of concrete purlins in main roof of galvanizing plant, from

W. Linker Co., 831 Cherry St., Phila., Pa., (1a) $119,900, (179 days); (1b) $119,900, (179 days); (1c) add $44, deduct $11; (1d) add $0.80, deduct $0.10; (1e) $3500; (2a) $7800, (169 days); (2b) $7800 (169 days); (2c) add $44, deduct $11; (2d) add $0.80, deduct $0.10; (2e) add $3500; (3a) $44,400 (169 days); (3b) $44,400, (169 days); (3c) add $44, deduct $11; (3b) add $0.80, deduct $0.10.

Boyle-Robertson Constr. Co., 601 Evans Bldg., Wash., D. C., (1a) $133,195, (180 days); (1b) $134,695, (180 days); (1c) add $26, deduct $20; (3c) add $26, deduct $20; (3d) add $0.55, deduct $0.20; (2a) $87,212, (180 days); (2b) $88,412, (180 days); (2d) add $0.55, deduct $0.20; (3a) $48,811, (180 days); (3b) $49,111, (180 days).

Oscawanna Bldg. Co., 101 Park Ave., New York City, (1a) $135,470, (180 days); (1b) $136,220, (180 days); (1c) add $30, deduct $20; (1d) add $0.50, deduct $0.20; (1e) $1250; (2a) $90,870; (2b) $91,370; (2c) add $30, deduct $20; (2d) add $0.50, deduct $0.20; (2e) $1250; (3a) $52,700, (180 days); (3b) $53,000; (3c) add $30, deduct $20; (3d) add $0.50, deduct $0.20. Noted Apr. 10.

Va., Yorktown—Barracks, Mess Hall and Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 21, building at Naval Mine Depot, here,

(1) net price and time for work complete, in accordance with drawings and specifications, based on shingle roofs, except flat decks;

(2) amount and time to be added to or deducted from (1) if slate surfaced prepared roofing is substituted for shingles, from

H. S. Roberts, 1123 Bway., New York City, (1) $183,141, (180 days); (2) deduct $12,000.

Rangely Constr. Co., 405 Lexington Ave., New York City, (1) $184,487, (180 days); (2) deduct $5628.

H. Foulkrod, 1406 Commonwealth Bldg., Phila., Pa., (1) $187,700, (180 days); (2) deduct $5277. Noted Apr. 10.

W. Va., South Charleston—Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 21, building 4 officers' quarters, at Naval Ordnance plant, here,

(1) net price and time for 4 buildings (3 of type "B" and 1 of type "C") complete, in accordance with drawings and specifications;

(1a) amount to be added to or deducted from net price stated under (1) for substitution of slate roofing, as specified under "alternative No. 1," in place of wood shingles;

(2) net price and time for each additional building, type "B" complete, in accordance with drawings and specifications;

(2a) amount to be added to or deducted from net price stated under (2) for substitution of slate roofing, as specified under "alternative No. 1," in place of wood shingles, from

Wills Egelhoff Co., 101 Park Ave., New York City, (1) $71,443, (150 days); (1a) $1450; (2) $17,775, (30 days); (2a) add $365.

Algernon Blair, 11 South Lawrence St., Montgomery, Ala., (1) $72,000, (180 days); (1a) $1800; (2) $16,400, (45 days); (2a) $425.

Newport News Contg. & Eng. Co., Newport News, Va., (1) $73,956, (150 days); (1a) $900; (2) $17,000, (20 days); (2a) add $240. Noted Apr. 10.

★Ky., Greenup—Lock and Abutment—U. S. Eng. Office, 1st Dist., Cincinnati, O., let contract building lock and abutment for Dam No. 30, Ohio River, near here, to Nat'l Contg. Co., Citizens Bank Bldg., Evansville, Ind., $592,590. Noted Mar. 6.

★O., Port Clinton—Warehouses—Constr. Div., War Dept., Wash., D. C., let contract to Cleveland Constr. Co., Citizens Bldg., Cleveland, cost plus percentage.

Mich., Mt. Pleasant—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 18, building here, from W. O'Neil Son, Faribault, Minn., $58,844; Northern Constr. Co., 421 Milwaukee St., Milwaukee, Wis., $59,359; W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., $59,700. Noted Mar. 13.

★Ill., Savannah—Warehouses—Constr. Div., War Dept., Wash., D. C., let contract building 40 warehouses here, to W. M. Sutherland, Savannah. About $1,500,000; cost plus percentage.

Wis., Rhinelander—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 21, building post office, here, from W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $52,000; Henry & Matfield Constr. Co., Indianapolis, Ind., $53,572; W. O'Neil & Son Co., Faribault, Minn., $55,446. Noted Mar. 13.

★Tex., Ft. Worth—Argon Production Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract for all work under heading "Piping for Machinery," in connection with Argon production plant to be erected here, to Carroll Electric Co., 714 12th St., N. W., Wash., D. C., $71,600 (60 days). Noted Mar. 27.

Wash., Montesano—Road Work—L. I. Hewes, dist. engr., bureau pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., Portland, Ore., received only bid building Quinalt Lake project, Grays Harbor Co., from Jarvis & Ward, Olson, total, using log culverts, $95,801, metal culverts, $97,231.

Ore., Portland—Road Work—L. I. Hewes, dist. engr., bureau pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., received only bid building Crater Lake-Prospect Sect. of Meford-Klamath Falls at Nat'l. Forest Rd., Klamath and Jackson Counties, from G. Atkinson, Spaulding Bldg. Work involves 64 acres grubbing, $325, 107 acres clearing, $350, 9225 cu.yd. rock excav., $3.25, per cu.yd., 87,108 cu.yd. earth excav., $1.30, 22 mi. earth finish earth road, $200, $180 cu.yd. class "A," 297 cu.yd. Class "B" and 58 cu.yd. Class "C" concrete, $35. Total ranges from $254,045 (Government furnishing explosives, using dry rubble headwalls, concrete pipe) to $259,673 (using metal pipe) concrete headwalls and contractor furnishing explosives. Noted Apr. 10.

Ore., Portland—Road Work—L. I. Hewes, dist. engr., bureau pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., received bids building and improving Sect. 2, Canyonville-Galesville Natl. Forest Rd., in Umqua Natl. Forest, Douglas Co., (a) clearing and grubbing; (b) 60,000 cu.yd. excav.; (c) 50 cu.yd. Class "C" concrete, etc., from J. E. Nelson, Glendale, (a) $1825; (b) $.85; (c) $25; total, sawed guard rail, $53,741; sawed timber rail, $59,923; rustic guard rail, $53,741; rustic rail, $59,923; A. Giebish, Portland, (a) $1460; (b) $1.08;

Federal Government Work (Continued)

(c) $30; total, sawed guard rail, $63,436; sawed timber rail, $73,196; rustic guard rail, $62,636; rustic rail, $72,396; Fayette, Forbert & Winter, Portland, (a) $3700, (b) $895, (c) $26; total sawed guard rail $61,010, sawed timber rail $63,910, rustic guard rail $61,490, rustic rail, $64,390. Noted Apr. 3.

★Cal., Mare Island—Steel—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract furnishing steel for structural shop, here, to Amer. Bridge Co., Wilkins Bldg., Wash., D. C., $591,181 (170 days). Noted Apr. 10.

MISCELLANEOUS

PROPOSED WORK

Shipway—Lake Placid, N. Y.—See "Industrial Works."

Pavilion — Poughkeepsie, N. Y. — State Hospital Comn., Albany, had plans prepared by L. F. Pilcher, state archt., Albany, building 2 story, 50x299 ft. frame pavilion at Hudson River State Hospital, here. About $75,000.

Road Material—Jersey City, N. J.—Hudson Co. Blvd. Comn., Court House, soon lets contract furnishing following road material: 100,000 gal. asphaltic or other road binder in barrels or in bulk at plant, 40,000 gal. cold patch road binder in barrels or in bulk at plant, 1200 yds. ⅝-1½ in. crushed stone and 1000 yd. pea or screenings, Dist. No. 1, Bayonne to Morris Canal Bridge; 1200 yd. ⅝-1½ in. crushed stone, 1000 yd. pea or screenings, Dist. No. 2, Morris Canal to Paterson Plank Rd.; 1600 yd. ⅝-1½ in. crushed stone and 1500 yd. pea or screenings, Dist. No. 3, Paterson Plank Rd. to 14th St., Hoboken.

Park—Baltimore, Md.—J. J. Carlin, Reistertown Rd. and Park Circle, plans to establish amusement park on Liberty Heights near Reistertown Rd. About $1,000,000.

Pier Head—Baltimore, Md.—See "Industrial Works."

Pipe—Minneapolis, Minn.—K. E. Alexander, city purch. agt. will purchase 12 mi. 6-12 in. pipe.

Grand Stand—Omaha, Neb.—Ak-Sar-Ben Exposition Co., 20th and Spruce Sts., plans to build concrete and steel, on 62nd and Leavenworth Sts. About $100,000.

Grand Stand — Muskogee, Okla.— Free State Fair Assn. plans to build rein.-con. addition to grand stand. About $45,000. H. O. Valeur & Co., Phoenix Bldg., archts.

Dam—Benson, Ariz.—Benson Canal Co. had plans prepared by R. V. Leeson, engr., Kansas City, Mo., building diversion dam and headgate structure in San Pedro River, 7 mi. above here.

Dike—Kelso, Wash—Comrs. Cowlitz Co. plan to build dike Dist No. 5, west of Woodland. G. J. Poysky, Kelso, engr.

Pier—Astoria, Ore.—Port of Astoria Comn. soon receives bids building 1500 ft. foreign commerce pier adjoining pier occupied by Astoria Marine Wks., 160 ft. wide, alternate bids on concrete and wood roof. About $820,000. R. R. Bartlett, ch. engr.

Breakwater — Santa Barbara, Cal. — City plans election soon to vote on $200,000 bonds to build breakwater in front of Santa Barbara. This will be 1st unit of one recommended by J. R. Chapman, engr., which will extend from Castle Rock to Booth Point, to provide anchorage for largest naval vessels. A. B. Cook, city engr.

Rink—Dartmouth, N. S.—Dartmouth Curling Club plans to build. About $50,000. H. R. Silver, pres.

Dams—Montreal, Que.—Provincial Government plans to build storage dams on St. Anne River for Quebec Streams Comn. About $100,000. S. N. Parent, McGill St., engr.

Road Machinery—Brantford, Ont.—City voted $10,000 bonds to purchase road machinery.

Rink—Lindsay, Ont.—Town plans to build skating rink. About $25,000. D. Ray, clk.

Wharf—Prince Rupert, B. C.—Provincial Government, Victoria, having plans prepared building timber wharf on cedar piles, here. About $42,700. A. E. Forman, Victoria, engr.

BIDS DESIRED

Granite Curbing—Cranston (Providence P. O.), R. I.—Until May 1, by Bd. Contr. & Purchase furnishing 5000 ft. granite curbing. D. D. Waterman, city clk.

FILTERS—WEST HARTFORD, CONN.

Bids were received by Commissioners of Water Board for constructing 8 covered masonry filters and appurtenances from (A) Foundation Co., 233 Broadway, New York City, (awarded contract); (B) Fred T. Ley & Co., 185 Devonshire St., Springfield, Mass.; (C) Henry E. Fox Constr. Co., 81 East 125th St., New York City; (D) Bruno & Petitti, 18 Tremont St., Boston, Mass., $693,245; (E) Coleman Bros., Boston, Mass., $702,855. The unit bids of the lowest 3 bidders were as follows:

	(A)	(B)	(C)
45,000 cu.yd. earth excavation	$1.00	$1.10	$1.35
7,000 cu.yd. rock excavation	5.00	4.25	3.42
16,000 cu.yd. rolled embankment	1.10	1.30	.85
35,000 cu.yd. general fill	.80	1.05	.54
1,000 sq.yd. sodding	.30	.90	.64
35,000 sq.yd. seeding and grassing	.05	.05	.07
7,000 cu.yd. concrete—Class "A"	14.00	13.65	10.80
11,000 cu.yd. concrete—Class "B"	7.50	7.50	8.52
2,000 cu.yd. concrete —Class "C" (reinforced)	13.50	11.60	17.40
2,000 cu.yd. concrete—Class "D"	4.00	3.15	7.10
50 cu.yd. brick masonry	30.00	27.75	24.10
32,000 bbl. cement	3.50	3.65	4.00
20 cu.yd. paving and dry rubble	10.00	3.90	5.70
100 cu.yd. gravel	4.50	3.50	2.85
7,500 cu.yd. special gravel for filters	5.50	3.90	3.55
Piping, gates, etc., in structures (lump sum)	48,393.00	44,500.00	80,215.00
100 lin.ft. furnishing and placing 48-in. c.-i. pipe	55.00	50.00	20.00
150 lin.ft. furnishing and placing 42-in. c.-i. pipe	55.00	50.00	60.00
300 lin.ft. furnishing and placing 36-in. c.-i. pipe	20.00	47.00	51.35
900 lin.ft. furnishing and placing 30-in. c.-i. pipe	20.00	23.50	30.19
100 lin.ft. furnishing and placing 24-in. c.-i. pipe	14.00	9.90	10.00
600 lin.ft. furnishing and placing 18-in. c.-i. pipe	8.00	9.75	11.50
150 lin.ft. furnishing and placing 12-in. c.-i. pipe	6.50	9.00	6.10
150 lin.ft. furnishing and placing 6-in. c.-i. pipe	9.00	3.15	2.84
1,000 lin.ft. furnishing and placing 4 to 10-in. tile drains	.26	.50	.70
1,050 drains through filter roof	2.00	.21	1.07
1,250 lin.ft. furnishing and laying 6-in. split tile	.20	.16	.20
2,900 lin.ft. furnishing and laying 8-in. split tile	.25	.22	.35
3,750 lin.ft. furnishing and laying 10-in. split tile	.35	.32	.45
5,000 lin.ft. furnishing and laying 12-in. split tile	.45	.37	.50
530 lin.ft. furnishing and laying 21-in. split tile	1.40	1.10	1.45
300,000 lb. reinforcing and waterstops	.05	.07	.05$\frac{47}{100}$
90,000 lb. miscellaneous cast iron, wrought iron and steel	.12	.10¼	.06
10M.bd.ft. timber	85.00	120.00	124.00
Extended totals	$627,508	$632,620	$668,956

ROAD PROJECTS—AGREEMENTS BETWEEN FEDERAL GOVERNMENT AND STATES

	Total Estimated Cost	Federal Aid	Mileage
Alabama			
Sulligent-Hamilton Rd., Lamar Co.	$28,071.30	$14,035.65	6.14
Arkansas			
Brinkley-Clarendon Rd., Monroe Co.	75,183.68	37,471.83	8.08
Jonesboro-Nettleton Rd., Craighead Co.	102,013.56	38,836.16	5.0
East and West Rd. between Buckner and Spirit Lake	48,950.95	37,471.83	8.08
Arizona			
Superior Rd., Mesa and Superior Counties	153,436.25	76,718.12	12.71
Colorado			
Pueblo-Walsenburg Rd., Las Animas Co.	309,215.71	154,607.85	64.12
Georgia			
Summerville-Menlo Rd., Chattanooga Co.	98,921.79	49,460.00	13.62
Chattanooga-Birmingham Highway, Dade Co.	59,847.25	29,900.00	9.8
Tallapoosa Rd., Douglas Co.	54,443.72	27,000.00	12.07
Illinois			
Sect. "K"-Peoria Henry Rd., Marshall Co.	37,203.67	15,700.00	1.57
Michigan			
Rogers City-Onaway Rd., Presqueiso Co.	41,839.38	20,919.69	2.85
Coldwater-Brownson Rd., Branch Co.	146,252.59	73,126.29	5.25
New Mexico			
Old Santa Fe Trail across Colfax Co.	98,622.21	49,311.10	9.71
Ohio			
Cleveland Wooster Rd. between Jackson and Bloomington, Wayne Co.	150,000.00	50,000.00	5.0
Ashland Wooster Rd. between Jefferson and Ashland Co. Lines	213,000.00	50,000.00	6.72
Pennsylvania			
Buffalo Ridge Rd.	181,997.33	90,998.66	4.9
Sects. "C," "D" and "E"	64,441.52	32,220.76	2.9
Texas			
Ft. Worth-El Paso Rd., Shackleford Co.	62,310.25	30,679.81	11.12
East Texas Highway between Kirbyville and Brownell, Jasper Co.	107,652.94	30,000.00	14.73
Sequin-Gonzaleas Rd.	70,064.45	34,900.00	14.58
D. C. D. Highway, Hemphill Co.	21,046.97	10,523.48	15.58
Oklannion Rd., Wilbarger Co.	108,468.10	46,353.45	4.66
Puget Sound Gulf Rd., Randall Co.	36,955.94	11,800.00	17.65
Austin-San Antonio Post Rd., Comal Co.	73,886.77	29,750.00	19.79
Dallas Canadian Denver Highway, Wheeler Co.	63,482.01	31,741.00	27.97
League City-Dickinson Rd., Harris Co.	19,827.50	8,600.00	5.5
Virginia			
State Road North between Greendale and Russel Co. lines	45,291.95	22,645.97	6.75
Wisconsin			
Eclair-Chippewa Falls Rd.	173,812.56	47,000.00	8.8
Lancaster-Plateville Rd., Grout Co.	25,797.84	8,599.28	2.15
Greenlake-Berlin Rd., Greenlake Co.	44,205.05	14,100.00	7.61
Milwaukee-West Bend, Fondulac Rd., Washington Co.	62,396.58	20,798.86	2.9
Mauston-Tomah Rd., Monroe Co.	13,287.25	4,429.08	1.10

Miscellaneous (Continued)

Tracks—New York, N. Y.—Until May 2, by Pub. Serv. Comn., 1st Dist., 49 Lafayette St., furnishing and installing tracks for portion of Bway.-4th Ave. line, Queens and Manhattan Boro. T. H. Whitney, acting chn.

Heating, Plumbing, etc.—Erie, Pa.—Until May 12, by Bd. Educ., for general work, heating, plumbing, electric work, etc. for new East High School. W. B. Ittner, Bd. Educ. Bldg., St. Louis, Mo., archt.; advertised in this issue.

Asphalt—Lansing, Mich.—Until May 5, by J. A. Parsons, city clk., furnishing asphalt to be used for year 1919; advertised in this issue.

Breakwater — Sheboygan, Wis. — Until Apr. 21, by Bd. Pub. Wks., building breakwater along shore of Lake Michigan opposite Vollrath Park, about 490 lin. ft. long. C. U. Boley, comr. pub. wks.

Paving Blocks—Minneapolis, Minn.—Until Apr. 28, by H. E. Alexander, city purch. agt., furnishing 100,000 sq. yd. 3½ and 4 in. yellow pine creosoted paving blocks. About $2.00 per sq. ft.

Tower—Prince Rupert, B. C.—Until May 12, by A. Johnston, deputy minister, dept. of marine, Ottawa, Ont., building rein.-con. lighthouse tower, 40 ft. high, and frame dwelling on Barrett Rock. About $20,000. B. H. Fraser, Rea Bldg., Ottawa, Ont., engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Paving Materials—Fall River, Mass.—Street Dept. received bids furnishing Portland cement, from W. Pettey, 129 Front St., $3.64 per bbl.; McKenzie & Winslow, 78 4th St., $3.65 per bbl.; curbing (various sizes), from Tonkonogy & Co., Fall River, $1.19, $1.28 and $1.35 per ft.; W. H. Beattie, Fall River, $1.20, $1.39 and $1.65 per ft.; Savoie Quarry & Constr. Co., Beauregard St., $1.20, $1.30 and $1.35 per ft.

★Fender Piers—New Bedford, Mass.—City let contract building fender piers to New Bedford-Fairhaven Bridge, to F. C. Taylor, Fairhaven, $12,600.

★Tanks—Providence, R. I.—Atlantic Refining Co., 507 Turks Head Bldg., will build 6 concrete and steel oil tanks on Roger Williams Ave. Work will be done by day labor.

★Stone, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro., let contracts furnishing and delivering 2500 cu.yd. broken stone or grits, to T. F. Tuohy, 98 Main St., $5975; 2 automobile pressure distributors, to Harold Motor Car Co., $16,138. Noted Apr. 10.

★Road Oil—New York, N. Y.—Dept. Parks let contract furnishing and delivering 80,000 gal. tar road oil (Bronx Boro.), to Barrett Co., 17 Battery Pl., $10,500. Noted Apr. 10.

★Structural Steel—New York, N. Y.—Pub. Serv. Comn., 49 Lafayette St., let contract erecting structural steel on Sect. 2. Routes 19 and 22, 7th Ave.-Lexington Ave. Rapid Transit R. R., to Terry & Tench, Grand Central Terminal, $586,700. Noted Apr. 3.

★Asphalt—Rochester, N. Y.—Bd. Contr. & Supply let contract furnishing 3500 tons asphalt to Whitmore, Rauber & Vicinus, 279 South Ave., $15.35 per ton. Noted Apr. 3.

Stone—Rochester, N. Y—Bd. Contr. & Supply received bids Apr. 2, furnishing 2000 tons crushed stone, from Sweeney & Boland, Wolcott Rd., $2.25 per ton; F. W. Crouch, Rochester, $2.60 ton. Noted Apr. 3.

★Valves, etc.—Schenectady, N. Y.—Bd. Contr. & Supply let contract furnishing valves and water gate boxes, to Ludlow Valves Co., foot Adams St., Troy, $6510.

★Seawall — Detroit, Mich. — Windmill Point Land Co. 2258 Penobscot Bldg. let contract filling and grading seawall at Windmill Point, 200 ft. wide, 4200 ft. along shore, involving 250,000 to 500,000 cu.yd. hydraulic or floating dredge work, to A. J. O'Sullivan, Port Huron, $70,000. Noted Feb. 27.

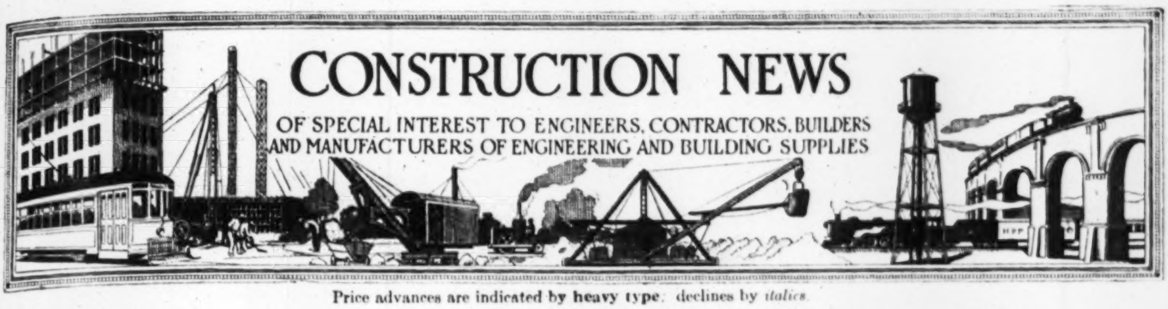
★Hog Run—South St. Paul, Minn.—South St. Paul Union Stock Yards Co. let contract building 3 story, 70 x 100 ft. rein.-con. hog run to W. Kingsly, Faribault, $42,000.

★Fill—Seattle, Wash—Bd. Pub. Wks. let contract filling and bulkheading land in Elliott Ave., Sanitary Fill No. 1, to Tacoma Dredging Co., Natl. Bank of Tacoma Bldg., Tacoma, $149,078. Noted Feb. 27.

★Tank—Portland, Ore.—Port of Seattle Comn., Wash., let contract furnishing and placing 10,000 gal. steel tank (place to be designated by A. Nicholson, port engr., Seattle, Wash.) to Northwest Bridge & Iron Co., Portland. About $10,000.

ROAD PROJECTS APPROVED BY SECRETARY OF AGRICULTURE WITH MILEAGE AND ESTIMATED COST

	Total Estimated Cost	Federal Aid	Mileage
Alabama			
Guntersville, Huntsville Rd., Marshall Co	$29,900.31	$14,950.15	5.6
Bridge on Ozark Troy Montgomery Rd., Dale Co	69,099.80	34,549.90	0.63
Enterprise Ozark-Clio Rd., Dale Co	42,718.50	21,359.25	7.95
Elba-Troy Rd., Coffee Co	32,161.71	16,080.35	6.41
California			
Oilfields Rd., Fresno Co	211,799.06	105,899.50	8.17
Merced-Mariposa Rd., Merced Co	251,900.00	125,950.00	14.9
Ft. Morgan-Brush Rd., Morgan Co	10,995.66	5,497.83	0.5
Pueblo-Rocky Ford Rd., Pueblo Co	25,806.45	12,903.22	1.7
Delaware			
State Highway between Farmington and Harrington, Kent Co	262,240.00	119,200.00	5.96
Florida			
Dixie Highway, Suwanee Co	26,367.90	10,000.00	8.7
Georgia			
Bridge on Oconee-Dublin Rd., Dixie Co	151,723.55	75,861.00	7.00
Tallapoosa Highway, Douglas Co	41,615.14	20,000.00	6.5
Lathrop Ave.-Port Wentworth-Augusta Rd., Chatham Co	484,774.89	200,000.00	15.5
Ft. Valley-Colloden Rd., Crawford Co	25,126.75	12,563.00	7.0
Forsyth Rd., Bibb Co	309,870.00	154,935.00	8.75
Idaho			
Bridge over Snake River on Idaho Pacific Highway	63,217.00	31,608.50	7.00
North and South Highway, Adams and Idaho Counties	649,000.00	324,000.00	30.5
Iowa			
North Iowa Pike between Emettsburg and Ruthven, Poloalto Co.	83,360.00	22,113.25	11.93
Illinois			
Henry-Morris Rd. between Sparland and Morris Road	1,636,445.00	818,222.75	65.0
Kansas			
Independence-Neodesha Rd., Montgomery Co	87,628.75	43,814.37	9.92
Kentucky			
Mayfield-Bardwell Rd., Graves Co	73,113.70	36,556.85	6.13
Maryland			
Central Ave. Rd. between Largo & Halls Sta., Prince Georges Co.	191,730.00	95,865.00	5.33
Harpers Ferry Rd., Knoxville	87,133.20	43,566.60	3.51
Clarksville Pike between Elioak and Highland	207,515.00	103,757.50	5.2
Rockhall Rd., Kent Co	79,011.57	39,505.78	3.03
Main St., & R.R., Greensboro	20,053.00	10,026.50	6.5
Michigan			
Lansing-Grand Ledge Rd., Ingham Co	52,949.38	26,474.69	1.66
Montana			
Kalispell-Ovando Rd. between Kalispell and Missoula	17,600.00	8,800.00	9.0
Bridge over Bitter Root River, Ravalli Co	22,000.00	11,000.00	7.0
Nebraska			
Columbus Rd. between Albion and Genoa	53,460.00	26,730.00	20.00
Kearney-Pleasanton Rd., Buffalo Co	53,460.00	26,730.00	20.00
New Hampsire			
Mascoma Valley Rd. between Franklin and Lebannon	9,997.63	4,998.81	1.23
Merrimack Valley Rd. between Grafton and Hillsboro Counties.	13,996.62	6,998.31	1.09
New Mexico			
Carlsbad-Lovington Rd., Ebby Co	72,648.40	36,324.20	31.00
Oklahoma			
Morris-Muskogee Rd., Okmulgee Co	183,717.60	91,858.80	15.00
Ohio			
Lima-Sandusky Rd., Erie Co	110,000.00	30,000.00	3.04
Lisbon-East Liverpool Rd., Columbiana Co	84,059.30	35,600.00	3.00
Columbus-Wooster Rd., Knox Co	200,337.72	50,000.00	5.1
Oregon			
Burns-Lawen Sect., Central Oregon Highway, Harney Co	121,725.71	45,000.00	16.14
Pennsylvania			
Tobyhanna-Pocona Rd., Monroe Co	117,813.90	58,906.95	4.45
Lincoln Highway, East Adams and Franklin Counties	205,181.19	102,590.59	5.7
Butler Plank Rd., Allegheny Co	363,440.00	165,200.00	8.26
Harrisville Rd., Mercer Co	198,000.00	81,000.00	4.5
Milford Rd., Pike Co	246,400.00	112,000.00	5.6
Tonawanda Sayre Rd., Bradford Co	435,600.00	198,000.00	9.9
South Carolina			
Edgefield-Greenwood Rd., Edgefield Co	35,062.36	17,531.18	8.42
Buncombe-Augusta Rd., near Greenville	26,762.56	13,381.28	3.53
Virginia			
State Road No. 9 between Malvern Hill, P. O. and Wade	18,824.30	9,412.15	4.19
State Road No. 14 between Wilson Creek and Longdale Furnace.	76,725.33	38,362.66	8.03
Bristol-Washington Highway between Atkins and Wythe Co. line	89,621.68	44,801.84	5.71
Little River Pike between Fairfax and Pender	63,873.15	31,936.57	3.27
Hodges Ferry-State Road No. 10, Norfolk	135,910.50	67,955.20	5.31
State Road No. 10. Petersburg to Rich's Store, Dinwiddie Co.	36,256.82	18,128.41	1.62
West Virginia			
Fennsboro-Ellensboro Rd., Ritchie Co	112,040.00	53,500.00	5.0
Randall-Mt. Morris Rd., Monongalia Co	88,851.00	44,000.00	4.5
Wisconsin			
Delavan-Elkhorn Rd., Walworth Co	25,783.13	8,594.37	1.28
Block River Falls-Alma Center Rd., Jackson Co	25,509.00	8,000.00	3.2
Still Junction-Oconto Falls Rd., Oconto Co	25,058.43	8,352.81	4.36
Fountain City-Winona Rd., Buffalo Co	29,910.54	9,970.18	2.75
Radisson-Conderay Rds., Sioux Co	26,897.20	8,965.73	4.38
Frederick-Webster Rd., Polk and Bernett Counties	44,484.00	14,828.00	8.22
Hat Creek-Warren Rd., Niobrara Co	20,266.91	10,113.45	11.27
Cokeville-Star Valley Rd., Lincoln Co	19,998.00	9,999.00	4.18
Big Piney Rd., Lincoln Co	30,968.19	15,484.09	9.17
Lariamie-North Park Rd., Albany Co	73,886.78	36,943.39	26.87



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

PIG IRON—

	Current	One Month Ago
CINCINNATI		
No. 2 Southern	$30.35	$30.35
Northern Basic	27.55	27.55
Southern Ohio No. 2	**28.55**	28.25
NEW YORK, tidewater delivery		
2X Virginia (silicon 2.25 to 2.75)	32.50	32.50
Southern No. 2 (silicon 2.25 to 2.75)	34.70	34.90
BIRMINGHAM		
No. 2 Foundry	25.75	25.75
PHILADELPHIA		
Eastern Pa. 2X (silicon 2.25 to 2.75)	31.90*	31.90*
Virginia No. 2	33.25†	33.25†
Basic	29.65*	29.65*
Grey Forge	29.65*	29.65*
CHICAGO		
No. 2 Foundry Local	26.75	26.75
No. 2 Foundry Southern	33.00	33.00
PITTSBURGH, including freight charge from the Valley		
No. 2 Foundry Valley	26.25	26.25
Basic	25.75	25.75
Bessemer	29.35	29.35

* F. o. b. furnace. † Delivered.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f. o. b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Current	One Year Ago	Current	One Year Ago
Standard bessemer rails	$45.00	$65.00	$45.00	$65.00
Standard openhearth rails	47.00	67.00	47.00	67.00
Light rails, 8 to 10 lb	2.58½*	3.36*	2.83½*	3.36*
Light rails, 12 to 14 lb	2.54*	3.09*	2.79*	3.09*
Light rails, 25 to 45 lb	2.45*	3.00*	2.70*	3.00*

*Per 100 lb.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Current	One Year Ago	Chicago	St. Louis	San Francisco
Standard spikes, $\frac{9}{16}$-in. and larger	$3.25	$3.90	$4.27	$5.04	$6.15
Track bolts	4.90	4.90	5.17	Premium	7.20
Standard section angle bars	3.00	3.25	4.22	Premium	*4.60*

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

		7 In. x 9 In. by 8 Ft. 6 In.	6 In. x 8 In by 8 Ft.
Chicago	Plain	$1.48	$1.33
San Francisco	Douglas Fir—Green	1.35	.96
San Francisco	Douglas Fir—Creosoted	2.70	1.92

Prices per tie at Missouri mills; St. Louis prices about 25c. higher:

Untreated A Grade White Oak 6x8x8		Untreated A Grade Red Oak 6x8x8	
No. 1	$0.70	No. 1	$0.55
No. 2	.80	No. 2	.65
No. 3	.90	No. 3	.75
No. 4	.98		
7x9x8 white oak			1.05
7x9x8 red oak (No. 4)	$0.80	No. 5	.87

Note.—Add 36c. each for treatment.

PIPE

STEEL—From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	47%	46½%	45%
2½ to 6 in. lap welded	42%	42½%	41½%

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	31%	31%	30½%
2½ to 6 in. lap welded	27%	27½%	27½%

Malleable fittings, Class B and C, from New York stock sell at +15% list prices. Cast iron, standard sizes, 10% off.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Current	One Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in	$60.70	$60.70	$58.35	$59.80	$53.00	*$77.55*	$65.00
6 in. and over	57.70	57.70	55.35	56.80	50.00	*74.55*	62.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin ft.:

	New York					
Size, In.	Current	One Year Ago	St Louis	Chicago	San Francisco	Dallas
3	$35.00	$35.00	$22.50	$30.00		$33.44
4	51.00	51.00	27.00	40.00	$45.00	50.16
5	65.00	65.00	45.00	50.00	65.00	62.70
6	90.00	90.00	55.00	60.00	90.00	83.60
8	130.00	130.00	100.00	80.80	150.00	143.76

SEWER PIPE—The following prices are in cents per foot for carload lots.

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.09	$0.111	.....	$0.125	$0.09	$0.132
4	.09	.....	.....	.125	.15	.132
5	.135	.1665		.175	.1875	.207
6	.135	.....	$0.16	.175	.225	.207
8	.21	.259	.21	.25	.3475	.2875
10	.315	.3885	.29	.375	.45	.4025
12	.405	.4995	.37	.475	.60	.5175
15	.54	.666	.56	.63	.9375	.7475
18	.75	.925	.91	1.00	1.275	.9775
20	.90	1.11	1.14	1.20	1.71	1.15
22	1.20	1.48	1.46	1.60	.....	1.495
24	1.485	1.665	1.56	1.80	2.125	1.725
27	2.145	2.47	1.90	2.75	.....	2.5875
30	2.376	2.736	2.57	3.45	.....	3.1625
33	3.15	3.42	3.09	4.00	.....	4.025
36	3.5875	3.895	3.37	4.35	.....	4.60

	3	5	8	12	24	36
Boston	$0.093	$0.1395	$0.217	$0.4186	$1.395	$4.6125
St. Paul	.12	.18	.28	.45	2.00	4.75
Denver	.10½*	.16	.25	.42½	1.57½	.....
Seattle	.15	.....	.33¾	.64	2.00	.....
Kansas City	.12	.18	.25	.50	1.80	4.60
New Orleans	49 per cent. off list					
Los Angeles	.047	.076	.136	.25	.90	
Atlanta	5½ per cent. off list					

*4-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices per gallon in tank cars 8000 gal. minimum f.o.b. place named:

	Current	One Month Ago
New York, 45-65% asphalt	*$0.05*	$0.06½
New York, liquid asphalt	*.06½*	.07½
New York, binder	*.07*	.07½
New York, flux	*.05*	.06½
St. Louis, 45-50% asphalt	.06	.....
Chicago, 15-20% asphalt	.10	.10
Chicago, 100% dust layer	.11	.11
Dallas, 40-50% asphalt	.09	.09
Dallas, 60-70% asphalt	.10	.10
Dallas, 75-90% asphalt	.11	.11
San Francisco, 75-95% asphalt, per bbl	2.10	2.10

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	*$20.00*	*$16.00*
Chicago	Mexican	35.50	33.50
San Francisco	California	17.00	13.75
Dallas	Texaco and Mexican	32.00	30.00
Seattle	D grade	23.10	.....
Denver	Trinidad	*48.00*	.....
Denver	California	38.00	.....
St. Paul	Stanolind	.....	26.00
Kansas City	Trinidad	32.50	.....
Kansas City	Mexican or Magnolia	27–28	25–26
Los Angeles	D grade	.....	13.50
St. Louis	Stanolind	*24.90*	*18.40*

PAVING STONE—

Chicago	About 4x8x4 dressed	2.70	sq.yd.
	About 4x8x4 common	2.35	sq.yd.
San Francisco	Basalt block 4x7x8	57.75	per M
Kansas City	Limestone	2.75	sq.yd.
Boston	5-in. granite	**110.00**	per M
St. Paul	Sandstone	1.75	sq.yd.
Atlanta	Granite	1.70	sq.yd.
Salisbury, N. C.	Std. granite, quarry	62.50	per M

FLAGGING—

New York	Bronx	$0.20	sq.ft.
	Manhattan	.21	sq.ft.
	Queens, 5 ft. square	.20	sq.ft.
	5x20-in. cross-walk	.70	lin.ft.
Chicago	18 in. wide	.80	lin.ft.

WOOD BLOCK PAVING—	Size of Block	Treatment	Per Sq. Yd.
New York	3½	16	$3.25
New York	4	16	3.50
Chicago	4	16	3.10
Chicago	3½	16	2.95
Chicago	City specifications		3.10
St. Louis	3½	16	2.25
St. Louis	4	16	2.50
St. Louis, Minneapolis spec.	3½	..	1.94
St. Louis, Minneapolis spec.	4	..	2.25
Seattle	4	16	2.55
Kansas City	4	16	3.00
St. Paul	Minneapolis specifications		*2.20*
Dallas	3½	18	3.17
Dallas	4	18	3.56
New Orleans	3½	16	2.63
New Orlea	4	16	3.00

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00	$2.00	$2.00	$2.00	$1.25	$1.25
Denver	1.60	1.50	1.60	1.50	1.10	1.05
Chicago	2.00	1.50	.....	1.50	1.10	1.50
Kansas City	2.50	2.15	3.00	2.60	1.00†	1.00
St. Louis*	1.76	.90	1.82	.90	1.68	.70†
Seattle	1.25	1.00	1.25	1.00	1.25	1.00
Dallas	2.25	2.00	2.25	2.00	1.35	1.40
St. Paul	1.25	1.00	1.35	1.40	.60	.50
San Francisco	1.15	1.00	1.15	1.00	1.15	1.00
Boston	*1.65*	1.65	1.75	1.75	1.00	.90
New Orleans	2.75	.....	2.75	.....	1.50	.....
Los Angeles	1.02	.85	1.02	.85	.70	.65
Atlanta	2.40	1.75	2.40	2.35	1.12	.75

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd.

CRUSHED STONE—Price for cago or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.65-1.75	$1.60	$1.75-1.85	$1.75
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.35	1.08	1.35	1.08
Dallas	2.25	1.51	2.25	1.55
San Francisco	1.15	1.00	1.15	1.00
Boston	3.00*	2.10	3.00*	2.20
St. Paul	1.15†	1.00	1.25†	1.10
Denver	....	1.50	1.60	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle	....	1.10	1.50	1.10
Atlanta	2.35*	1.85	2.60*	2.35
Los Angeles	1.12	1.05	1.12	1.15

*Per ton at crusher. †Limestone; traprock, $1.60 and $1.80 per ton for 1½ and ¾-in., respectfully.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	*21.00*	......		2.20*
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	18.00	.....	1.75*
Boston	22.50	18.25	3.65	3.30
Dallas	2.25*	1.25*	.....	.....
San Francisco	19.00	......	.....	2.00†
St. Paul	*23.00*	19.50	*1.60**	*1.50**
New Orleans	.....		.....	1.65*
Atlanta	......	18.50	.....	1.50*
Los Angeles	......	......	3.05†	2.80†
Denver	......	26.25	.....	2.50*

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton.

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., exclusive of bags:

St. Paul (Austin)	$1.55
Kansas City (Ft. Scott)	1.30
New Orleans	2.52

PORTLAND CEMENT—Current prices are for barrels in carload lots, without bags, to contractors:

	Current	One Month Ago Without Bags	One Year Ago With Bags
New York	$*2.30*	$2.45	$2.59
Jersey City	*2.27*	2.62	2.50
Boston	*2.57*	2.57	2.81
Chicago	*2.00*	2.05	2.36
Pittsburgh	*2.05*	2.15	2.46
Cleveland	*2.22*	2.32	2.59
Detroit	*2.23*	2.28	2.55
Indianapolis	*2.17*	2.22	2.59
Toledo	*2.23*	2.22	2.59
Milwaukee	*2.11*	2.16	2.48
Duluth	*2.10*	2.20	2.51
Peoria	*2.12*	2.16	2.48
Cedar Rapids	*2.18*	2.28	2.60
Davenport	*2.14*	2.24	2.55
St. Louis	2.40	2.30	2.60
San Francisco	*2.40*	3.00	2.80
New Orleans	2.70	2.70	3.10
St. Paul	*2.20*	2.40	2.68
Denver	2.67	2.67	3.40
Kansas City	*2.26*	2.30	2.59
Seattle	2.53	2.53	3.75
Dallas	2.03	2.03	2.60
Atlanta	2.60	2.60	3.00
Los Angeles	2.68	2.68	2.30

NOTE—Bag charge is generally 15c. each.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-INCH x 4-INCH MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.92	$1.16	$0.98	$*0.99*	$1.13	$*1.32*
049	0.049	1.18	1.48	1.26	*1.26*	1.43	*1.67*
068	0.068	1.44	1.86	1.53	*1.56*	1.79	*2.06*
093	0.093	1.85	2.39	1.97	*2.00*	2.41	*2.65*
126	0.126	2.28	3.02	2.43	*2.47*	2.92	*3.28*
153	0.153	2.72	3.59	2.90	*2.95*	3.48	*3.93*
180	0.180	3.12	4.13	3.33	*3.39*	3.99	....
245	0.245	4.12	5.44	4.40	*4.47*	5.27	....
287	0.287	4.76	6.29	5.08	*5.16*	6.10	*6.86*
336	0.336	5.52	7.30	5.89	*5.99*	7.06	.....
395	0.395	6.40	8.45	6.83	*6.94*	8.19	.....
PAVING							
036P	0.036	$0.71	$0.92	$0.76	$*0.77*	$0.80	
053P	0.053	1.00	1.28	1.06	*1.08*	1.12	
072P	0.072	1.26	1.66	1.34	*1.37*	1.46	
097P	0.097	1.62	2.12	1.73	*1.76*	1.88	
049R	0.049	1.00	1.28	1.06	*1.08*	1.12	
067R	0.067	1.26	1.65	1.34	*1.37*	1.46	
089R	0.089	1.62	3.11	1.73	*1.76*	1.88	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

NOTE—New York Warehouse price is about 15% lower than given above, owing to mill decrease.

EXPANDED METAL LATH—Prices in carload lots per 100 yd for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$*29.16*	$30.97	$31.00	$*32.00*	$*34.00*	$34.75
26	250	*30.70*	32.03	32.00	*33.00*	*35.00*	36.25
25	300	*31.65*	33.19	33.25	.....	*37.00*	38.15
24	340	*33.56*	34.30	34.50	*35.00*	*40.25*	40.10
22	450	*36.60*	36.80	.....	.....	.....	43.10

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—Following quotations are per 100 lb.

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse Dallas	Warehouse San Francisco
¾ and larger	$2.35	$3.37	$4.09½	$*3.37*	$3.69	$4.75	$4.60
⅝	2.40	3.42	4.14½	*3.42*	3.74	4.80	4.65
½	2.45	3.47	4.19½	*3.47*	3.79	4.90	4.70
⅜	2.60	3.62	4.34½	*3.62*	4.04	5.00	4.85
¼	2.85	3.87	4.59½	*4.87*	4.19	5.25	5.10

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas
¾ in. and larger	$2.45	$2.45	$4.75
⅝	2.50	2.50	4.80
½	2.55	2.55	4.90
⅜	$2.70	$2.70	$5.00
¼	2.95	.....	5.25

BRICK—To contractors price per 1000 in cargo or carload lots is as follows

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$15.00	$10.00	No Quotations.	
Chicago	12.00	12.00	8.00	......	
St. Louis, selected	*16.00*	18.00	14.00	$26.00	.....
St. Louis, salmon	10.00*	10.00	9.00	......	.....
Denver	12.00†	12.00	8.50	......	.....
Dallas	16.07	16.07	11.50	26.50	.....
San Francisco	12.50	12.50	10.00	......	
Boston (on job)	18.00	18.00	12.35	30.00	45.50
New Orleans	18.00	18.00	12.00*	19.00	36.00
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	14.00	11.00	52.00	
Seattle	15.00	15.00	10.00	36.00	
Atlanta	15.00	15.00	13.00	......	35.00
Los Angeles	12.50	12.50	9.00	......	

* Hard brick, $14. † Salmon is $12 in Denver.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$*0.11¼75**	$0.09	$0.08	$0.08	$0.1125	$0.1072	
6x12x12	*.153**	.12	.112	.105	.15	.1474	$0.1512
8x12x12	*.20¼**	.16	.144	.15	....	.2010	.1944
10x12x12	.....	.....	.168	.173	....	.2546	.2263
12x12x12	.....	.....	.208	.208	....	.3082	.2916

*Delivered below 72nd St.

	4x12x12	8x12x12	12x12x12
Boston	$*0.10*	$*0.20*	$0.30
St. Paul	.056	.11	.162
Kansas City	.0786	.15	.205
Denver	.12½	.18	.25
Seattle	.09	.175	.30
Atlanta	.10	*.13*	.21
Los Angeles	.082	.154	.236
New Orleans	*.12*	*.15*	*.20*

STRUCTURAL MATERIAL—Following are base prices f.o.b. mill, Pittsburgh, together with quotations per 100 lb. from warehouses at places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in	$2.25	$3.47	$4.195	$3.39	$3.47	$4.70	$4.50
Channels, 3 to 15 in	2.45	3.47	4.195	3.39	3.47	4.70	4.50
Angles, 3 to 6 in., ¼ in. thick	2.45	3.47	4.195	3.39	3.47	4.70	4.50
Tees, 3 in. and larger	2.45	3.52	4.195	3.39	3.47	4.70	4.50
Plates	2.66	3.67	4.445	3.39	3.67	4.90	4.70

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$4.20	$5.05	$6.095	$*4.87*	$4.94	$*6.05*	$*6.00*
CONE HEAD BOILER							
¾ in. and larger	4.30	5.15	6.195	4.97	5.04	*6.15*	*6.00*
⅝ and 11/16	4.45	5.30	6.345	5.12	5.19	*6.30*	*6.10*
½ and 9/16	4.70	5.55	6.695	6.47	5.44	*6.65*	*6.50*

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated Felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs *$1.80* per roll in carload lots and *$2.05* for smaller quantities.

Shingles, red and green slate finish, cost *$5.00* per square in carloads; *$5.25* in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots N. Y.	Carload Lots Chicago	Less Than Carload Lots N. Y.	Less Than Carload Lots Chicago
Tar felt (14 lb. per square of 100 sq.ft.)	*$50.00*	*$50.00*	*$51.00*	*$51.50*
Tar pitch (in 400-lb. bbl.)	19.00	16.00	20.00	17.00
Asphalt pitch (in barrels)	*30.00*	*30.00*	*35.50*	*35.50*
Asphalt felt	*65.00*	*65.00*	*69.50*	*69.50*

SHEETS—Quotations are in cents per pound in various cities from warehouse also the base quotations from mill:

	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York Current	New York One Yr. Ago
Blue Annealed						
No. 10	3.55	4.29	4.57	5.80	4.57	5.45
No. 12	3.60	4.34	4.62	5.75	4.62	5.50
No. 14	3.65	4.39	4.67	5.90	4.67	5.55
Black						
Nos. 18 and 20	4.15	5.04	5.17	6.75	5.42	6.25
*Nos. 22 and 24	4.20	5.14	5.22	6.80	5.47	6.30
*No. 26	4.25	5.19	5.27	6.95	5.52	6.40
*No. 28	4.35	5.29	5.37	7.05	5.62	6.45
Galvanized						
No. 10	4.70	5.64	5.72	....	5.97	6.70
No. 12	4.80	5.64	5.82	7.30	6.02	6.80
No. 14	4.80	5.64	5.82	7.30	6.07	6.80
Nos. 18 and 20	5.20	5.84	6.12	7.60	6.37	7.10
Nos. 22 and 24	5.25	5.99	6.25	7.75	6.52	7.25
*No. 26	5.40	6.14	6.42	7.90	6.67	7.40
*No. 28	5.70	6.44	6.72	8.20	6.9	7.70

*For painted corrugated sheets add 30c. per 1000 lb. for 25 to 28 gage; 25c. for 19 to 24 gages; for galvanized corrugated sheets add 15c., all gages.

LINSEED OIL—These prices are per gallon:

	New York Current	New York One Year Ago	Cleveland Current	Cleveland One Year Ago	Chicago Current	Chicago One Year Ago
Raw in barrel	$ .63	$1.55	$1.71	$1.65	$1.66	$1.65
5-gal cans	1.76	1.65	*1.81*	1.80	1.86	1.75

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Current Dry	Red Current In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Current Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.00	14.50	11.25	11.00	13.00	10.50
25 and 50-lb. kegs	13.25	14.75	11.50	11.25	13.25	10.75
12½-lb. keg	13.50	15.00	11.75	11.50	13.50	11.00
5-lb. cans	15.00	16.50	13.25	13.00	15.00	13.00
1-lb. cans	16.00	17.50	13.25	13.00	16.00	13.00

500 lb. lots less 10% discount; 2000 lb. lots less 10-2½% discount.

LUMBER

San Francisco—Prices of rough Douglas fir No. 1 common, in more than carload lots:

Lumber Prices in Yards at San Francisco

	6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	22 and 24 Ft.	25 to 32 Ft.
3x3 and 4	*$23.50*	*$24.00*	*$25.00*	*$27.00*
3x6 and 8	*24.50*	*25.00*	*26.00*	*28.00*
4x4-6 and 8	*25.00*	*26.00*	*27.00*	*29.00*
3x10 and 12	*25.00*	*26.00*	*27.00*	*29.00*
3x14	*25.50*	*26.50*	*27.50*	*29.50*
4x10 and 12	*25.00*	*26.00*	*27.00*	*29.00*
4x14	*26.00*	*27.00*	*28.00*	*29.00*

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	*$24.50*	*$26.50*	*$27.50*
6x14	*26.00*	*28.00*	*29.00*
8x10	*24.50*	*26.50*	*27.50*
8x14	*26.00*	*28.00*	*29.00*

New York, Chicago and St. Louis	Southern Pine New York* 20-24 Ft.	Southern Pine New York* 34 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	$39.00	$40.00	$38.50	$39.50	$35.00	$37.00
3x10 to 10x10	43.00	44.00	40.50	41.50	38.50	40.00
3x12 to 12x12	45.00	46.00	43.50	44.50	40.00	41.50
3x14 to 14x14	50.00	51.00	47.50	48.50	45.00	47.00
3x16 to 16x16	54.00	55.00	51.00	52.00	48.00	50.00
3x18 to 18x18	59.00	60.00	55.00	56.00	52.00	53.50
4x20 to 20x20	62.00	63.00	61.00	62.00	......	......

*From Lumbermen's Bureau.

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities	8 x 8-In. x 20-Ft. and Under P.	8 x 8-In. x 20-Ft. and Under Fir	8 x 8-In. x 20-Ft. and Under Hemlock	8 x 8-In. x 20-Ft. and Under Spruce	12 x 12-In. 20 Ft. and Under P.	12 x 12-In. 20 Ft. and Under Fir
Boston	$46.50	$45.00	$45.00	$46.00	$52.00	$46.00
Cincinnati	37.00	......	36.00	......	41.00	......
Kansas City	40.50	43.50	41.50	39.50	45.50	45.50
Seattle	17.50	17.50	17.50	17.50	17.50	17.50
New Orleans	31.50 (No. 1)		......	......	36.50 (No. 1)	
St. Paul	46.00	50.00	46.00	46.00	......	53.00
Denver	44.00	36.50	36.50	......	49.00	39.00
Atlanta	35.50	......	......	......	*40.50*	......

	1-In. Rough, 10 In. x 16 Ft. and Under P.	1-In. Rough, 10 In. x 16 Ft. and Under Fir	1-In. Rough, 10 In. x 16 Ft. and Under Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. P.	2-In. T. and Gr. 10 In. x 16 Ft. Fir
Boston	$50.00	$45.00	$40.00	$45.00	$48.50
Cincinnati	50.50	40.00	40.00	48.50	44.50
Kansas City	50.00	57.75	55.75	53.50	63.00
Seattle	17.50	17.50	17.50	17.50	17.50
New Orleans	34 and $41 for No. and No. 2			31.50 (No. 1)	
St. Paul	50.50	40.00	40.00	48.50	45.50
Denver	45.00	35.50	35.50	38.00	32.00
Atlanta	*20.00*	......	......	33.00	......
Los Angeles	......	31.00	30.00	......	......

Dallas—Yellow pine:

2x4 to 2x12—12, 14 and 16	$38.80
2x4 to 2x12—10, 18 and 20	40.90
2x4 to 2x12—22 and 24	43.20
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
8x10, 10x10 and 3x10	52.00
12x12 and 3x12	54.25

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.25	*$3.90*	$4.37	$5.00	$4.7
Cut	3.45	*6.00*	6.50	6.40	

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl	$0.03	$0.04½
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.02	.05
Soda ash, in 400-lb. bbl	.02	.03
Liquid chlorine in 100-lb. cylinders. Lime is quoted separately	.12	.12

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f. o. b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$2.25	$2.25	$4 to $5

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	*+12½%*
Galvanized cast steel rigging	*7½%*
Bright plow steel	*35%*
Bright cast steel	*22½%*
Bright iron and iron tiller	*5*

San Francisco: Galvanized, less *5%*, bright, less *25%* off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅜-in., 8 ft., ½-in., 6; ⅝-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	*$0.26*	Atlanta	*$0.29½*
New York	*.28*	Denver	.29
Cincinnati	*.29*	Kansas City	.28½
Chicago	*.26¼*	New Orleans	.27½
St. Paul	*.28*	Seattle	*.27*
San Francisco	*.26*	Los Angeles	*.28*

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb keg for black powder.

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	80%	Black Powder
New York	.....	$0.27½	$0.30	.....	$2.40
Boston	$0.22¼	.24¼	.26¼	$0.31	2.40
Cincinnati	.19¾	.21¾	.23¾	.....	2.35
Kansas City	*.19*	*.23¾*	*.26¼*	*.30*	2.45
New Orleans	.23¾ (50%)	*.22¾*	*.24¾*	.....	.....
Seattle	.....	.18½	.21	.....	.....
Chicago	.18¾	.21¼	.25½	.....	.....
St. Paul	.19	*.23¾*	*.26¾*	.....	2.45
St. Louis	.19	.23¼	.25¼	30	2.35
Denver	.17¾	*.22*	*.24½*	*.28¾*	2.60
Dallas	*.189*	*.225*	*.288*	*.342*	.....
Los Angeles	*.19*	*.24*	.27	.....	2.75

POLES—Price of Western red cedar poles is as follows:

	New York Current	New York One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft	7.65	7.45	6.85	6.10	6.85
7-in. x 35-ft	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft	$9.00
12-in. butts, 6-in. tops, length 30-40 ft	11.50
12-in. butts, 6-in. tops, length 41-50 ft	12.50
14-in. butts, 6-in. tops, length 51-60 ft	21.00
14-in. butts, 6-in. tops, length 61-71 ft	23.50

	Dallas
6-in. x 20-ft	$3.00
6-in. x 30-ft	5.00
8-in. x 30-ft	7.50
8-in. x 35-ft	7.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges.

	New York	Chicago	St. Louis
No. 1 railroad wrought	$18.50	$16.50	$15.50
Stove plate	16.00	16.50	15.50
No. 1 machinery cast	*22.00*	22.00	19.50
Machine shop turnings	*8.00*	6.75	7.00
Cast borings	*9.50*	9.75	7.50
Railroad malleable cast	13.50	16.50	14.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	San Francisco Black	Seattle Black
½	$10.50	$8.50	$8.55
⅝	9.85	7.85	8.25
¾	9.70	7.70	8.30

Pittsburgh base, $4.75 per 100 lb

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
May 5	Pottsville, Pa.	Apr. 17
	Adv. Apr. 17 and 24.	
May 5	Salt Lake City, Utah	Apr. 24
May 6	Ely, Minn.	Apr. 17
	Adv. Apr. 17 and 24.	
May 7	Harrisburg, Pa.	May 1
May 8	Brainerd, Minn.	Apr. 24
May 13	Hollandale, Miss.	Apr. 17
May 14	Gilboa, N. Y.	Apr. 17
	Adv. Apr. 10 to 24.	
May 27	Niles, Mich.	May 1
May 29	Tamaqua, Pa.	Apr. 24
	Adv. Apr. 24.	
June 2	Mankato, Minn.	May 1
	Adv. May 1.	

SEWERS

May 5	Des Moines, Ia.	May 1
May 5	Macon, Mo.	Apr. 17
	Adv. Apr. 17 and 24.	
May 6	Newark, N. J.	Apr. 3
May 6	Cleveland, O.	Apr. 10
	Adv. Apr. 3 and 10.	
May 6	Bridgeport, Conn.	May 1
May 7	Brooklyn, N. Y.	May 1
May 8	Platte, S. D.	Apr. 17
	Adv. Apr. 17 and 24.	
May 12	Pontiac, Mich.	Apr. 24
	Adv. Apr. 24.	
May 13	Newark, N. J.	Apr. 24
May 14	Humphrey, Neb.	May 1
May 14	Cleveland, O.	May 1
May 19	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 20	Erie, Pa.	Apr. 24
	Adv. Apr. 24.	
May 21	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 27	Niles, Mich.	May 1

BRIDGES

May 3	North Adams, Mass.	Apr. 24
	Adv. Apr. 17 and 24.	
May 3	Ste. Marie Monnoir, Que.	May 1
May 5	Akron, O.	Apr. 10
	Adv. Apr. 10 and 17.	
May 5	Lyons, Kan.	May 1
May 5	St. Valerein, Que.	May 1
May 5	Cathlamet, Wash.	May 1
May 5	Chariton, Ia	May 1
May 7	Long Prairie, Minn.	May 1
May 8	New Haven, Conn.	May 1
May 8	Lindsay, Ont.	May 1
May 10	Adrian, Mich.	May 1
May 12	St. Croix, Que.	May 1
May 12	Bright, Ont.	May 1
May 13	North Temiskaming, Que.	May 1
May 15	Valdosta, Ga	Apr. 24
May 15	Marion, Ia.	May 1
May 16	Thomasville, Ga.	Apr. 24
May 19	Cottonwood, Ariz.	Apr. 24
May 19	Jerome, Ariz.	May 1
May 19	Bowling Green, O.	May 1
May 20	Macon, Ga.	May 1

STREETS AND ROADS

Bids Close		See Eng. News-Record
May 2	St. George, S. I., N. Y.	Apr. 24
May 2	Pennsylvania	Apr. 10
	Adv. Apr. 10 to 24.	
May 2	Ebensburg, Pa.	May 1
May 2	Philadelphia, Pa.	May 1
May 3	Stonewall, Man.	May 1
May 5	Greenfield, Ind.	Apr. 17
May 5	North Dakota	Apr. 10
May 5	Worthington, Minn.	Apr. 10
May 5	Fayetteville, W. Va.	Apr. 17
	Adv. Apr. 10 to 24.	
May 5	Colfax, Wash.	Apr. 24
May 5	Dallas, Tex.	Apr. 17
	Adv. Apr. 17 and 24.	
May 5	Swan River, Man.	May 1
May 5	Ebensburg, Pa.	May 1
May 5	Des Moines, Ia.	May 1
May 5	Union, N. J.	May 1
May 5	Sheboygan, Wis.	May 1
May 5	Mt. Lebanon, Pa.	May 1
May 5	New York, N. Y.	May 1
May 6	St. George, S. I., N. Y.	May 1
May 6	Sheboygan, Wis.	May 1
May 6	Flandreau, S. D.	May 1
May 6	Clarion, Ia.	May 1
	Adv. May 1.	
May 6	Esterville, Ia.	May 1
May 6	Bellevue, Pa.	May 1
May 6	Pipestone, Minn.	May 1
May 6	Everett, Wash.	May 1
May 6	Maryland	May 1
	Adv. May 1.	
May 6	Detroit, Minn.	Apr. 24
May 6	Durham, N. C.	Apr. 17
	Adv. Apr. 17.	
May 6	Upper Marlboro, Md.	Apr. 24
May 6	Edgerton, O.	Apr. 24
May 7	Burlington, N. J.	Apr. 10
May 7	Long Prairie, Minn.	Apr. 17
May 7	Faribault, Minn.	Apr. 17
May 7	Manhattan Beach, Cal.	Apr. 24
May 7	Brooklyn, N. Y.	May 1
May 7	Guelph, Ont.	Apr. 24
May 7	New Jersey	Apr. 24
May 7	Burlington, N. J.	Apr. 24
	Adv. Apr. 24.	
May 7	Arkansas	Apr. 24
	Adv. Apr. 24.	
May 7	Rome, N. Y.	May 1
May 7	Aberdeen, S. D.	May 1
May 8	Milan, Mich.	May 1
May 8	Lorain, O.	May 1
May 8	Poughkeepsie, N. Y.	May 1
	Adv. May 1.	
May 8	Arthabaska, Que.	May 1
May 8	Cohoes, N. Y.	May 1
	Adv. May 1.	
May 9	Norfolk, Va.	Apr. 24
	Adv. Apr. 24.	
May 9	Patchogue, N. Y.	Apr. 24
	Adv. Apr. 24.	
May 9	Ebensburg, Pa.	May 1
	Adv. May 1.	
May 9	Norfolk, Va.	May 1
May 9	New York, N. Y.	May 1
May 9	Tylertown, Miss.	May 1
May 9	Trenton, N. J.	May 1
May 10	Pittsfield, Mass.	May 1
	Adv. May 1.	
May 12	Elk River, Minn.	Apr. 17
May 12	David City, Neb.	Apr. 24
May 12	Wahoo, Neb.	Apr. 24
May 12	St. Paul, Neb.	Apr. 24
May 12	New Jersey	Apr. 24
May 12	Salem, N. J.	Apr. 24
May 12	Great Falls, S. C.	May 1
May 12	Oneonta, N. Y.	May 1
May 12	Charleston, Wash.	May 1
May 12	Bremerton, Wash.	May 1
May 12	Hutchinson, Kan.	May 1
May 12	Seattle, Wash.	May 1
May 13	Toledo, O.	May 1
May 13	Beatrice, Neb.	Apr. 24
May 14	Arkansas	Apr. 17
	Adv. Apr. 17 and 24.	
May 14	Austin, Minn.	Apr. 24
May 14	Nebraska City, Neb.	Apr. 24
May 14	Humphrey, Neb.	Apr. 24
May 14	Helena, Mont.	May 1
May 14	Illinois	May 1
May 14	New Jersey	May 1
May 15	Sioux Falls, S. D.	May 1
May 15	Columbus, Tex.	May 1
May 15	Duluth, Minn.	May 1
May 15	Rushville, Neb.	Apr. 24
May 15	Hastings, Minn.	Apr. 24
May 15	Plymouth, Wis.	Apr. 10
May 15	Bridgeville, Pa.	Apr. 24
May 15	New York	May 1
May 15	Lebanon, Pa.	May 1
	Adv. May 1.	
May 15	Terra Haute, Ind.	May 1
May 15	Cumberland, Md.	May 1
	Adv. May 1.	
May 16	Toronto Ont.	Apr. 24
May 16	La Moure, N. D.	May 1
May 19	Merced, Cal.	Apr. 10
May 19	Tulsa, Okla.	Apr. 17
	Adv. Apr. 17 and 24.	
May 19	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 19	Minneapolis, Minn.	May 1
May 20	Windom, Minn.	Apr. 24
May 21	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 22	Benson, Minn.	May 1
May 23	Lawrence, Kan.	May 1
May 27	Preston, Minn.	May 1
May 28	Nashville, Tenn.	May 1
	Adv. May 1.	
May 30	Dallas, Tex.	Apr. 17
	Adv. Apr. 17 and 24.	
June 2	St. Severe, Que.	Apr. 24
June 10	Clarksville, Pa.	Apr. 3

EXCAVATION AND DREDGING

May 5	Albert Lea, Minn	May 1
May 5	Clinton, Ia.	May 1
	Adv. May 1.	
May 6	Paragould, Ark.	Apr. 3
May 6	Manatoba	May 1
May 14	Sheboygan, Wis.	May 1
May 14	Poplar Bluff, Mo.	Apr. 3
May 15	Mobile, Ala.	Apr. 10
	Adv. Apr. 10 to 24.	
May 15	Sheboygan, Wis.	May 1
May 16	Grant City, Mo.	May 1
	Adv. May 1.	
June 2	Beaufort, N. C.	Apr. 24
	Adv. Apr. 24.	

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
May 10	Sheboygan, Wis.	Apr 24
May 15	Toronto, Ont.	Apr 24
May 15	Bemidji, Minn.	Apr 17

BUILDINGS

May 2	New York, N. Y.	May 1
May 3	Racine, Wis.	Apr 17
Apr. 5	Akron, O.	Apr 17
May 5	Guelph, Ont.	May 1
May 5	Bridgeport, Conn.	Apr 24
May 5	West New York, N. Y.	May 1
May 5	Campbell, Minn.	May 1
May 6	Bayonne, N. J.	Apr 24
May 6	Hartford, Conn.	May 1
May 7	Troy, N. Y.	May 1
May 7	Ft. Willian, Ont.	Apr 24
May 7	Duluth, Minn.	May 1
May 7	Red Lake Falls, Minn.	May 1
May 8	Newark, N. J.	Apr 17
	Adv. Apr. 17 and 24	
May 8	Salisbury Center, N. Y.	Apr 24
May 8	Victoria, Minn.	Apr. 24
May 9	Sault Ste. Marie, Ont.	May 1
May 10	Sheboygan, Wis.	May 1
May 12	Highland Park, Mich.	May 1
May 12	Ironton, O.	May 1
	Adv. May 1.	
May 12	Flint, Mich.	Apr. 17
May 12	Hawley, Minn.	Apr. 24
May 15	Port Washington, Wis.	Apr. 24
May 15	Verona, N. J.	Apr. 10
May 15	Kearney, Minn.	Apr. 17
May 15	Winnebago, Minn.	Apr. 24
May 15	Sault Ste. Marie, Ont.	May 1
May 15	Farrell, Pa.	May 1
May 16	Grand Rapids, Mich.	May 1
	Adv. May 1.	
May 19	Charleston, S. C.	May 1
May 20	Cathay, N. D.	May 1
	Adv. May 1.	
May 21	Cohoes, N. Y.	May 1
May 26	Gallipolis O.	May 1

FEDERAL GOVERNMENT WORK

May 5	Dredging—Wilmington Del.	Apr 10
	Adv. Apr. 17 and 24.	
May 5	Sewer Discharge Pipe — Spec. 3267 — Pensacola, Fla.	Apr. 17
May 5	Fence — Spec. 3789 — Charleston, W. Va.	Apr. 17
May 5	Discharge Pipe—Spec. 3267 —Washington, D. C.	Apr. 24
May 5	Buildings — Spec. 3818 — Hampton Roads, Va.	Apr. 24
May 5	Additional Buildings—Spec. 3823—Hampton Roads, Va.	Apr. 24
May 5	Officers' Quarters and Administration Building, Spec. 3835—Quantico, Va.	May 1
May 6	Post Office — Woodward, Okla.	May 1
May 6	Lock and Abutment—Cincinnati, O.	Apr. 10
	Adv. Apr. 3 to 24.	
May 6	Alteration to Post Office—Bridgeport, Conn.	Apr. 17
May 8	Marine Railway — Ft. Mifflin, Pa.	Apr. 10
	Adv. Apr. 10 to 24.	
May 8	Post Office—Mount Pleasant, Tex.	Apr. 10
May 9	Rock Crusher — Florence, Ala.	Apr. 10
	Adv. Apr. 10 to 24.	
May 9	Dredging — New York, N. Y.	Apr. 10
	Adv. Apr. 10 to 24.	
May 12	Dredging — New York, N. Y.	Apr. 10
	Adv. Apr. 10 to 24.	
May 12	Torpedo Storage Building —Spec. 3767 — Newport, R. I.	Apr. 24
May 12	Storehouse — Spec. 3842 — Charleston, S. C.	Apr. 24
May 12	Conduit System—Spec. 3846 —Pensacola, Fla.	Apr. 24
May 12	Cranes — Spec. 3670 — South Charleston, W. Va.	May 1
May 12	Buildings — Spec. 3855 — Paris Island, S. C.	May 1
May 15	Rip Rap—Baltimore, Md.	Apr. 17
	Adv. Apr. 10 to 24.	
May 15	Dredging — New Bedford, Mass.	Apr. 17
	Adv. Apr. 10 to 24.	
May 19	Dry Dock—Spec. 3858—Charleston, S. C.	Apr. 24
May 19	Elevators and shaft—Spec. 3851—Philadelphia, Pa.	May 1
May 19	Crane—Spec. 3869—Pensacola, Fla.	May 1
May 20	Dredging — New London, Conn.	May 1
	Adv. May 1.	

Bids Close		See Eng. News-Record
May 20	Conduit, Wiring and Lighting Fixtures—Elgin, Ill. Adv. May 1.	May 1
May 21	Dredging—Duluth, Minn. Adv. Apr. 24.	Apr. 24
May 21	Derricks—Florence, Ala. Adv. Apr. 24.	Apr. 24
May 22	Rip Rap—Duluth, Minn.	May 1
May 26	Laboratory—Fairport, Ia.	May 1
May 26	Superstructure — Chicago, Ill. Adv. May 1.	May 1
May 26	Rip Rap—Philadelphia, Pa.	May 1
May 27	Dredging—Wilmington, Del. Adv. May 1.	May 1
May 28	Jetty and Revetment—Jacksonville, Fla. Adv. May 1.	May 1
May 28	Lock and Abutment—Cincinnati, O. Adv. May 1.	May 1
June 2	Dam and Bridge—Sacaton, Ariz. Adv. May 1.	May 1
June 6	Post Office—Bellefourche. S. D. Adv. May 1.	May 1

MISCELLANEOUS

May 1	Stone—Cranston, R. I.	May 1
May 2	Tracks—New York, N. Y.	Apr. 24
May 5	Asphalt—Lansing, Mich. Adv. Apr. 24.	Apr. 24
May 6	Pipe—Detroit, Mich.	May 1
May 6	Graders — Grand Forks, N. D.	May 1
May 6	Road Oil—Sheboygan, Wis.	May 1
May 12	Tower — Prince Rupert, B. C.	Apr. 24
May 12	Granite Blocks, etc.—Sherbrooke, Que.	May 1
May 15	Lighting System—Mandan, N. D. Adv. May 1.	May 1

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Monroe—Bridgeport Hydraulic Co., 820 Main St., Bridgeport, plans to build concrete dam to divert water from Cargills Stream into Means Brook, here.

N. Y., Rome—Water & Sewer Bd. plans to lay water mains in Garden, Pine and Ann Sts., also Howland and McKinley Aves. About $7500. A. Armstrong, supt.

N. Y., Schenectady—City plans to build additional well at Rotterdam Pumping Station. About $200,000. L. B. Seabring, city engr.

O., Toledo—Lucas Co. receives bids about July, laying 7700 ft. 6 in. c.i. pipe and installing ten 6 in. valves and ten 3 way hydrants. L. A. Boulay, co. engr.

Mich., Highland Park (Detroit P. O.)—City soon lets contract building rein.-con. and brick superstructure for filtration plant, to include 2-story, 29 x 32 ft. head house, two 1-story, 22 x 27 ft. wings, and 3-story, 32 x 85 ft. filter house, for Dequindre Ave. Pumping Station. About $85,000. L. C. Whitset, 28 Gerald Ave., engr. Noted Aug. 15.

Ill., Decatur—City having plans prepared by S. A. Greeley, engr., 64 West Randolph St., Chicago, for dam to impound water supply for city. About $500,000. Noted Sept. 26 under "Miscellaneous."

Ill., Moline—See "Streets and Roads."

Kan., Lyons—City having tests made for improving water-works system. Work involves 8650 ft. 8 in. pipe, 3 motor driven pumps and pump house. Bonds for $30,000 voted for project. S. Ainsworth, city engr. Noted Mar. 27.

Mont., Hardin—City voted $9600 bonds to extend water-works. L. L. Flickinger, Hardin, engr. Noted Jan. 30.

Idaho, Caldwell—City plans election May 20, to vote on $30,000 bonds to replace present wood pipe with c.i. pipe. F. J. Lockwood, Cadwell, engr.

Ore., Pilot Rock—City plans to improve water system, cost $16,000; also install lighting plant, 25 kw. capacity, to be operated by 25 hp. gasoline motor; $4000 bonds issued toward cost. J. L. Vaughn, mayor.

Cal., Anaheim—City soon receives bids furnishing and laying water pipe. About $6000.

Cal., Los Angeles—Bd. Pub. Serv. approved plan to supply aqueduct water to Westgate, Palma and Sawtelle Dists. and ultimately Santa Monica Dist., if it is annexed to city. Work involves 25 mi. pipe line from San Fernando Reservoir and tunnel and reservoir in Santa Monica Mts. About $1,357,000. Citizens will form irrigation districts and vote on bonds to secure above improvements; also distributing systems and laterals and to purchase private water companies. W. Mulholland, 645 South Olive St., ch. engr.

Cal., Whittier—City having plans prepared by J. B. Lippincott, engr., 1134 Central Bldg., Los Angeles, for extension and improvements to water system. Plans include developing new supply and increasing storage facilities. About $300,000. C. O. Trueblood, clk.

BIDS DESIRED

Pa., Harrisburg—Until May 7, by E. Martin, state comr. health, replacing existing wood roof on reservoir with one of concrete, Contr. No. 30; extending water supply system, including about 5000 ft. 8 in. c.i. pipe, and 5000 ft. w.i. and c.i. pipe, varying from 2-6 in. diam., with valves, fire hydrants, etc., Contr. No. 31; building and resurfacing with water bound macadam 15,000 ft. road, Contr. No. 32; building rein.-con. elevated coal bin to have 300 ton capacity, with necessary coal handling machinery, Contr. No. 33; extending sewage treatment plant, involving 60 cu.yd. concrete, 1 ton steel reinforcement, 1000 cu.yd. excav., 350 cu.yd. broken stone filter material, 50 cu.yd. rubble masonry, piping, etc., Contr. No. 34.

O., Bryan—Until May 9, by Bd. Trustees Pub. Affairs, improving waterworks system. Work involves two 10 in. x 20 ft. artesian wells, one 1,000,000 gal. reservoir, 2 electrically driven centrifugal pumps, one 500 gal. meter and 14,500 ft. 4, 6 and 8 in. mains with hydrants and valves. A. H. Smith Co., 320 Nasby Bldg., Toledo, engrs.

Mich., Niles—Until May 27, by city, building 500,000 gal. rein.-con. reservoir. About $10,000. C. W. Cole, 529 J. M. S. Bldg., South Bend, Ind., engr.

Ia., Des Moines—See "Sewers."

Minn., Mankato—Until June 2, by Village Recorders, furnishing material and extending water mains. M. M. Crain, engr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Bayonne—City received lowest bid building two 30 in. water mains under Hackensack River, from Snare & Triest Co., 8 West 40th St., New York City, $373,640. Noted Apr. 10.

★Md., Baltimore—Bd. Awards let contract furnishing and erecting 30,000,000 gal. turbo-centrifugal pump and auxiliary equipment for Mt. Royal Pumping Station, to Worthington Pump & Machine Corp., 115 Bway, New York City, $26,258. Noted Mar. 6.

★N. C., High Point—City let contract constructing filtering building, to R. K. Stewart & Son, Farmville, Va., $59,930; filters, to Pittsburgh Meter Co., 1st Natl. Bank Bldg., Pittsburgh, $21,400; pumps and motors, to Morris Machine Wks., East Genesee St., Baldwinsville, N. Y., $4320. Noted Apr. 3.

O., Toledo—Comrs. Lucas Co. received bids laying 7720 ft. 6 in. c.i. pipe in Overland Heights, from S. L. Cothrel, 341 Ohio Bldg., $12,678; Brooks & Sons, Jackson, Mich., $12,685; J. N. Bick, 601 Nasby Bldg., $13,656. Noted Apr. 17.

★Mont., Cascade—City let contract building well and pumphouse, to E. Z. Comer, Cascade, $6029. Noted Jan. 30.

★Ont., New Toronto—City let contract laying 1100 ft. 24 in. steel intake pipe, to R. C. Huffman, 14 Wellington St. E., cost plus 10 per cent. Noted Mar. 20.

Sewers

PROPOSED WORK

Mass., New Bedford—City appropriated $20,000 to build sewers in Church St.; $1700 in Acushnet Ave.; $20,000 in Tripps Brook, and $4000 for catch basins. G. H. Aye, city engr.

R. I., Pawtucket—City appropriated $100,000 to build sewers in various streets. i. Gill, comr. pub. wks. soon receives bids.

R. I., Providence—Bd. Contr. & Supply soon receives bids, building storm sewers in Roger Williams Park, Bway., Cape, Sabin and Federal Sts., Hope, Eaton, Carleton and Yale Aves. M. H. Bronsdin, city engr.

N. Y., Rochester—City having plans prepared building sewage disposal plant in 23rd Ward, to include 1 Imhoff Tank and pumping system to care for territory between Lata Rd. and Beach Ave.; also one in Maplewood Dist. to include sprinkler filters. Address J. T. Skinner, asst. city engr.

N. Y., Syracuse—City plans to build sewers in Midland Ave., also in Gale Ave. from Vann St. to city line; West Matson Ave. from Midland Ave. to South Salina St., and East Willow St. from Lodi St. to point 600 ft. east Lodi St. H. C. Allen, city engr.

N. Y., Watertown—Bd. Pub. Wks. plans to build sewers in Morrison, Dimmick, West Ten Eyck and Paddock Sts. About $25,000. E. W. Sayles, city engr., will prepare plans.

O., Akron—City soon receives bids building sanitary sewers in Uhler Ave. and Carpenter St. Work involves 3820 ft. 12-36 sewer, 15 manholes, etc. J. E. Root, city sewerage engr.

O., Cleveland—City soon receives bids building sewer in East 82nd St. from Superior to Decker Aves., involving 880 ft. 12 ft. 6 in. x 11 ft. brick sewers, 125,000 ft. B. M. plank and timber, 20,000 ft. B. M. hardwood grillage and 30 ft. 12 in. vitr. pipe. R. Hoffman, city engr.

O., Springfield—City plans to build sewers in (1) Clay, Catherine, Pearl and Rose Sts., (2) Race and Rubsam Sts., (3) 1st St. from Limestone St. to Fountain Ave., (4) Warder Park Suburb, (5) Yellow Spring St., (6) Grant St., (7) Limestone St. north to a point 300 ft. south of Columbia Ave., involving 22,000 lin.ft. 6-24 in. vitr. pipe and 2700 cu.yd. rock excav., cost $47,590; storm sewer in alley west of Fountain Ave. from College to McCreight Sts., involving 2945 lin.ft. 30 in. vitr. pipe, $15,555. O. E. Car, city mgr.

Mich., Alpha—City having plans prepared by S. A. Greeley, engr., 64 West Randolph St., Chicago, for sewerage system. About $25,000.

Mich., Detroit—City soon lets contract furnishing labor and material (except manhole rings, covers and iron steps) building and finishing complete with backfilling vitr. crock lateral sewers, crocks varying from 12-18 in. together with specials and brick manholes alleys No. 3062, 3116, 3117, 3118, 3119, 3120, 3122, 3123, 3124, 3125, 3126, 3127, cost $47,500. C. W. Hubbell, city engr.

Wash., Camas—City plans to build trunk line sewerage system. About $27,000.

Ore., Astoria—City plans to build main trunk sewerage and drainage system in Dist. No. 5. Cost to exceed $10,000. G. T. McClean, city engr.

Ore., Portland—City plans to build vitr. or cement sewers in Malden Ave., cost, $3156; East 78th St., $1493; Lambert Ave., $3209; East 74th 75th, 76th and Halsey Sts., $15,139. G. R. Funk, city aud.

Cal., Beverly Hills—See "Miscellaneous."

Cal., Redwood City—See "Bridges."

Ont., Aurora — City retained James, Loudon & Hertzberg, engrs., 36 Toronto St., Toronto, to prepare estimates for installing vitr. sewers and septic tanks. About $100,000.

BIDS DESIRED

Conn., Bridgeport—Until May 6, by Paving & Sewer Comn., building 1500 ft. vitr. sanitary and storm sewer in Spring St., cost $25,000; also 5760 ft. in Canfield Ave. J. A. McElroy, city engr.

N. Y., Brooklyn—Until May 7, by E. Riegelmann, boro. pres., Borough Hall, furnishing all labor and material for building sewers in Rutland Rd. from Remsen to Nostrand Aves.; Kingston Ave. from Rutland Rd. to Montgomery St.; Midwood St. from Kingston to Nostrand Aves.

Pa., Harrisburg—See "Waterworks."

Md., Baltimore—Until May 7, at office of City Register, City Hall, furnishing and erecting 400 hp. water tube boiler, also one 400 and three 260 hp. mechanical side-feed stokers and drivers for Sewage Pumping Station, Eastern Ave. and President St; advertised in this issue.

Sewers (Continued)

O., Cleveland—Until May 14, (change of date) by Comr. Purchases and Supplies, 229 City Hall Bldg., building sewage treatment works at westerly site. Work includes building grit chambers, 2-story settling tanks, outfall conduits, etc., and involves 15,000 lin.ft. wooden piling, 30,000 cu.yd. excav., 15,000 cu.yd. concrete, 850 tons steel reinforcement, 60 tons c. i. piping, etc. E. Shattuck, comr.

O., Cleveland—City receiving bids building sewers in East 40th St. from Central to Scoville Aves., involving 1330 ft. 5 ft. brick sewers, 1330 ft. 6 in. underdrain, 160,000 ft. B. M. hardwood grillage and 30 ft. 12 in. vitr. pipe. R. Hoffman, city engr.

Mich., Niles—Until May 27, by city, building 20-48 in. trunk sewers. About $108,000. C. W. Cole, 529 J. M. S. Bldg., South Bend., Ind., engr.

Ia., Des Moines—Until May 5, by city, building sewer and water connections in about 160 blocks. C. Kastburg, city engr.

Neb., Humphrey—Until May 14, by J. A. Zavadil, city clk., building 4 mi. sanitary sewer, 8-12 in. vitr. pipe. About $25,000. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract building rein.-con. sewer in Blackstone St., involving 1175 ft. 4 ft. x 4-6 in. rein.-con. pipe, 2000 cu.yd. earth trenching, 20 tons reinforcing steel, to W. Barrett, 27 Hunneman St., Dorchester, $43,890; in Tremont St., involving 125 ft. 12 and 18 in. vitr. pipe, 200 cu.yd. earth trenching, to V. Grande, 59 Hull St., $8224.

N. Y., New York—H. Bruckner, pres. Bronx Boro., received bids Apr. 22, building sewers and appurtenances in Rhinelander Ave., etc., (type A), from Govern Constr. Co., Bronx, $54,969; A. Russiano, $54,850; (type B) Anida Constr. Co., Bronx, $58,-$482; C. W. McDonald, $62,194. Noted Apr. 17.

Pa., College Hill (Easton P. O.)—City Council received bids building 28,000 ft. sewers with necessary manholes, flush tanks, etc., from H. George Co., Youngstown, $33,000; Elder & Ferry, New Castle, $39,000. Noted Apr. 3.

★Pa., Pittsburgh—City let contracts installing sewers in Jackson St., to Manella Constr. Co., Pittsburgh, $979; Baltimore and Ohio property and Ethel St., to M. O'Herron, 1st and McKean Sts., $7247; Methyl St., to F. and F. Diulus, 40 Boundary St., $12,095; Soho Playgrounds, to J. Bellisario, $1958. Noted Apr. 17.

★O., Cleveland—City let contracts to D. Pfahl, 724 Guardian Bldg., building sewers in Parkgrove Ave. from East 156th to 161st Sts., $4861; Hale Ave. and East 147th St. from Sylvia Ave. to East 152nd St., $3657; Sylvia Ave. from East 140th to 152nd Sts., $11,931; Huntmere Ave. from East 156th to 161st Sts., $4720; Grovewood Ave. from East 156th to 161st Sts., $4889. A. C. Hattendorf, 13601 6th Ave., East 156th St. from Holmes to St. Clair Aves., $3377. Water & Sewer Impvt. Co., 345 The Arcade, Damon Ave. from East 156th to 161st Sts., $2936; Corsica Ave. from East 156th to 161st Sts., $2770. A. Marra, 610 Park Bldg., East 140th St. from St. Clair to Castelia Aves., $4603. Noted Mar. 13.

★O., Cleveland—City let contracts building sewers in Joy St., involving 330 ft. 12. in. pipe, to H. Mahmood, 9802 Euclid Ave., $735; West 32nd St., 260 ft. 12 and 15 in. pipe, N. Salem, 237 Bradley Court, $957; 9 mi. Creek, 430 cu.yd. class A concrete, 37,000 lb. reinforcing steel, 460 cu.yd. excav., 3800 sq.ft. brick paving and 30 ft. 12 in. pipe, W. P. Gibbons, 340 Leader-News Bldg., $11,266; West 21st and 28th Sts. and Hood Ave., 2780 ft. pipe, Brookside Constr. Co., 3905 West 20th St., $7594; Gifford Ave., 1890 ft. 12 in. pipe, H. Hahn, 2973 East 78th St., $4955; West 18th St., 330 ft. 12 in. pipe, Amata Constr. Co., 343 The Arcade, $874; West 47th St., 810 ft. 12 and 15 in. pipe, Aftoora & Joseph, 887 The Arcade, $1591; Nottingham Rd., 2190 ft. Nos 2-7C brick sewer, 50,000 ft. plank and timber and 390 ft. 12-20 in. pipe, D. Zullo, 10501 Hudson Ave., $39,593. All vitr, pipe. Noted Apr. 10.

★O., Cleveland—City let contracts to M. A. Yahya, 3539 Independence Rd., building sewers in Severn Ave., $2297; Joseph & Kalill, 1200 Bolivar Rd., Clyde Ave. from St. Olga Ave. to West 1st St., $1439; St. Olga Ave. from Starkweather to Clyde Aves., $1945; A. J. Galvin, 357 Lennox Bldg., St. Tichan Ave. from Starkweather to Clyde Aves., $1978; Fredericks & Housaine, 635 Bradley Court, Clarence Ave. from West 9th to east end. $5137. Noted Mar. 20.

★O., Cleveland—City let contract building sewer in East 96th St. from Seminole to Lowell Aves., to Aftoora & Joseph, 887 The Arcade, $810; East 61st St. from Quincy St. to north end, also Ada Ave. from Lynn Dr. to Lakeview Rd., to Fredericks & Housaine, 635 Bradley Court, $414 and $1164 respectively; East 76th St. from Woodland Ave. to East 75th St., to E. Cesa & Son, $2462 Baldwin Rd., $2289; St. Clair Ave. from East 88th to 93rd Sts., to P. Ciraci, 11811 Browning Ave., $7016; East 130th and 131st St. from Iroquois Ave. to city limits, to Iannetta Bros., 2064 East 125th St., $3830 and $3634 respectively; Lowell Ave. from East 96th to 99th Sts., to W. P. Gibbons, 340 Leader-News Bldg., $979; Adelbert Rd. from Euclid Ave. to New York Central R.R., to W. Nichols & Son, 11422 Fairchild Ave., $19,008; East 18th St. from Prospect to Central Aves., to P. W. Graham, 1274 East 108th St., $26,431. Noted Apr. 10.

O., Cleveland—City received bids building sewers in (a) East 87th St. from Euclid to Hough Aves., (b) East 174th St. from Lakeshore Blvd. to Grovewood Ave., (c) Bosworth Rd. from Thrush to Governor Aves., (d) East 36th St. from Croton Ave. to point 265 ft. south, (e) East 121st St. from Woodland to Hamlen Aves., (f) Church Ave. from West 28th to 29th Sts., from Manson Co., 345 The Arcade, (a) $11,848; Amata Constr. Co., 343 The Arcade, (a) $13,171; (d) $812; (f) $2060; River Constr. Co., 12109 Mayfield Rd., (a) $13,235; B. W. Ernst, 14011 Woodworth Rd., (b) $13,450; Brookside Constr. Co., 3905 West 20th St., (b) $14,094, (e) $2776; P. W. Graham, 1274 West 108th St., (b) $14,659; Sprague & Burkhardt, 12011 Woodland Ave., (c) $4456; H. Hahn, 2973 East 78th St., (c) $4770; (d) $840, (f) $1984; A. Marra, 915 Illuminating Bldg., (c) $5806; M. Yahya, 3539 Independence Ave. 6, (a) $825, H. Mahmood, 9802 Euclid Ave., (e) $2559; Brookside Constr. Co., 3905 West 20th St., (e) $2776; Cairo Bros., 1977 East 126th St., (e) $2863; Iannetta Bros., 2064 East 125th St., (f) $1961. Noted Apr. 17.

O., Toledo—Comrs. Lucas Co. received bids building sewers in Brussels, Berkshire, Barrow and Borden Aves., Overland Heights, involving 6255 ft. 8 in. and 50 ft. 6 in. vitr. pipe, from T. J. Kelly, 626 Avondale Ave., $13,786; Peters Bros., 237 Marion St., $13,997; J. N. Bick, 601 Nasby Bldg., $14,489. Noted Apr. 17.

Mich., Detroit—E. S. Friechkorn, 1268-70 Penobscot Bldg., received lowest 3 bids trenching, laying and backfilling complete lateral sewer system, for Tireman Park subdivision, involving 14,124 ft. 12-24 in. vitr. pipe, from Walker & Teetarte, Penobscot Bldg., $26,499; Brooks & Co. & Adams, Dime Bank Bldg., $27,988; Western Constr. Co., 1208 Ford Bldg., $28,098. Noted Apr. 24.

Wis., Sheboygan—Bd. Pub. Wks., received bids building sewers in North 3rd St. from Bluff to Bell Aves. and in Geele Ave. from North 3rd to North 6th Sts., from South Side Hardware & Plumbing Co., 1512 South 12th St., $11,577; E. M. Schefflow, North 13th St., $12,423; Olson & Murphy, 903 Michigan St., $12,915. Noted Apr. 17.

★Neb., Omaha—City let contract building storm sewer in 31st and Farnam Sts. along Turner Blvd. southwest to 34th and Jones Sts., involving 2140 ft. 45-54 in. segmental block and 435 ft. 18 in. vitr. pipe, to Hanson & Willadsen Co., 2907 Douglas St., $25,788; 1153 ft. 48 in. rein.-con. storm sewer from 13th and Emmet St., along railway right-of-way, to E. P. Donahue, 306 Lincoln Blvd., $22,543. J. A. Bruce, City Hall, engr.

Tex., Dallas—City received bids building storm sewer in (a) Fairmont St. from Wellborn to Wolf Sts. and Wolf St. from Fairmont to Maple Sts., involving 1410 lin.ft. 30-36 in. monolithic concrete pipe and 2905 lin.ft. 15-21 in. tile pipe, etc.; (b) Buckner Park from Carroll Ave. to Worth St., 247 lin.ft. 72 in. concrete pipe and 1 concrete manhole; (c) Douglas St. Dist., 4835 lin.ft. 30-60 in. monolithic concrete pipe and 7788 lin. ft. 15-24 in. tile pipe, etc.; (d) Wall St. Dist., 4136 lin. ft. 30-84 in. monolithic concrete pipe and 9321 lin. ft. 15-24 in. tile pipe, etc.; (e) Oak Cliff Dist., from Davis and Beckley to Melba and Madison Sts., 56 lin.ft. 66 in. rein.-con. pipe, 1545 lin.ft. 15-66 in. monolithic concrete pipe and 386 lin.ft. 15-21 in. tile pipe, etc., from Klein Bros. Co., Junius and Walton Sts., (a) $20,757, (b) $3125, (c) $73,691, (d) $83,301, (e) $17,101; Cramer & Cullum, Dallas, (a) $21,080, (b) $3785, (c) $79,506; F. A. Eldridge, Dallas, (a) $23,668; McCall-Moore Eng. Co., Commonwealth Bldg., (a) $25,353; Dallas Lime & Gravel Co., 1915½ Main St., (b) $2999, (c) $80,347, (e) $19,351; Standard Eng. & Constr. Co., Interurban Bldg., (c) $79,698.

★Ore., Astoria—City let contract building Sewer and Drainage System No. 10A, to J. Mattson, Astoria, $13,464.

★Ont., Orillia—City let contract laying sewers in various streets, to Curran & Clement, Orillia. About $30,000. Noted Mar. 20.

Bridges

PROPOSED WORK

N. Y., Albion—Town and Western New York Utility Co. soon receive bids building new waterport bridge over Oak Orchard Creek. About $65,000. Town will appropriate $30,000 toward cost. Address P. H. Stowell, superv.

N. Y., Castleton—New York Central R. R., Grand Central Terminal, New York City, had plans prepared, by H. W. Kittredge, engr., Grand Central Terminal, New York City, building ½ mi. rein.-con. bridge, 27 ft. wide, from here to Ravina. About $10,000,000.

Pa., Leetsdale—Comrs. Allegheny Co. (Pittsburgh), soon let contract building 110 ft. stone and concrete bridge, 50 ft. wide with 37 ft. arch., over Sewickley Creek, between Allegheny and Beaver Counties. Work involves 150 sq.yd. concrete sidewalk, 9000 lbs. steel, 1250 cu.yd. masonry, 1100 cu.yd. earth approach and fill, and 400 ft. concrete curbing. J. G. Cholfont, Court House, engr.

Pa., Reading—Berks Co. receives bids in June building Bingaman St. viaduct over Schuylkill River on Railroad St. Work includes tearing down old iron bridge, building temporary foot bridge and demolishing few buildings on present site, etc. About $1,000,000. C. F. Saunders, co. engr.

Pa., Scranton—City and Scranton Ry., 284 Lackawanna Ave., plan to improve and repair Lackawanna Ave. bridge. About $20,000. W. Schunk, city engr.

Md., Baltimore—Baltimore & Ohio Ry., Charles and Baltimore Sts., plans to build two 88 ft. steel and concrete trestles, 22 ft. wide, over Key Highway, at Locust Point. About $20,000. H. A. Lane, ch. engr.

Fla., Waldo—Comrs. Alachua Co. (Gainesville) receive bids in May building 170 ft. bridge over Santa Fe River between here and Hampton, 16 ft. wide, 4 ft. high. W. E. Bryant, chn. co. comrs.

Minn., Elk River—See "Streets and Roads."

Wyo., Cody—See "Streets and Roads" under Wyoming.

Wyo., Kemmerer—See "Streets and Roads" under Wyoming.

Mo., St. Louis—City having plans prepared building 1400 ft. rein.-con. viaduct over Missouri & Pacific R.R. tracks, at River Des Peres, cost $225,000, also one over Wabash Ry. tracks, at Hodiamont Ave., $32,000. L. R. Bowen, city engr.

Cal., Los Angeles—See "Miscellaneous."

Cal., Redwood City—City plans election to vote on bonds to build 7 concrete bridges, outfall sewerage system, pumping plant, fire house, concrete retaining wall on Maple St. and macadam road leading to pumping station. C. E. Dimmick, city engr.

Que., Cartierville—See "Buildings."

Que., Rawdon—City Council had plans drawn for concrete and steel bridge, 203 ft. long, 16 ft. wide, over Burroughs River. I. E. Vallee, Parliament Bldg., Quebec, engr.

BIDS DESIRED

Conn., New Haven—Until May 8, by city, building 3 span, 125 ft. rolled steel girder beam bridge, encased in concrete, over West River, on Washington Ave., 50 ft. wide, including 25 new abutments and 2 piers, of local sandstone on pile and timber foundation, rein.-con. flooring. F. L. Ford, city engr.; advertised in this issue. Noted Feb. 6.

Ga., Macon—Until May 20, by Comrs. Bibb Co. building 3 large concrete bridges.

O., Bowling Green—Until May 19, at office of R. S. Gillespie, co. aud. building (1) bridge abutment and retaining wall for bridge over Jackson Cut-off, Milton Twp., cost, $16,165; (2) bridge abutment and retaining wall, Jackson Twp., $3976.

Mich., Adrian—Until May 10, by city, building rein.-con. bridge over Raisin River on West Maumee St., 54 ft. between abutments, 22 ft. from floor to bed of stream. N. B. Washburn, comr.; advertised in this issue.

Ia., Chariton—Until May 5, by Bd. Superv. Lucus Co., building one 60 x 18 ft. pony truss bridge on concrete abutments, one 32 x 16 ft. I-beam bridge on concrete abutments and one I-beam bridge, consisting of 3 spans 18 x 18 ft. About $11,990. C. W. Eby, co. engr.

Bridges (Continued)

Ia., Marion—Until May 15, by Bd. Supervs. Linn Co., building 13 concrete box culverts and 2 concrete slab bridges. About $14,462. Work involves 589 cu.yd. rein.-con., 18 tons reinforcing steel and 628 lin.-ft. wood piling. R. W. Gearheart, co. engr.

Minn., Albert Lea—See "Excavation and Dredging."

Minn., Long Prairie—Until Apr. 7, by E. M. Burg, aud. Todd Co., building Bridge No. 3046, 23 ft. long, 20 ft. wide; No. 3065, 40 ft. long, 20 ft. wide. About $10,500. A. M. Graves, Long Prairie, engr.

Kan., Hutchinson—See "Streets and Roads."

Kan., Lawrence—See "Streets and Roads."

Kan., Lyons—Until May 5, by E. H. Sledd, clk. Rice Co., building one 90 ft. steel truss bridge, 20 ft. roadway also one 30 ft. and one 35 ft. rein.-con. bridges, 20 ft. roadway. About $17,500. S. Ainsworth, co. engr.

S. D., Aberdeen—See "Streets and Roads"

Ariz., Jerome—Until May 19, by T. Maddock, state engr., Phœnix, building bridge over Verde River at Cottonwood, near here. About $40,000. Noted Feb. 27.

Wash., Cathlamet—Until May 5, by Comrs. Wahkiakum Co., building 260 ft. pile and timber bridge over Birnie Slough. R. Buswell, chn.

Que., North Temiskaming—Until May 13, by Dominion Government, Ottawa, Ont., building steel superstructure of bridge over Quinze River, Pontiac Co., here, consisting of 2 spans, each 75 ft. long, 2 spans each 237 ft. 1¾ in. long, 18 ft. 6 in. clear roadway and rein.-con. floor. Work involves about 500 tons steel. Cost, $80,000. A. Lefleur, c/o Dept. Pub. Wks., Ottawa, ch. engr.

Que., St. Croix—Until May 12, by J. Bedpard, secy. Lotbiniere Co., building concrete and steel bridge over Duchene River between St. Edouard and St. Emilie, 318 ft. long, 18 ft. wide. I. E. Vallee, Parliament Bldg., Quebec, engr. Noted Mar. 13 under "Lotbiniere."

Que., Ste. Marie Monnoir—Until May 3, by Town Secy., building concrete and steel bridge on St. Louis Rd. I. E. Vallee, Parliament Bldg., Quebec, engr.

Que., St. Valerien—Until May 5, by C. Bouthillier, secy. city council, building 3 concrete and steel bridges. I. E. Vallee, Parliament Bldg., Quebec engr. Noted Apr. 24.

Ont., Bright—Until May 12, by G. Oliver, building steel bridge with concrete abutments over Horners Creek, 40 ft. long, 22 ft. wide, for town. About $15,000. E. J. Ure, Woodstock, engr.

Ont., Lindsay—Until May 8, by Bowman & Connor, engrs., 31 Queen St., W., Toronto, building 2 concrete bridges with railings, over Grass River for Victoria Co., 20 and 38 ft. long respectively. About $30,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., New Haven—City received bids building bridge over Mill River on Orange St., (1) concrete; (2) limestone; (a) 70 ft. wide, (b) 60 ft. wide, to have two 32-ft. spans and one 36-ft. span, from C. W. Blakeslee & Sons, 58 Waverley St., (1a) $90,734; (2a) $92,902; (1b) $81,588; (2b) $83,756; C. W. Murdock, 185 Church St., (1a) $95,725; (2a) $97,828; (1b) $84,629; (2b) $86,732; Sperry & Treat Co., 39 Church St., (1a) $99,539; (2a) $101,687; (1b) $90,469; (2b) $92,621. Noted Apr. 3.

★N. J., Cape May—Comrs. Cape May let contract building concrete bridge over Cedar Swamp Creek, to S. G. Corson, Ocean City, $15,365.

Wis., Eau Claire—See "Streets and Roads."

Tex., Dallas—City received bids building rein.-con. bridge over Turtle Creek on Fairmont St., from Klein Bros. Co., Juniun and Walton Sts., $29,120; McCall-Moore Eng. Co., Commonwealth Bldg., $29,500; R. J. Estep & Co., South West Life Bldg., $32,182. Noted Nov. 28

Structural Steel

BIDS DESIRED

Ia., Marion—See "Bridges."

Ont., Bright—See "Bridges."

Reinforced Concrete

PROPOSED WORK

Mass., Boston—See "Industrial Works."

Mass., Dorchester (Boston P. O.)—See "Industrial Works."

Cal., San Francisco—See "Industrial Works."

BIDS DESIRED

Ga., Macon—See "Bridges."

Ia., Chariton—See "Bridges."

Ia., Marion—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., South Manchester—See "Industrial Works."

★N. J., Cape May—See "Bridges."

Tex., Dallas—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Northampton—City appropriated $75,000 bonds to build permanent roads.

R. I., Providence—City plans to widen, pave and curb North Main St. from Benefit to Grand View Sts. About $350,000. M. H. Bronsdin, city engr.

N. Y., Albany—Bd. Contr. & Supply rejected bids received Apr. 7, paving Ridgefield and Mapleridge Aves. Work will be readvertised. Noted Apr. 17.

N. Y., Mt. Morris—Bd. Trustees plans to expend between $10,000 and $12,000 to improve streets. Address F. P. Conlon, pres.

N. Y., Syracuse—City plans to pave Greenwood Pl. from Clarendon St. to Bristol Pl.; Cortland Ave. from Englewood Ave. to city line; Plum St. to west line Lot 22, Blk. 431; resurface West Water St. from Onondago Creek to West St. and West Fayette St. from Seneca to Geddes Sts.; also build sidewalks on 7th, North and Court Sts. to Lemoyne St. H. C. Allen, city engr.

N. J., Salem—City plans to pave East and West Bway., Front and Oak Sts., Market St. from Bway. to Grant St., Grant St. from Market to 7th Sts., and Griffith St. from Market to 4th Sts.; also improve 7th and Walnut Sts., and Grant Sts. from Hubbell to end of paved portion of lower end 5th St. About $57,000.

W. Va., Beckley—Raleigh Co. soon receives bids building 13 mi. vitr. brick road. C. Scott, Jr., Beckley, engr.

W. Va., Hinton—Summers Co. election May 3, to vote on $36,000 bonds to pave roads in Jumping Branch Dist. Z. V. Burks, Bellpoint, engr.

W. Va., Kingwood—Preston Co. soon receives bids building 3⅜ mi. road from Cadell to Rag Tavern. About $23,386. E. H. Wilhelm, Kingwood, engr.

W. Va., Lewisburg—Greenbrier Co. voted on $136,000 bonds, which will be supplemented with Federal and state aid funds, to pave and grade 18 mi. road, 12 ft. wide, and build bridges in Meadow Bluff Dist. Total cost, $199,375. G. H. Hill, Charleston, engr.

W. Va., Morgantown—Monongalia Co., Cass Dist., voted $300,000 bonds to build 17 mi. vitr. brick road, 24 ft. wide. W. S. Downs, Morgantown, engr.

W. Va., Wayne—Wayne Co. soon receives bids building 25 mi. road, 16 ft. wide, brick, concrete or bituminous. About $1,150,000. A. Levering, co. engr.

Ga., Americus—Sumter Co. voted $500,000 bonds to pave roads. Federal Government will appropriate like amount. Noted Mar. 20.

Ga., Camilla—City plans to pave main streets. J. B. McCrary, 1408 3rd Natl. Bank Bldg., Atlanta, engrs.

Ga., Columbus—Muscogee Co. election July 29 to vote on $740,000 bonds to pave main roads.

Ga., Fitzgerald—Ben Hill Co. plans election to vote on $350,000 bonds to build roads.

Ga., Griffin—Spaulding Co. plans election soon to vote on $420,000 bonds to build roads. Federal Government will appropriate like amount if election carries.

Ga., La Grange—Troup Co. plans election to vote on $500,000 bonds to build roads.

Ga., Moultrie—Colquitt Co. voted $500,000 bonds to build about 100 mi. roads. Federal Government will appropriate toward cost.

Ga., Nashville—Berrien Co. election May 14 to vote on $500,000 bonds to build about 75 mi. roads.

Ga., Tifton—Tift Co. election soon to vote on $300,000 bonds to build roads.

Miss., Greenwood—City plans to pave and improve streets. About $40,000.

La., Cameron—Cameron Parish, Rd. Dists. No. 3, 4 and 5, will sell $390,000 bonds June 2, to build highways. T. H. Mandell, Frank Bldg., Lake Charles, engr.

La., Houma—Terrebonne Parish voted $105,000 bonds to build 35 mi. hard surfaced highway from here to Assumption Parish line. Noted Mar. 20.

O., Bowling Green—Wood Co. having plans prepared grading, draining and paving 6 mi. County Line Rd. from Fostoria to Sandusky Co. line, 10 ft. wide, rein.-con., 6 in. thick at sides, 8 in. thick in center. About $213,960. J. Gallier, Bowling Green, engr.

O., Cleveland—City plans to pave West 95th St. from Almira to Maywood Aves., involving 1600 cu.yd. excav., 34,710 sq.ft. 4 in. brick on 6 in. concrete base, and 2810 ft. 5 in. stone curbing; West 44th St. from Denison Ave. to south end, 12,120 sq.ft. 4 in. brick on 6 in. concrete base, 795 ft. 5 in. stone curbing; West 35th St. from Mapledale to Trowbridge Aves., 3200 cu.yd. excav., 62,000 sq.ft. 5 in. brick on 6 in. concrete base, 4600 ft. 5 in. stone curbing; East 119th St. from Kinsman Rd. to Union Ave., 1400 cu.yd. excav., 33,310 sq.ft. 4 in. brick on 6 in. base, 2550 ft. 5 in. stone curbing; East 117th St. from Kinsman Rd. to Ely Ave., 1900 cu.yd. excav., 30,290 sq. ft. 4 in. brick on 6 in. concrete base, 2600 ft. 5 in. stone curbing; East 74th St. from Aetna Rd. to Union Ave., 1350 cu.yd. excav., 33,070 sq.ft. 4 in. brick on 6 in. concrete base, 2780 ft. 5 in. stone curbing; East 49th St. from Czar to Barkwell Aves., 1275 cu. yd. excav., 22,930 sq.ft. 5 in. brick; Roanoke Ave. from West 30th St. to Broadview Rd., 1890 cu.yd. excav., 29,380 sq.ft. 4 in. brick on 6 in. base, 2600 ft. 5 in. stone curbing; Franklin Ave. from Franklin Circle to West 65th St., 22,100 sq.yd. asphalt, 900 sq.ft. 6 in. concrete base, 1000 ft. 5 in. stone curbing; Carnegie Ave. from East 89th to 100th Sts., 12,000 cu.yd. excav., 98,720 sq.ft. 8 in. concrete base, 10,970 sq.yd. asphalt or 3½ wood block, 21,000 sq.ft. 2½ stone flagging, 3450 ft. 5 in. stone curbing; Bessemer Ave. from East 65th to 75th Sts., 8570 cu.yd. excav., 98,400 sq.ft. 5 in. brick on 6 in. concrete base, 5760 ft. 5 in. stone curbing; Aetna Rd. from East 93rd St. to Erie R.R., 3000 cu.yd. excav., 30,515 sq.ft. 5 in. brick on 6 in. concrete base, 2311 ft. 5 in. stone curbing. R. Hoffman, city engr.

O., Columbus—City plans to grade, curb, pave and lay water mains in 2 mi. 5th Ave. from Perry St. to alley west of Parker St., 30-32 ft. wide, brick or asphalt. About $127,407. H. A. Maetzel, city engr.

O., Columbus—City plans to pave 1200 ft. Franklin Park W. from Broad St. to Franklin Park S., 30 ft. wide. Work involves 2950 sq.yd. asphalt on present brick pavement and 1220 cu.ft. brick gutters. H. A. Maetzel, city engr.

O., Columbus—Comrs. Franklin Co. plan to improve 3.6 mi. Groveport Pike, 3.2 mi. Refugee Rd., 4.5 mi. Opossum Run Rd., 0.75 mi. Durr Rd., 5.75 mi. Brice Rd., 3.2 mi. James Rd., 3.4 mi. Columbus and Gahanna Rd., 4 mi. Dublin and Worthington Rd. and 5.5 mi. Olentangy River Rd.

O., Columbus—Franklin Co. soon receives bids grading and paving 12½ mi. Georgeville Rd., 18 ft. wide, waterbound macadam. J. A. Dunn, co. engr.

O., Dayton—City plans to pave 2000 ft. 3rd St. from Perry to St. Clair Sts. Work involves 13,400 sq.yd. wood block, 4200 lin.-ft. granite curbing and 2000 sq.ft. cement sidewalk. F. O. Eichelberger, city engr.

O., St. Bernard—City plans to lower grade of Carthage Pike over Miami and Erie Canal and resurface with granite. Work involves 1800 sq.yd. granite block on 6 in. concrete base, 400 sq.yd. bituminous, 520 lin.ft. granite curbing (reset) and 4000 sq.yd. 4 in. cement sidewalk. H. A. Nunlist, 309 Traction Bldg., Cincinnati, engr.

O., Springfield—City plans to pave 802 ft. Spring St. from High to Columbia Sts., 45 ft. wide, cost $15,641; 4563 ft. Limestone St. from Washington to Rice Sts., 45 ft. wide, $104,810; 926 ft. Limestone St. from Main St. north, 43½ ft. wide, $24,280. O. E. Carr, city mgr.

O., Springfield—Clark Co. having plans prepared paving Natl. Rd. from Donnelsville to Miami Co. line and Dayton-Springfield Rd. from Springfield to Green Co. line, 16 ft. wide, concrete, brick or macadam. W. H. Sieverling, co. engr.

Streets and Roads (Continued)

O., Toledo—City plans to grade, drain, curb and pave 1309 ft. Upton Ave. from Dorr St. to Avondale Ave., 26 ft. wide, involving 2269 cu.yd. earth excav. Bids will be received on all types of pavement. About $22,719. H. A. McClure, city engr.

O., Toledo—Comrs. Lucas Co. having surveys made and plans prepared grading, draining and paving 3.75 mi. Archbold-Whitehouse Rd., No. 132, 10 ft. wide; 2.96 mi. Midway Rd. No. 115 from Toledo-Wauseon I. C. H. to Waterville Twp. line, 10 ft. wide; 2.56 mi. Midway Rd. No. 115 from Obee No. 138 to Whitehouse-Spencer Rd. No. 117, 10 ft. wide, All waterbound macadam. C. L. Rood, co. engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving streets with asphaltic concrete on 6 in. concrete base, Berea or Medina curbstone, and alleys with 1 course concrete with retaining plank sides; Florida Ave. from Michigan to Radcliffe Aves., 26 ft. wide, cost $56,205; Philadelphia Ave. from Linwood Ave. to Dexter Blvd., 26 ft. wide, $35,767; Tireman Ave. from Epworth Blvd. to Livernois Ave., 30 ft. wide, $26,132; 12th St. from Webb to Fenkell Aves., 32 ft. wide, $138,375; alleys in block bounded by Cameron, Richmond, Clay and Euclid Aves., 11-19 ft. wide, $8100; 3rd, 2nd, Pingree and Blaine Aves., 19 ft. wide, $4830; Elmwood, Moran and Palmer Aves., also East Grand Blvd., 17 and 20 ft. wide, $5460; T alley between Wilson, Kipling, Bethune Aves. and West Grand Blvd., 18 ft. wide, $5600; T alley between Chene St. and Jos. Campau, Hunt and Charlevoix Aves., 20 ft. wide, $6850; alley east of and parallel to McClellan Ave. between Marietta and Cutler Aves., 20 ft. wide, $1360; Wilson and Byron Aves. and Chicago and Boston Blvds., 20 ft. wide, $5140. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on 6 in. concrete base, Berea or Medina curbing, Weyher Ave. from McClellan to Pennsylvania Aves., 26 ft. wide, cost, $9600; Walbridge St. from Van Dyke to Maxwell Aves., 26 ft. wide, $8700; Sunset Pl. from Woodward Ave. to John R. St., 24 ft. wide, $10,110; Brandon Ave. from Junction to Campbell Aves., 26 ft. wide, $8232; Sargent St. from Elmwood to Moran Sts., 20 ft. wide, $7800; Fremont Pl. from Elmwood to Ellery Sts., 20 ft. wide, $13,050; Collingwood Ave. from 12th St. to westerly terminus, 26 ft. wide, $17,719; Pittsburgh Ave. from Gilbert St. to Martin Ave., 26 ft. wide, $17,212; Casgrain Ave. from Army St. to Desmond Pl., 26 ft. wide, $28,750; also alley between Larchmont St., Firwood, Scotten and Tirman Aves., 20 ft. wide, 1 course concrete, $6360; T alley in block bounded by Chene St., Joseph Campau Ave., Antietam and Chestnut Sts., 15 and 20 ft. wide, 1 course concrete, $7010. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract paving on 6 in. concrete base, Berea or Medina curbing, (a) Distel Ave. from Fort to Olivet Sts., 26 ft. wide, involving 2162 sq.yd. asphaltic concrete, 1425 lin.ft. curbstone, 941 cu.yd. excav., 35 cu. yd. concrete under curbing, 99 lin.ft. retaining stone;

(b) Gartner Ave. from Beard to Lawndale Aves., 26 ft. wide, 12,588 sq.yd. asphaltic concrete, 8083 lin.ft. curbstone, 6696 cu.yd. excav., 234 cu.yd. concrete under curbing, 724 lin.ft. retaining stone;

(c) Harper Ave. from Hurlburt to Montclair Aves., 40 ft. wide less 18 ft. track space, 4167 sq.yd. asphaltic concrete, 3003 lin.ft. curbstone, 3584 cu.yd. excav., 155 cu. yd. concrete under curbing, 412 lin.ft. retaining stone, 3334 ft. 3 x 12 in. retaining plank;

(d) Senator Ave. from Beard to Lawndale Aves., 26 ft. wide, 12,331 sq.yd. asphaltic concrete, 7643 lin.ft. curbstone, 6511 cu.yd. excav., 231 cu.yd. concrete under curbing, 666 lin.ft. retaining stone;

(e) Alley No. 985, 18 ft. wide, 1830 sq.yd. 1 course concrete, 569 cu.yd. excav., 1725 ft. 2 x 6 in. retaining plank;

(f) Alley No. 986, 20 ft. wide, 1606 sq.yd. 1 course concrete, 611 cu.yd. excav., 1425 ft. 2 x 6 in. retaining plank;

(g) Alley No. 987, 20 ft. wide, 1550 sq.yd. 1 course concrete, 13 lin.ft. curbstone, 670 cu.yd. excav., 1 cu.yd. concrete under curbing, 27 lin.ft. retaining stone, 1136 ft. 2 x 6 in. retaining plank;

(h) Alley No. 988, 20 ft. wide, 1418 sq. yd. 1 course concrete, 569 cu.yd. excav., 56 lin.ft. retaining stone, 1260 ft. 2 x 6 in. retaining plank;

(i) Alley No. 989, 20 ft. wide, 578 sq.yd. 1 course concrete, 192 cu.yd. excav., 27 lin. ft. retaining stone, 417 ft. 2 x 6 in. retaining plank;

(j) Alley No. 990, 20 ft. wide, 1697 sq.yd. 1 course concrete, 598 cu.yd. excav., 1508 ft. 2 x 6 in. retaining plank. C. W. Hubbell, city engr.

Ill., Moline—City having plans prepared paving 15th St. from 23rd to 29th Aves.; 14th St. from 28th to 34th Aves.; 26th Ave. from 15th to 16th Sts.; 28th and 29th Aves. from 14th to 16th Sts. About $80,756. L. Payton, city engr.

Ill., Moline—City plans to pave 24th Ave. from 16th to 18th Sts. A; 18th St. from 23rd to 24th Aves.; 18th St. A. from 23rd to 25th Aves.; 48th St. from 2nd to 5th Aves.; also build watermains in 27th Ave. from 4th to 7th Sts. L. Payton, city engr.

Ia., Cherokee—Bd. Control of State Institutions, Capitol, Des Moines, soon receives bids paving 1½ mi. road bordering Iowa Hospital for Insane, here, 18 ft. wide, concrete, monolithic brick or asphaltic concrete. F. H. Mann, Ames, constr. engr.

Ia., Council Bluffs—Bd. Control of State Institutions, Capitol, Des Moines, soon receives bids paving 1 mi. road bordering Iowa State School for Deaf, here, 18 ft. wide, concrete, asphaltic concrete or monolithic brick. About $25,000. F. H. Mann, Ames, constr. engr.

Minn., Elk River—Comrs. Sherburne Co. plan to pave and build bridges on 10 mi. road, 18 ft. wide, involving 106,000 sq.yd. paving and 50,000 cu.yd. excav. About $250,000. F. W. Nickerson, Elk River, engr.

Minn., Fairmont—Comrs. Martin Co. plan to grade and gravel 17 mi. road, 24 ft. wide, involving 20,000 cu.yd. gravel surfacing and 90,000 cu.yd. excav. About $100,000. G. A. Taber, Fairmont, engr.

Minn., Faribault—Comrs. Rice Co. plan to pave 17 mi. road, 16 ft. wide, involving 175,000 cu.yd. paving and 80,000 cu.yd. excav. About $400,000. W. P. Chapman, Faribault, engr.

Minn., Glenwood—Comrs. Pope Co. plan to grade and gravel 32 mi. road, 24 ft. wide, involving 38,000 cu.yd. gravel surfacing and 180,000 cu.yd. excav. About $160,000. L. Martin, Glenwood, engr.

Minn., Henderson—Comrs. Sibley Co. plan to grade and gravel 20 mi. road, 24 ft. wide, involving 24,000 cu.yd. gravel surfacing and 120,000 cu.yd. excav. About $100,000. S. F. Nullen, Gaylord, engr.

Minn., Long Prairie—Comrs. Todd Co. plan to grade and gravel 30 mi. road, 24 ft. wide, involving 36,000 cu.yd. gravel surfacing and 180,000 cu.yd. excav. About $150,000. A. M. Graves, Long Prairie, engr.

Minn., Morris—Comrs. Stevens Co. plan to pave 10 mi. road, 18 ft. wide, involving 105,000 cu.yd. paving and 60,000 cu.yd. excav. About $250,000. W. A. Hunt, Morris, engr.

Minn., Morris—Comrs. Stevens Co. plan to grade and gravel 30 mi. road, 24 ft. wide, involving 36,000 cu.yd. gravel surfacing and 180,000 cu.yd. earth excav. About $150,000. W. A. Hunt, Morris, engr.

Minn., New Ulm—City soon lets contract for 4500 lin.ft. concrete curb and gutter on Franklin St. from Center to 5th Sts. S. and 5th St., S. from Washington to Franklin Sts. W. P. Backer, city clk.

Minn., Olivia—Comrs. Renville Co. plan to pave 8 mi. road, 18 ft. wide, involving 84,000 cu.yd. paving and 40,000 cu.yd. excav. About $200,000. F. M. Shepard, Olivia, engr.

Minn., Pipestone—Comrs. Pipestone Co. plan to gravel surface 42 mi. road, 24 ft. wide, involving 50,000 cu.yd. graveling. About $100,000. E. Keeler, Pipestone, engr.

Minn., Princeton—Comrs. Millelacs Co. plan to grade and gravel 19 mi. road, involving 20,000 cu.yd. gravel surfacing and 100,000 cu.yd. excav. About $90,000. A. W. Lenard, Millelacs, engr.

Minn., Red Lake Falls—Comrs. Red Lake Co. plan to issue $25,000 bonds to hard surface 10 mi. Jefferson Highway between here and Terrebonne.

Minn., Redwood Falls—Comrs. Redwood Co. plan to improve 20 mi. road, 24 ft. wide, involving 24,000 cu.yd. gravel surfacing, cost, $60,000; 6 mi. road, 16 ft. wide, 63,000 sq.yd. paving and 18,000 cu.yd. earth excav., $140,000 H. Nyron, Redwood Falls, engr.

Minn., Slayton—Comrs. Murray Co. plan to grade and gravel 16 mi. road 24 ft. wide, involving 19,000 cu.yd. gravel surfacing and 110,000 cu.yd. excav. About $80,000. G. L. Minder, Slayton, engr.

Minn., Sleepy Eye—Town rejected bid received Apr. 12, building 5½ mi. road and culverts in Home Twp. Work will be readvertised. Noted Apr. 3.

Minn., Windom—Comrs. Cottonwood Co. soon let contract building 17.5 mi. Federal Aid Project No. 43, State Rd. No. 12, involving 120,121 cu.yd. excav. And loading and hauling 21,000 cu.yd. gravel surfacing material. About $300,000. D. R. Savage, Windom, engr.

Minn., Worthington—Comrs. Nobles Co. plan to grade and gravel 24 mi. road, 24 ft. wide, involving 29,000 cu.yd. gravel surfacing and 150,000 cu.yd. excav. About $120,000. R. J. Boomer, Worthington, engr.

N. D., Grand Forks—City plans to pave 1 mi. 4th, 5th and 6th Sts. from Cheyenne to Griggs Aves., concrete. C. A. Giles, city engr.

Wyoming—State Highway Comn., Cheyenne, plans to build roads and bridges in following counties:

Albany Co., 10.75 mi. Sect. 1, earth and gravel and 26.87 mi. Sect. 2, gravel, Laramie-North Park Rd., cost $11,905 and $73,887 respectively. Albany and Carbon Counties, 23.4 mi. Medicine Bow-Marshall Rd., earth, $10,350.

Carbon Co., 13.88 mi. Baggs-Wamsutter Rd., earth, $14,500.

Lincoln Co., 6.23 mi. Sect. 1, 6.59 mi. Sect. 2, and 4.18 mi. Sect. 3, Cokeville-Star Valley Rd., earth, $13,428, $20,004 and $19,998 respectively; 4.12 mi. Sect. 1, gravel, and 9.17 mi. Sect. 2, earth, Big Piney Rd., $8125 and $30,968 respectively; Wilson-Moran Rd. and timber bridges, $24,310.

Natrona Co., 5.5 mi., bitulithic concrete, 2 mi. sand clay and 35.22 mi. earth, Casper-Salt Creek Rd., $219,735.

Niobrara Co., 6.76 mi. Sect. 1 and 11.27 mi. Sect. 2, Hat Creek-Warren Rd., earth, $10,000 and $20,227 respectively.

Park Co., Cody-Meeteetse Rd., including rein.-con. or I beam bridge, $8564; 1.2 mi. Wheat-Laramie Rd., earth, $4100.

Sheridan Co., 8.02 mi. Sheridan-Big Horn Rd., concrete or asphaltic gravel, $169,380.

Sweetwater Co., 14 mi. Eden Valley Rd., earth, $15,987; 7.5 mi. Spring Canyon Rd., earth, $7689.

Uinta Co., 1.5 mi. Carter-Lyman Rd., earth, $2242; 3.83 mi. Ft. Bridger-Urie Rd., earth, $5896. Noted Jan. 16.

Mont., Big Timber—Comrs. Sweet Grass Co. plan to grade 6 mi. Big Timber-Harlowton Rd. and 10 mi. Glasston-Big Timber Rd., $15,500 and $27,000 respectively. P. D. Pratt, Helena, state highway engr. Noted Apr. 3.

Mont., Butte—Silver Bow Co. election in July to vote on $300,000 bonds to build roads. Federal Government will be asked to appropriate like amount. P. D. Pratt, Helena, state highway engr.

Mont., Glendive—Dawson Co. election in July to vote on $125,000 bonds to build roads. Federal Government will be asked to appropriate like amount. P. D. Pratt, Helena, state highway engr.

Mont., Helena—City plans to pave 6th Ave. from Allen St. to Montana Ave., concrete, 20 ft. wide. About $25,000. J. McLeod, city engr.

Mont., Sidney—Richland Co. election in July to vote on $125,000 bonds to build roads. Federal Government will be asked to appropriate like amount. P. D. Pratt, Helena, state highway engr.

Mo., St. Louis—City plans to widen 3 mi. 12th St. from Washington to Florrisant Aves., from 60 to 80 ft. wide. H. Bartholomew, 5408 Maple Ave., engr.

Mo., St. Louis—City plans to widen 1 mi. Washington Ave. from Jefferson to Grand Aves., from 60 to 80 ft. wide. About $568,000. W. W. Horner, city engr.

Tex., Fairfield—Comrs. Freestone Co. soon receive bids grading, macadamizing and building rein.-con. bridges and culverts on 2.79 mi. Highway No. 7, including road up to precinct line of county, 60 ft. wide. About $40,500. Work involves 1.6 acres clearing and grubbing, 2.79 mi. macadam and gravel surfacing, 262 cu.yd. rein.-con. and 18,315 cu.yd. earth excav. T. E. Huffman, c/o Bryant & Huffman, Littlefield Bldg., Austin, engr.

Idaho, Idaho Falls—City election May 9, to vote on $58,000 bonds to pave streets. G. B. Riches, city clk.

Arizona—State and Federal Government plan to pave 7 mi. road from Tempe to Mesa. About $207,000. T. Maddock, Phoenix, state engr.

Oregon—State Highway Comn., Salem, plans to build highway from Lakeview to Klamath Falls. W. L. Thompson, comr.

Ore., Cottage Grove—City plans to improve 12th St. from Madison to Main Aves.; Quincy Ave. from 1st to 6th Sts. and Jefferson Ave. from 10th St. east to end of avenue. O. L. Nichols, engr.

Streets and Roads (Continued)

Ore., Helix—City having plans prepared paving various streets. Cost to exceed $10,000.

Ore., Hillsboro—City plans to improve Jackson, 7th, West Maple and 6th Sts. E. McCormick, city recorder.

Ore., Pendleton—Umatilla Co. applied to State Highway Comn., Salem, for aid to complete Wild Horse Rd. from Eastland to Washington state line, also build hardsurface road from Reith west to Morrow Co. line.

Ore., Pilot Rock—City plans to plat John W. Etter land northeast of here on Pendleton Rd. for new addition to city.

Ore., Seaside—City plans to pave and improve streets. E. S. Abbott, city aud.

Cal., Beverly Hills—See "Miscellaneous."

Cal., El Centro—Comrs. Imperial Co. recommended paving 40 mi. road from Niland to Calexico, via Calipatria, Brawley, Lockwood, Imperial, El Centro and Heber; 20 mi. road from Mt. Signal near Calexico to Bond's Corner; 12 mi. road from El Centro to Holtville and eastward; 20 mi. cross road east and west about 7 mi. north of here; 15 mi. cross road east and west on Brawley Rd.; 15 mi. road west of Holtville to connect easterly ends of above cross roads. G. R. Wade, Brawley, co. highway engr.

Cal., Los Angeles—See "Miscellaneous."

Cal., Manteca—City plans to pave 2 mi. Yosemite Ave. and Hogan Rd., 30 ft. wide, asphaltic macadam 6 in. thick. About $31,500. Noted Apr. 10.

Cal., Modesto—City plans to pave and curb 3 blocks Stanislaus St., concrete. About $15,000.

Cal., Redwood City—See "Bridges."

Cal., Visalia—Comrs. Tulare Co. plan to build 10 mi. mountain road from forks on Tule River east of Porterville to Camp Nelson. L. Moye, co. surv.

N. S., Wolfville—City voted $25,000 bonds to pave and improve streets.

Que., St. Edouard de Frampton—F. E. Boutin, secy. municipal council, soon lets contract building 7 mi. gravel road between Frampton and St. Malachie. About $30,000. G. Henry, Parliament Bldg., Quebec, engr.

Ont., Bridgeburg—Comrs. Welland Co. ((Welland) plan to build 1 mi. experimental concrete highway on Garrison Rd. Success or failure of experiment to determine expenditure of $100,000 ultimately on Garrison Rd.

Ont., Cayuga—Dept. Highways, Parliament Bldg., Toronto, plans to build road from Wentworth Co. to Jarvis and 2 mi. road on Indian line from Nelles Corners to Fisherville Side Rd. About $100,000.

Ont., Hamilton—City having plans prepared paving Balmoral, Beechwood, East Bend and Hilda Sts. About $43,000. E. R. Gray, City Hall, engr.

Ont., Islington—City plans to build 4 mi. road. About $40,000. E. A. James, 57 Adelaide St. E., Toronto, engr.

Ont., Mimico—City instructed James, Loudon & Hertzberg, engrs., 36 Toronto St., Toronto, to make surveys, prepare plans and receive bids for paving streets with bituminous concrete. About $75,000.

Ont., Williamstown—Glengarry Co. plans to expend $150,000 to improve roads and build culverts during 1919. J. Watson, Williamstown, clk.

BIDS DESIRED

Mass., Pittsfield—Until May 10, by Bd. Pub. Wks., building appurtenances and paving South and West Housatonic Sts. and Pecks Rd. A. B. Farnham, city engr.; advertised in this issue.

New York—Until May 15, by State Highway Comn., 55 Lancaster St., Albany, completing highways in following counties: Cattaraugus Co., 3 highways, 6.88 mi., 4.73 mi. and 2.17; Chautauqua Co., 3.90 mi.; Delaware Co., 6.51 mi.; Erie Co., 5.19 mi.; Montgomery Co., 2 highways, 2.49 mi. and 1.61 mi.; Nassau Co., 3 highways, 4.98 mi., 3.09 mi. and 3.38 mi.; Niagara Co., 7.79 mi.; Onondaga Co., 5.55 mi.; Orange Co., 9.18 mi.; Ulster Co., 3.17 mi.; Wayne Co., 3.97; building highways in Onondaga Co., 3.94 mi.; Rensselaer Co., 3.80 mi.; also repairing highways in Columbia, Livingston, Montgomery, Niagara, Orange, St. Lawrence, Steuben, and Westchester Counties. F. K. Greene, comr.; advertised in this issue.

N. Y., Brooklyn—Until May 7, by E. Riegelmann, boro. pres., Borough Hall, regulating, curbing, grading and laying sidewalks on Atkins Ave. from New Lots to Hegeman Aves.; also regulating and repaving with permanent asphalt pavement on 6 in. concrete foundation, Bayard St. from Manhattan to Graham Aves.; Conway St. from Bway. to Bushwick Ave.; Gravesend Ave. from Ave. T to Gravesend Neck Rd.; Humboldt St. from Stagg to Meserole Sts.; North 5th St. from Berry St. to Bedford Ave.; Sackman St. from Newport St. to Lott Ave.; 12th St. from 7th to 8th Aves.; 40th St. from 3rd to 4th Aves.; Ryerson St. from De Kalk to Lafayette Aves.; West 1st St. from 364 ft. north of West Ave. to West Ave.; New York Ave. from Clarendon Rd. to Newkirk Ave.; with permanent grade 1 granite pavement, Beard St. from Conover to Van Brunt Sts.; Clymer St. from Kent to Wythe Aves.; Congress St. from East River to Columbia St.; Conover St. from Hamilton Ave. to India wharf; Douglass St. from Bond St. to Gowanus Canal; 59th St. from 2nd to 3rd Aves.

N. Y., Cohoes—Until May 8, by city, paving Manor Ave. from intersection Reservoir St. to city line, brick, bitulithic, concrete, tarvia, or bituminous. E. M. Hebert, secy.; advertised in this issue.

N. Y., New York—Until May 5, by C. B. J. Snyder, supt. Bd. Educ., Municipal Bldg., grading, paving, draining, etc., playground adjoining P. S. 74, 220 East 63rd St.

N. Y., New York—Until May 9, by F. L. Dowling, pres. Manhattan Boro., Municipal Bldg., regulating and repaving with sheet asphalt on concrete foundation, William St. from Pearl to Fulton Sts.; 7th Ave. from curb to rail, south line 42nd St. to 123 ft. north of north curb 42nd St.; 59th St. from 5th to 8th Aves.; Amsterdam Ave. from 90th to 100th Sts.; 120th St. from 180 ft. more or less west of east river to 1st Ave.

N. Y., Oneonta—Until May 12, by Bd. Pub. Wks. at office of S. H. Close, clk., paving Maple St. from Main to south line Centre St.; Maple St. from south line Center St. to Normal School grounds; Elm St. from Main to Cedar Sts., and Spruce St. from Elm to Maple Sts., bituminous; advertised in this issue.

N. Y., Poughkeepsie—Until May 8, by Bd. Pub Wks., Eastman Park Mansion, furnishing and applying asphaltic oil 40-50% to 300,000 sq.yd. earth and macadam streets during 1919. Price to be per sq.yd. treated. E. W. Sylvester, supt.; advertised in this issue.

N. Y., Rome—Until May 7, by Bd. Pub. Wks. paving North George St. between Linden and Sycamore Sts.; Embargo St. between James and Robert Sts. and North Jay St. between Embargo and Elm Sts., bitulithic, brick and asphalt. About $16,500. J. L. Plunkett, city engr.

N. Y., S. I., St. George—Until May 6, by C. D. Van Name, pres. Richmond Boro., regulating and repaving with bituminous concrete on present macadam foundation, Seaside Blvd. from Sea Ave., to about 2000 ft. south of Sand Lane.

New Jersey—Until May 14, by State Highway Comn., Broad St., Bank Bldg., Trenton, building State Highway Route No. 4, Sect. 1A, Monmouth Co., involving 1400 sq.yd. concrete surface; State Highway Route No. 3, Da Costa-Hammonton Sect., Atlantic Co., involving 46,658 sq.yd. concrete surface. A. L. Grover, ch. clk.

N. J., Trenton—Until May 9, by city, paving 30,262 sq.yd. Hamilton, Market, Lafayette, Calhoun, Greenwood, Ferry and Laclede Sts., asphalt on 6 in. concrete base, also resurfacing Greenwood Ave., and Montgomery St., asphalt on present base. About $106,000. Work involves 2500 sq.yd. concrete gutter and 2500 sq.yd. asphalt gutter. A. Swan, Jr., 506 Riverside Ave., engr.

N. J., Union—Until May 5, by Town Council, improving Hudson and Palisade Aves., cost, $10,000 each. Noted July 18.

Pa., Bellvue—(Pittsburgh P. O.)—Until May 6, by J. M. Simeral, boro. clk., subgrading and paving West Riverview Ave. from Roosevelt Ave. to Gallegher St. Work involves 2270 sq.yd. vitr. brick and 626 cu.yd. earth excav. McBride Surveying & Eng. Co., 331 4th Ave., Pittsburgh, engrs.

Pa., Ebensburg—Until May 9, by Superv. East Carroll Twp., c/o Cambria Co. Controller, reconstructing 7 mi. and 152 ft. from Patton to Carrolltown and from Bradley Junction to 1 mi. south of Carrolltown, 18 ft. roadway of vitr. brick block on concrete base and curb. O. P. Thomas, Leader Bldg., Johnstown, engr.; advertised in this issue.

Pa., Ebensburg—Until May 2, by Superv. Richland Twp., c/o Controller Cambria Co., rebuilding 2.65 mi. Geistown-Elton Rd., Richland Twp., vitr. brick or 2 course rein.-con., on combination concrete base. Noted Apr. 10.

Pa., Ebensburg—Until May 5, by Superv. Summerhill Twp., c/o Controller Cambria Co., rebuilding 1.06 mi. road leading from Beaverdale to Wilmore, Summer Hill Twp., vitr. fire clay or shale brick on combination concrete base.

Pa., Ebensburg—Until May 5, by Superv. Lower Yoder. Twp., c/o. Controller Cambria Co., rebuilding 1.82 mi. road leading from city line of Johnstown and D St., to township line of Upper Yoder Twp., vitr. fire clay or shale brick on combination concrete base.

Pa., Harrisburg—See "Waterworks."

Pa., Lebanon—Until May 15, by D. M. Sharp, city clk., paving 1500 sq.yd. Cumberland St. from 4th to 5th Sts., 4600 sq.yd. from 9th St. to Pennsylvania R. R. and 9000 sq.yd. from Pennsylvania R.R. to 16th St., also 16,700 sq.yd. Chestnut St. from 4th to 12th Sts. Alternate bids on wood block, vitr. brick, cement concrete, asphaltic concrete and sheet asphalt. P. A. Volcker, city engr.; advertised in this issue.

Pa., Mt. Lebanon—(Pittsburgh P. O.)—Until May 5, by Bd. Comrs. Mt. Lebanon Twp., Allegheny Co., Pittsburgh, rebuilding track of Pittsburgh Rys. Co. on Washington Rd.; also for necessary grading and repaving between rails of tracks. Work involves 3700 lin.ft. track rebuilding and 2840 cu.yd. paving. F. W. Cooke, town clk. McCully Eng. Co., 709 Berger Bldg., Pittsburgh, engrs.

Pa., Phila—Until May 2, by G. E. Datesman, dir. dept. pub. wks., City Hall, grading, paving, surfacing streets and repairing and painting bridges. About $300,000.

Maryland—Until May 6, by State Rds. Comn., 601 Garrett Bldg., Baltimore, paving 0.23 mi. concrete road over Allen Mill Dam, Wicomico and Somerset Counties, Contr. No. 094-A; advertised in this issue.

Md., Cumberland—Until May 15, at office of City Clerk, curbing, paving and otherwise improving 8 streets. Work involves 9135 ft. concrete curbing, 7050 sq.yd. concrete, 930 sq.yd. wood block and 14,200 sq.yd. brick paving, miscellaneous sewer work, etc. Alternate bids will be asked on 11,280 sq.yd. sheet asphalt on part of above-mentioned paving. R. L. Rizer, city engr.; advertised in this issue.

Va., Norfolk—Until May 8, at office of C. E. Ashburner, city mgr., paving Boush St. from Brooke Ave. to Dartmouth St., involving 6130 sq.yd. Durax, Class D, No. 6; also furnishing material and constructing 10,200 lin.ft. concrete curb and gutter, Class C.; advertised in this issue.

W. Va., Pineville—Until May 14, by Wyoming Co. building 4 mi. Elmore-Herndon Rd., near Mullins, 22 ft. wide, involving 40,000 cu.yd. excav. About $40,000. A. B. Shannon, Pineville, engr.

S. C., Great Falls—Until May 12, by Great Falls Farm Co., grading road from here to Wateree, involving 5000 cu.yd. per mile with several stream crossings of 20,000 cu.yd. Work will be let in two sections, Sect. 2, 10 mi. and Sect. 3, 15 mi. A. T. Jones, engr.; advertised in this issue.

Miss., Tylertown—Until May 9, by Highway Comn. Dist. Nos. 1 and 2, Walthall Co., building 11.8 mi. Federal Aid Project No. 36, between Natchez and Mobile, Ala. Work involves 27 acres clearing and grubbing, 60,000 cu.yd. grading, 14,000 cu.yd. gravel. X. A. Kramer, Magnolia, state highway engr.

Tenn., Nashville—Until May 20, at office of J. W. Dashiell, secy. Bd. Comrs., for construction of certain bitulithic paving under Special Benefit Impvt. Ordinances Nos. 102, 103, 104 and 105; asphaltic concrete, No. 106; recut granite block, Nos. 107, 108, 109, 110, 111 and 112; wood block, Nos. 113 and 114; macadam (oil and gravel surface treatment) No. 115; advertised in this issue.

O., Lorain—Until May 8, by Dir. Pub. Serv., furnishing labor and material for 70,000 sq.yd. paving. C. C. Miller, city eng.; advertised in this issue.

O., Toledo—Until May 13, by Comrs. Lucas Co., grading, draining, curbing and paving 3 mi. Shenandoah and Richmond Rds., Potomac and Clarendon Drives, Mt. Vernon, Grand, West Woodruff and Oakwood Aves., Foster and Westmoreland Sts., 24 ft. wide. About $204,638. C. L. Rood, co. engr. Noted Mar. 27.

Ind., Terre Haute—Until May 15, by Bd. Wks. grading and paving 1650 ft. South 16th St., 30 ft. wide. Work involves 1800 cu.yd. grading and 5500 sq.yd. 8 in. concrete, asphalt, wood block or 200,000 brick blocks on 5 in. concrete base. About $17,000. R. A. Koerner, Terre Haute, engr.

Streets and Roads (Continued)

Mich., Milan—Until May 8, by village, grading, draining, curbing and paving 2500 ft. Wabash St. from bridge over Saline River to south corporation line, 16 and 20 ft. wide, involving 8448 sq.yd. concrete, 5427 lin.ft. concrete curbing and 4100 cu.yd. earth excav. Cost $27,695 Bids will be received on all types pavement. G. Champe, 610 Nasby Bldg., Toledo, O., engr.

Illinois—Until May 14, by State Highway Comn., Springfield, paving roads in following counties: Cook Co., 919.6 ft. Sect. 56, Route 15, various widths, involving 2000 sq.yd. concrete, cost $5100;

Crawford Co., 1295 ft. Sect. E, Route 5, 16 ft. wide, 2302 sq.yd. concrete, $8943;

La Salle Co., 5940 ft. Sect. K, Route 15, 15 ft. wide, 9900 sq.yd. concrete, $15,930; 4400 ft. Sect. L, Route 11, 18 ft. wide, 8800 sq.yd. concrete, $17,560.

McLean Co., 9800 ft. Sect. F, Route 7, 16 ft. wide, 7422 sq.yd. concrete, $28,336; 927 ft. Sect. E, Route 7, 1854 lin.ft. guard fence, $1150;

Shelby Co., 3750 ft. Sect. I, Route 5, 16 ft. wide, 6667 sq.yd. concrete, $12,007;

Macoupin Co., 3274 ft. Sect. H, Route 7, 10 ft. wide, 3638 sq.yd. concrete, $7433; 5200 ft. Sect. I, Route 12, 24 ft. wide, earth paving, $2200;

Henry Co., 31,556 ft. Sect. E, Route 6, 15 ft. wide, $20,820; 5200 ft. Sect. F, Route 8, 15 ft. wide, both oiled earth paving, $3913;

Rock Island Co., 19,984 ft. Sect. E, Route 8, 24 ft. wide, earth paving, 14,330 cu.yd. excav., $10,097;

Piatt Co., 2900 ft. Sect. D, Route 5, 10 ft. wide, 3222 sq.yd. brick, $9657; 2800 ft. Sect. E, Route 5, 10 ft. wide, 3111 sq.yd. brick, $9437. C. Older, ch. highway engr.

Wis., Sheboygan—Until May 5, by C. U. Boley, engr., City Hall, grading, constructing curbs and gutter and paving with concrete 3925 ft. Lighthouse St. from North 2nd St. to Bay View. Addition, 20 ft. wide, involving 1925 lin.ft. concrete curbing and guttering. Noted Apr. 10.

Wis., Sheboygan—Until May 6, by C. U. Boley, engr., City Hall, paving and curbing sidewalks with combination curb and gutter on 4350 sq.yd. Wisconsin Ave. from North 7th to North 19th Sts., 20 ft. wide, involving 4350 sq.yd. vitr. brick.

Ia., Clarion—Until May 6, by Bd. Supervs. Wright Co., grading 10.37 mi. road, involving 42,000 cu.yd. J. K. Hilton, co. engr.; advertised in this issue.

Ia., Des Moines—Until May 5, by city, curbing and guttering 12,183 ft. from north line Easton Blvd. to north line Washington St., East 18th St. from Court to Maury Sts. and from Maury St. at East 18th St. to East 21st St. About $12,000. C. Kastburg, city engr.

Ia., Esterville—Until May 6, by Bd. Supervs. Emmett Co., grading 13½ mi. Wallingford - Hoprig. Hoprig - Ringstead and Ringstead-Bancroft Rds., 24 ft. wide, involving 65,200 cu.yd. earth excav., cost, $25,156; surfacing 34½ mi. road from here to Armstrong, Spirit Lake and Huntington, Huntington to Dolliver, Wallingford to Terrill and Graettinger, Dolliver, to Maple Hill and Armstrong to Ringstead, 18 ft. wide, involving 26,000 cu.yd. gravel, $32,700. C. P. Smith, co. engr.

Minn., Benson—Until May 22, by Comrs. Swift Co., paving 7 mi. road, 18 ft. wide, grading and graveling 14 mi. road, Federal Aid Project No. 48. About $240,000. L. R. Johnson, Benson, engr. Noted Apr. 10.

Minn., Duluth—Until May 15, by J. A. Farrell, city comr., paving with concrete and laying 5 ft. concrete walk on either side of 21st Ave., east from Superior to 8th Sts., total length 2800 ft., 28 ft. wide. About $36,751.

Minn., Minneapolis—Until May 19, by Comrs. Hennepin Co., grading and paving 5 mi. Lyndale Ave., S., 20 ft. wide, involving 15,000 sq.yd. earth and 59,000 cu. yd. rock excav. About $140,000. C. E. Terrill, co. engr.

Minn., Pipestone—Until May 6, by T. A. Bailey, graveling 13½ mi. Job No. 1901, State Rd. No. 5. About $25.000. E. Keeler, Pipestone, engr.

Minn., Preston—Until May 27, by Comrs. Fillmore Co., grading and graveling 8 mi. Federal Aid Project No. 39, State Rd. No. 1, 20 ft. wide, involving 69,742 cu.yd. earth and 7564 cu.yd. rock excav. About $50,000. W. Dunbar, Preston, engr. Noted Apr. 10.

Kan., Hutchinson—Until May 12 by Reno Co., building Project No. 15, Federal aid road, Sect. A, 37,454 ft. from Rice Co. line to Nickerson, 18 ft. wide; Sect. B, 28,[illegible]2 ft., southeast from Nickerson, 18 ft. wide; Sect. C, 26,383 ft. northwest from Hutchinson, 18 ft. wide, all monolithic brick; Sect. D, 3 bridges, involving 300 cu.yd. excav., 351 cu.yd. Class A concrete and 13,779 lb. reinforcing steel.

Kan., Lawrence—Until May 23, by Douglas Co., building Project No. 7, Federal aid road, Sect. A, 16,709 ft. long between Douglas-Leavenworth Co. line and Lawrence, 18 ft. wide, concrete; Sect. C, 4735 ft. from west city limits of Lawrence to Station 70 plus 00, 28-32 ft. wide, earth grading; Sect. E, 19,235 ft. from end of Sect. C, Station 70 plus 00 to Station 262 plus 35, 18 ft. wide, concrete; Sect. F, 29,072 ft. from end of Sect. E, Station 262 plus 35 to Station 554 plus 00, 18 ft. wide, concrete; Sect. G, 26,736 ft. from end of Sect. F, Station 554 plus 00 to Station 821 plus 08.18, 18 ft. wide, concrete; Sect. B, 1 rein.-con. deck girder bridge, two 40 ft. spans.

S. D., Aberdeen—Until May 7, by State Highway Comn., at office of Co. Aud., here, grading, graveling, draining and building two 20 ft. span bridges on 12.84 mi. Aberdeen-Webster Rd., 18 ft. wide, Brown Co. Project involves, 42,731 cu.yd. earth excav., 49,343 yd. overhaul excav., 19,272 cu.yd. gravel surfacing, 471 cu.yd. concrete and 29,035 lb. steel. Noted Mar. 6, under "South Dakota."

S. D., Flandreau—Until May 6, by State Highway Comn., at office of Co. Aud., here, grading, graveling and draining, 13.56 mi. Flandreau-Madison Rd., Moody Co., involving 44 sq.yd. clearing and grubbing, 51,168 cu.yd. earth excav., 28,358 yd. overhaul excav., 6181 sq.yd. gravel surfacing, 427 cu.yd. concrete and 26,718 lb. steel. Noted Mar. 6 under "South Dakota."

S. D., Sioux Falls—Until May 15, by State Highway Comn., at office of Co. Aud., here, grading, graveling, draining and building bridges on 21.8 mi. Sioux Falls-Dell Rapids Rd., Minnehaha Co., 24 ft. wide, involving 55 sq.yd. clearing and grubbing, 180 cu.yd. rock excav., 89,666 cu.yd. earth excav., 53,329 yd. overhaul excav., 32,714 cu.yd. gravel surfacing, 100 cu.yd. binder for gravel, 23,993 lb. steel. About $100,600. Noted Mar. 13 under South Dakota.

N. D., Hillsboro—Until May 5, by Traill Co. building 24.87 mi. earth road. About $23,500. Federal Government will appropriate toward cost. W. H. Robinson, Bismarck, state highway engr.

N. D., La Moure—Until May 16, by Comrs. La Moure Co., building 4.79 mi. Federal Aid Project No. 31, gravel. About $29,000. Former bids rejected. Noted Mar. 27.

Montana—Until May 14 by State Highway Comn., Helena, gravel surfacing 2.02 mi. Hardin-Custer Rd.; 7.5 mi. Red Trail east of Glendive; 9 mi. Red Trail west of Glendive; 2.69 mi. Black and White Trail between Red Lodge and Bear Creek. P. D. Pratt, Helena, state highway engr. Noted Apr. 3.

Tex., Columbus—Until May 15, by Comrs. Colorado Co., building 17.12 mi. highway known as Highway No. 4, from Weimer through Columbus to Eagle Lake, 16 ft. wide, gravel macadam with bituminous top. About $160,000. Work involves laying 130 ft. 24 in. and 20 ft. 18 in. galvanized pipe, 1 acre clearing and grubbing 8.81 mi. grader work and 32,274 cu.yd. earth excav. About $160,000. F. M. Rugeley, Columbus, engr.

Wash., Bremerton—Until May 12, by City Council, grading, paving, and building sewers in Burwell Ave., involving 7000 sq.yd. concrete and 3000 cu.yd. earth excav.; Washington Ave., involving 9000 sq. yd. concrete, 7000 ft. combined concrete curb and gutter, $45,600. F. Hathaway, Bremerton, engr. Noted Mar. 27.

Wash., Charleston—Until May 12, by City Council, grading and paving 3 mi. streets, concrete. About $180,000. F. Hathaway, Bremerton, engr.

Wash., Everett—Until May 6, by Comrs. Snohomish Co., surface grading and paving 1 mi. Lowell-Snohomish Rd. (known as Permanent Highway No. 35), 35 ft. wide, involving 5280 cu.yd. earth excav., 240 sq. yd. concrete pipe headers and 10,712 sq.yd. 6 in. concrete; 1.7 mi. Three Lakes Rd., Highway No. 37, 16 ft. wide; 1.25 mi. Maryville and Pilchuck Rd., Highway No. 34, 18 ft. wide, 6251 lin.ft. 8 in. concrete surface grading; 1 mi. Snohomish-Lowell Rd., Highway No. 36, 18 ft. wide, 5280 ft. surface grading and 10,738 sq.yd. 6-8 in. concrete. F. G. Tegtmeier, co. engr.

Wash., Seattle—Until May 12, by Comrs. King Co., improving 1.202 mi. Houghton-Medina-Bellevue Rd., Permanent Highway, No. 2-L, 20 ft. wide, involving 580 sq.yd. gravel and 8255 sq.yd. paving, cost, concrete, $22,469; monolithic brick, $29,899; 1.303 mi. Seattle-Renton Rd., Permanent Highway, No. 23, 13,874 sq.yd. paving, concrete, $36,736, monolithic brick, $49,916; 1.988 mi. Auburn-Enumclaw Rd., Permanent Highway, No. 11-D, 20 ft. wide, 23,334 sq.yd. paving, concrete, $58,807, monolithic brick, $79,808. S. Humes, co. engr. Noted Mar. 13.

Que, Arthabaska—Until May 8, by L. Lavargne, engr., Arthabaska, building 2 mi. macadam roads for town. About $15,000.

Man., Stonewall—Until May 3, by V. W. McFarlane, secy., ditching and grading 40 mi. road in rural municipality of Rockwood. D. M. Mawhimney, Stonewall, engr.

Man., Swan River—Until May 5, by J. Armstrong, secy.-treas., building 35 mi. roads.

PRICES AND CONTRACTS AWARDED

(★Indicates award or contract)

Massachusetts — State Highway Comn., Boston, received bids Apr. 22, building State Highway, Saugus Twp., involving 66,000 gal. bituminous macadam, 11,300 cu.yd. earth and 1500 cu.yd rock excav., from Warren Bros., Berkley St., Boston, $93,711; Welch & Moynihan, South Hamilton, $112,165; Rowe Constr. Co., 1231 Centre St., West Roxbury, $115,368. Noted Apr. 17.

★Mass., Boston—City let contracts to M. De Matteo, 154 Dudley St., Roslindale, paving Hallam and Holden Sts., 40 ft. wide, Dorchester Twp., involving 2000 sq.yd. asphalt on 7 in. concrete base, 1215 lin.ft. stone curbing, 6510 sq.ft. concrete sidewalk and 1000 cu.yd. earth excav., $9411; De Stefan Constr. Co., East Boston, Commercial St., 40 ft. wide, involving 7620 sq.yd. granite block on 6 in. concrete base and 2510 lin.ft. stone curbing, $21,664.

Rhode Island—State Bd. Pub. Rds., State House, Providence, received only bid Apr. 16, furnishing and applying 485,000 gal. asphaltic oil or refined tar by macadam sections of state highways, from Standard Oil Co., 26 Bway., New York City, asphalt $0.0657, oil $0.087 per gal. Noted Apr. 3.

★N. Y., Albany—Bd. Contr. & Supply let contracts paving Catharine St. to M. F. Dollard, 7 Hall Pl., $6500; paving Braelford St. and building sewer in Frisbie St., to T. Shaughnessy, 34 South Pine St., $7856 and $997 respectively. Noted Apr. 17.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., received bids Apr. 21, regulating and repaving (a) 4th St.; (b) East Ave.; (c) Hamilton St.; (d) 1st Ave.; (e) Jackson Ave. from Thompson Ave. to Bridge Plaza South; (f) from 2nd Ave. to Old Newtown Rd.; (g) from bridge plaza to 2nd Ave.; (h) 13th St., from Scott & Kurth, West New Brighton, S. I., (a) $5631; E. W. Fitzpatrick, 128 3rd Ave., (a) $5794; (g) $56,419; H. J. Mullen, Fulton St., Jamaica, (a) $6170; (d) $18,446; Uvalde Asphalt Paving Co., 1 Bway., New York City, (b) $13,038; (f) $136,525; (h) $45,255; Borough Asphalt Paving Co., 1301 Metropolitan Ave., Brooklyn (b) $14,893; (c) $40,678; (e) $41,820; (f) $136,340; (h) $50,880; Sicilian Asphalt Paving Co., 41 Park Row, New York City, (b) $15,513; (c) $42,074; (e) $36,603; (f) $128,820; (h) $45,703; Cleveland Trinidad Paving Co., Flushing, (c) $41,734; (e) $37,902; (f) $121,625; (h) $45,664; Hastings Paving Co., 25 Broad St., New York City, (d) $16,853; P. J. Kelly, (g) $49,936; T. A. Brown, (g) $52,767. Noted Apr. 17.

N. Y., New York—H. Bruckner, pres. Bronx Boro., received bids Apr. 22, regulating, grading, setting curbstones, flagging sidewalks, laying crosswalks, building approaches and fences, in (a) Corlear Ave.; repaving with granite blocks on concrete foundation, in (b) Morris Park Ave.; repaving with sheet asphalt, (c) Bathgate Ave.; (d) Intervale Ave.; (e) Clay Ave.; (f) East 163rd St.; repaving with bituminous concrete, (g) Vistor St., (h) Walton Ave.; (i) 177th St.; (j) East 178th St., from Spadera Contg. Co., 827 East 217th St., (a) $29,769; Taylor Constg. Co., (a) $33,719; T. Crimmins, 444 East 69th St., (a) $33,776; Leonard Paving Co., 233 Bway., (b) $140,744; P. J. Kearns, 2306 Creston Ave., (b) $141,131 and $144,725; T. Callahan, (b) $143,305; Uvalde Asphalt Paving Co., 1 Bway., (c) $11,280; (d) $16,038; (e) $11,135; (f) $10,435; (g) $6980; (h) $26,505; (j) $8472; Davney Asphalt Co., Inc., 1170 Bway., (c) $11,407; (d) $15,616; (e) $10,791; (f) $9915; (g) $7019; (i) $60,896; (j) $8495; Asphalt Const. Co., 2197 Madison Ave., (c) $11,458; (d) $15,083; (e) $10,464; (f) $9731; (g) $7112; (h) $26,925; (i) $63,737; (j) $8203; Union Paving Co., B'way and 112th St., (h) $27,138; (i) $62,593. Noted Apr. 17.

Streets and Roads (Continued)

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids Apr. 24, regulating and repaving, with sheet asphalt on concrete foundation (a) 10th Ave., (b) 43rd St.; with granite blocks, (c) 7th Ave.; (d) Greenwich St.; (e) 4th Ave., from, Davney Asphalt Co., foot of Quinby Ave., (a) $19,072; (b) $8019; Union Paving Co., Bway and 112th St., (a) $19,324; Cleveland Trinidad Paving Co., Flushing Ave., Flushing, L. I., (b) $8217; Sicilian Asphalt Paving Co., 41 Park Row, (b) $8518; W. J. Fitzgerald, 547 West 45th St., (c) $129,594; (d) $109,593; O'Rourke Constr. Co., 150 Nassau St., (c) $131,185; J. J. B. La Marsh, 37 Copper Sq., (d) $105,588; Asphalt Constr. Co., 2197 Madison Ave., (e) $13,870; Burnside Contg. Co., 270 Burnside Ave., (e) $13,121. Noted Apr. 17.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids Apr. 15, regulating and repaving with granite block on concrete foundation, (a) Park Pl.; (b) Beekman St.; (c) West 155th St., from point 140 ft. west of Washington Heights line of Bway. and Riverside Dr.; (d) with sheet asphalt, roadway of West 155th St. from Bway. to point 140 ft. west of Washington Heights Line of Bway., from O'Rourke Contg. Co., 150 Nassau St., (a) $32,234; (b) $10,349; (c) $18,791; W. J. Fitzgerald, 547 West 45th St., (a) $33,138; (b) $10,241; (c) $20,625; Regan-Towers Co., (a) $33,241; (b) $11,071; (c) $20,098; C. Holbrook, (a) $33,472; (b) $10,526; T. Crimmins, 444 East 69th St., (c) $19,723; Asphalt Constr. Co., 2197 Madison Ave., (a) $34,262; (b) $11,031; (c) $19,742; (d) $4699; Union Paving Co., Bway. and 112th St., (d) $4623; Uvalde Paving Co., 1 Bway., (d) $5030. Noted Apr. 10.

★**N. Y., S. I., St. George**—C. D. Van Name, pres. Richmond Boro., let contract building and repairing sidewalks on both sides of De Hart Ave., to J. Johnson & Sons, West Brighton, $3251; regulating and paving Richmond Turnpike, concrete granite blocks, to C. Vanderbilt. West Brighton, $42,569. Noted Apr. 10.

★**N. Y., Schenectady**—City let contract extending Green and Jefferson Sts. and eliminating bridges over abandoned Erie Canal, together with grading and paving, to J. Duguid, Schenectady. $12,702. Noted Mar. 6.

★**N. J., Cape May**—Comrs. Cape May Co. let contract widening Landis Ave. from Sea Isle City to Strathmere, from 20-30 ft., to E. A. Corson, Ocean City. About $20,000.

N. J., Mt. Holly—Comrs. Burlington Co. received only bid resurfacing 2 mi. Georgetown-Bordentown, Bordentown-Crosswicks Creek and Columbus-Harts Corner Rds., from Ross & Wheland, Broad St., Bank Bldg., Trenton, $175,000

N. J., North Bergen—Town received only bid improving 23rd St. from Hudson Blvd. west to Hackensack Plank Rd. from A. Capone, West Hoboken, Belgian block, $10,000, bituminous concrete. $12,000.

★**Pa., Pittsburgh**—City let contracts grading, paving and curbing following streets: (a) Jupiter Way, (b) Royal St., (c) Eckert Way, (d) Roessler St., (e) Wapello St., (f) Universal St., (g) Arabia Way, (h) Colville St., (i) Mulberry Way, (j) 56th St., (k) 53rd St., (l) Camelia St., (m) McCandless St. from Stanton to 53rd Sts., to J. T. Neelen, Perrysville, (a) $3969, (d) $3685; T. Cronin, 17th and Muriel Sts., (b) $3339, (i) $4539; M. O'Herron, 1st and McKean Sts., (d) $3685, (e) $6685, (h) $3749, (j) $4257; (k) $4190, (l) $24,396, (m) $16,560; McDonough & O'Toole, 3032 Landis St., (f) $28,123; Pittsburgh Paving Co., Bakewell Bldg., (g) $1985. Noted Apr. 17.

Pa., Pittsburgh—City received bids grading, paving and curbing (a) Realty Ave., involving 2245 sq.yd. stone block on 6 in. concrete base, 1844 lin.ft. steel protected curbing, 4877 cu.yd. earth excav.; (b) Creedmore Ave., 2612 sq.yd. vitr. brick and 1060 sq.yd. stone block on 6 in. concrete base, 2964 lin.ft. concrete steel protected curbing, 4840 cu.yd. earth excav.; (c) Hampshire Ave., 2612 sq.yd. vitr. brick and 507 sq.yd. stone block on 6 in. concrete base, 2386 lin.ft. concrete steel protected curbing, 2813 cu.yd. earth excav.; (d) Oakridge Ave., 574 sq.yd. stone block on 6 in. concrete base, 500 lin.ft. concrete steel protected curbing, 328 cu.yd. earth excav.; (e) Stevenson St., 1330 sq.yd. stone block on 6 in. concrete base, 685 lin.ft. steel protected curbing, 904 cu.yd. earth excav.; (f) Tonopah St., 1340 sq.yd. vitr. brick on 6 in. concrete base, 1229 lin.ft. steel protected curbing, 2862 cu.yd. earth excav.; (g) Warrington Ave., 10,660 sq.yd. stone block on 6 in. concrete base, 6565 lin.ft. steel protected curbing, 13,890 cu.yd. earth excav., 1595 cu.yd. trench excav., 79,500 lb. steel reinforcement, 16,000 lb. structural steel, etc., from T. Cronin, South 17th and Muriel Sts., (a) $22,452, (b) $25,720, (c) $18,991, (d) $4467, (e) $10,142, (f) $11,397, (g) $132,921; M. O'Herron, South 1st and McKean Sts., (a) 23,784, (b) $25,946, (d) $4632, (e) $9818, (f) $11,436, (g) $149,124; Booth & Flynn, 1942 Forbes St., (a) $24,036, (c) $19,568, (d) $4296, (e) $9013, (g) $143,248; M. Ott & Co., 414 Warrington St., (b) $26,379; F. and F. Diulis, 40 Boundary St., (c) $19,831; Pittsburgh Paving Co., Bakewell Bldg., (f) $11,061. Noted Apr. 17.

★**Maryland**—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract building 2.01 mi. Littletown Pike, 20 ft. wide, Carroll Co., Contr. CL-20, to Thomas, Bennett & Hunter, Westminister, $53,644; 3.51 mi. State Highway from Knoxville to Harpers Ferry, 20 ft. wide, Frederick and Washington Counties, Contr. W-16A, to Fisher & Carozza, 803 Calvert Bldg., Baltimore, $89,895; 2.51 mi. Clarkeville Pike, 20 ft. wide, Howard Co., Contr. HO-12, to Clairborne, Johnston & Co., 910 Garrett Bldg., Baltimore, $89,773, all concrete, 3 ft. dirt shoulders; 3.03 mi. Rock Hall-Swan Creek Rd., 14 ft. wide, 5 ft. dirt shoulders, Kent Co., Contr. K-12, to Kaufman & Co., Federalsburg, $76,220. Noted Apr. 10.

★**Md., Baltimore**—Bd. Awards let contracts paving private alleys in various sections of city as follows: Contr. No. 31a, to Arundel Constr. Co., 416 East Lexington St., $15,805; Contr. Nos. 32a and 33a, to G. Long Contg. Co., 1st Ave. and 13th St., $52,195. All cement concrete. Noted Apr. 3.

★**Md., Baltimore**—Bd. Awards let contracts paving Hughes St., old granite block on concrete with cement filler, Contr. No. 161, to P. Reddington & Son, 2 East Lexington St., $6815; Carlton, Rice, Stockton and Woodyear Sts., cement concrete, Contr. No. 162, Lovegrove, Wisen and Wyoming alleys, cement concrete, Contr. No. 163, to F. D. Carozza, 803 Calvert Bldg., $20,883 and $7653 respectively; paving around P. S. No. 47, cement and armored concrete curbing, to Marine Contg. Co., 8 East Lexington St., $2477. Noted Apr. 10.

★**Md., Baltimore**—Bd. Awards let contracts paving McCulloh, Francis, Retreat and Whitelock Sts. and Druid Hill Ave., Contr. 169, to Asphalt Block & The Co., Monroe and Laurens Sts., $170,614. Work involves 19,800 sq.yd. sheet asphalt, 4500 lin.ft. armored concrete curbing, 12,000 lin.-ft. old curb redressed and reset, 9900 sq.yd. railway area with 4400 sq.yd. granite block liners, 2300 sq.yd. vitr. brick gutters and 5000 cu.yd. grading. Noted Mar. 27.

★**Md., Baltimore**—Bd. Awards let contracts paving alleys in various sections, cement concrete, Contr. Nos. 37 and 39, to F. M. Latham & Co., 1417 Gorsuch Ave., $34,701 and $34,230 respectively.

★**W. Va., Middlebourne**—Tyler Co. let contract building 2½ mi. Class A bituminous macadam road from Middlebourne to Salem, to Allen & Horner, Clarksburg. About $70,000.

★**Ala., Enterprise**—City let contract paving 5000 sq.yd. Lee and Carmicael Sts., vitr. brick on sand and cement base, to Southern Clay Mfg. Co., Volunteer State Life Insurance Bldg., Chattanooga, Tenn.

★**Ala., Selma**—City let contract to Alabama Paving Co., Amer. Trust Bldg., Birmingham, building concrete sidewalks on both sides of Alabama Ave. from west curb line of Lauderdale St. to east curb line of Satterfield St.; Selma Ave. from east line of King St. to west line of Lauderdale St. and Selma Ave. from east curb of Broad St. to west curbline of Mechanic St., $1.45 per sq.yd. Noted Apr. 3.

★**Ky., Shelbyville**—City let contract paving 860 ft. Main St. between 6th and 8th Sts., 36 ft. wide, involving 3440 sq.yds. concrete, to Metzel Co., Newport, $11,136.

★**O., Akron**—Coventry Land & Impvt. Co., 1115 South Main St., let contract grading certain streets and lots in Firestone Park, 10,000 ft. long, 45-50 ft. wide, involving 50,000 cu.yd. earth excav., to Ward Bros., 1257 East 125th St., Cleveland. Noted Apr. 10.

★**O.**, Cleveland—City let contracts to Roehl Bros., West 25th St. and Clark Ave., paving sections of West 90th St., involving 2900 cu.yd. excav., 52,845 sq.ft. 4 in. brick on 6 in. base and 4330 ft. 5 in. stone curbing, $32,939, West 91st St., 2600 cu.yd. excav., 54,746 sq.ft. 4 in. brick on 6 in. concrete base, and 4460 ft. 5 in. stone curbing, $33,596, Denison Ave., 65,568 sq.ft. 5 in. brick on 6 in. concrete base, and 1600 ft. 6 in. stone curbing, $51,686; to Bentley Bros., 403 Electric Bldg., Lakeside Ave., 21,600 sq.ft. 4 in. wood block on 6 in. concrete base, 940 cu.yd. excav. and 940 ft. 6 in. stone curbing, $17,747, Lakeside Ave., 870 cu.yd. excav., 21,300 sq.ft. 4 in. wood block on 6 in. concrete base and 1000 ft. 6 in. stone curbing, $18,000, East 6th St., 6300 sq.ft. 5 in. granite block on 6 in. concrete base, 10 sq.yd. 6 in. wood block and 400 sq.ft. 6 in. concrete sidewalk, $6013; to Baldwin Bros., 4500 Euclid Bldg., Flora Ave., 380 cu.yd. excav., 15,600 sq.ft. 5 in. brick block and 1200 ft. 5 in. Berea stone curbing, $7012; Enterprise Paving Co., 8436 Bway Ave., East 58th St., 520 cu.yd. excav., 9120 sq.ft. brick, 9300 sq.ft. 6 in. concrete base and 760 ft. 5 in. stone curbing, $5785, East 57th St., 575 cu.yd. excav., 9555 sq.ft. 4 in. brick on 6 in. concrete base, and 785 ft. 5 in. stone curbing, $6055, Hege Ave., 870 cu.yd. excav., 13,175 sq.ft. 4 in. brick on 6 in. concrete base, and 1045 ft. 5 in. stone curbing, $8509; Rieley Bros., 357 The Arcade, East 102nd St., 13,020 sq.ft. 5 in. brick block and 1060 ft. 5 in. stone curbing, $6277; G. B. Herring, 527 Society for Savings Bldg., East 104 Pl., 3405 sq.ft. brick block, $1039.

★**O., Perrysburg**—City let contract paving 5th St., Trinidad Lake asphaltic concrete, 2 in. thick on 6 in. concrete base and concrete curbing, to Federal Asphalt Paving Co., 316 Rentschler Bldg., Hamilton, $56,977.

★**Mich., Detroit**—Dept. Pub. Wks. will resurface roadways in Belle Isle Park, involving 50,000 sq.yd. sheet asphalt, Bermudez Asphalt wearing surface on Mexican binder. About $75,000. Work will be done by day labor. Noted Apr. 24.

★**Mich., Midland**—Village let contract paving 3100 ft. Main, Gordon, Ashman, McDonald, Rodd and Townsend Sts., 24 ft. wide, to Globe Constr. Co., Kalamazoo, $65,488. Work involves 13,792 sq.yd. bituminous concrete on old base, 11,921 sq.yd. bituminous concrete on 6 in. concrete base, 6651 lin.ft. concrete curbing and 5740 cu.yd. earth excav. Noted Apr. 3.

★**Mich., Pontiac**—Oakland Co. let contract grading, paving and building drainage structures on 7 mi. road from here to Royal Oak, thence to Rochester and 1 mi. from here to Mt. Clemens, 16 ft. wide, concrete on gravel base, to G. F. Scharl, Battle Creek, $249,800.

★**Mich., Port Huron**—City let contracts, to J. H. Baker & Sons, Port Huron, paving 10th Ave. and 10th St. from Military St. to Pine Grove Ave., 30 ft. wide, cost $110,829; Lapeer Ave. from 16th to 24th Sts., 28 ft. wide, $22,422; 22nd St. from Griswolf to Railroad Sts., 28 ft. wide, and entire length of Railroad St., 24 ft. wide, $24,454, all concrete. Noted Apr. 3.

★**Wisconsin**—State Highway Comn., Madison, let contract paving 8.8 mi. road from Birch St., Eau Claire, to Main St., Chippewa Falls, to A. Larson & Co., Eau Claire, $212,648. Work involves 17.14 acres clearing and grubbing, 4500 cu.yd. borrow, 27,090 cu.yd earth and 645 cu.yd. rock excav., and 130 ft. concrete viaduct over Minneapolis, St. Paul & Sault Ste. Marie R.R. on Birch St., Eau Claire.

★**Wis., Sheboygan**—City let contract, to Jorgensen Constr. Co., Elm St., Denmark, grading, paving, curbing and guttering with concrete 25 mi. Upper Falls Rd., Koller Village, Sheboygan Twp., grading, $0.82, paving $1.80, concrete culverts, $18, total cost, $25,000; to J. Theune, Main St., Cedar Grove, 1.9 mi. Green Bay Rd., 18 ft. wide, Cedar Grove Village, grading, $1.05, paving, $1.79, concrete culverts, $18, total cost, $14,500. Noted Apr. 24.

★**Ia., Mapleton**—City let contract paving 55 blocks, involving 75,000 yd. 2-in. Texaco asphalt on 5-in. gravel base, to Natl. Roofing Co., 627 Paxton Blk., Omaha, Neb., $289,000. Noted Apr. 17.

★**Neb., Lincoln**—City let contract paving Starr and D Sts., to Able Const. Co., Terminal Bldg., $23,310. Noted Apr. 10.

★**Neb., Omaha**—Douglas Co. let contract paving 10,000 sq.yd. Bracken, Maple, Vetula and Linden Aves., 16 ft. wide, and Main Ave., 21 ft. wide, to Bauer & Johnson Co., 201 Farnan Bldg., $18,260.

★**N. D., Jamestown**—Comrs. Stutsman Co., let contract building Federal Aid Project No. 24, to Stevens Bros., St. Paul, Minn. $82,877. Noted Apr. 24.

★**Tex., Beaumont**—Comrs. Jefferson Co. let contract building 5 mi. State Highway No. 3 and 11 mi. State Highway No. 8, to Hardin & Hardin, Houston, $500,007. Noted Mar. 6.

Streets and Roads (Continued)

Tex., Dallas—City received bids from Texas Bitulithic Co., 1101 Praetorian Bldg., paving Shelby St. from Dickason to Maple Sts., involving 6498 sq.yd. paving, 3247 lin. ft. curb and gutter and 520 cu.yd. extra excav., $21,354; Knight St. from Cedar Springs to Brown St., 4529 sq.yd. paving 2310 lin.ft. curb and gutter and 350 cu.yd. extra excav., $14,871; Throckmorton St., from Cedar Springs to Maple St., 7642 sq. yd. paving, 2195 lin.ft. curb and gutter and 1157 cu.yd. extra excav., $24,225; Reagan St. from Cedar Springs to Maple St., 7395 sq.yd. paving, 2598 lin.ft. curb and gutter and 2390 cu.yd. extra excav., $23,585. All 2 in. bitulithic wearing surface on 5 in. concrete base.

★Utah—State Rd. Comn., Capitol, Salt Lake City, let contracts building 11.12 mi. State Highway between Midvale and Lehi, 18 ft. wide, to J. W. Mellen, Auditorium Bldg., $329,010; 4.95 mi. State Highway from Mogna east to Murray, 18 ft. wide, to P. J. Moran, Felt Bldg., $133,478; 5.36 mi. State Highway from Murray south to Midvale, 18 ft. wide, to Campbell Bldg. Co., New House Bldg., $121,330. Noted Apr. 24.

Wash., Hoquiam—City received bids improving Eklund Ave., involving (a) clearing and grading, (b) gravel top, (c) earth fill, from J. M. Webb, (a) $275, (b) $0.61 per yd., (c) $1.10 per cu.yd.; Peek & Emerson, (a) $.62 per yd., (b) $1.00 per yd., (c) $2.50 per cu.yd.; N. P. Willis, (a) $96, (b) $1.80 per yd., (c) $1.20 per cu.yd.

★Ont., Armitage—Town let contract building 3 mi. bituminous macadam road from Armitage to Holland Landing, to J. Jupp, Toronto. About $30,000.

★Ont., York—City let contracts building 5 mi. roads, 20 ft. wide, to R. S. Fisher, 7 Bowden Ave., $32,000; A. E. Jupp, 47 Sparkhill Ave., $30,000; E. A. Dagg, 559 Sherbourne St., $20,000. Contractors all of Toronto.

BIDS DESIRED

Pennsylvania—See "Streets and Roads" under Mt. Lebanon.

Railways

PROPOSED WORK

Quebec—Canadian Pacific R.R., Windsor St. Station, Montreal, soon receives bids electrifying branch line from Three Rivers to Shawinigan Falls and Grand Mere. J. M. Fairbairn, ch. engr.

Ontario—Hydro-Electric Co., University Ave., Toronto, plans to build radial railway between Toronto and Port Perry. H. H. Couzens, genl. mgr.

Ontario—City of Guelph plans to issue bonds to extend electric railway from Hespeler north to Mount Forest.

Excavation and Dredging

PROPOSED WORK

La., Thornwell—Drainage—Thornwell D. D. No. 1 plans election May 27 to vote on $36,000 bonds to improve and enlarge drainage system. T. H. Mandell, Frank Bldg., Lake Charles, engr.

O., Springfield — Drainage — Mad River Impvt. Assn. North, Clark Co., plans to deepen and straighten 8½ mi. Mad River channel and 15 mi. tributary streams; also build levees along river from Springfield north. W. H. Sieverling, co. engr.

Minn., Benson—Ditch—Comrs. Swift Co. plan to issue $50,000 bonds to build drainage ditch. D. P. Carney, aud.

Idaho, Caldwell—Drainage—City council passed resolution requiring F. J. Lockwood, city engr., to report on plan to change Indian Creek channel and build deep drain.

Ore., Springfield—Irrigation—Benham Irrigation Co., Eugene, plans to irrigate and develop 285 acres, 2 mi. northeast of here. S. C. Atlas in charge.

Cal. Concord—Ditch—Contra Costa Co. forming drainage district to carry overflow from Pacheo Creek. Work involves building main ditch, 200 ft. wide, with banks from 6-10 ft. high and necessary laterals. C. H. Hayden, Martinez, superv.

Cal., Los Angeles—Dredging—See "Miscellaneous."

Cal., Oxnard—Ditch—Oxnard D. D. having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for open ditch and pipe drainage system. About $200,000.

Ont., Ft. William—Dredging—City soon receives bids dredging mouth of Neebing River. Bonds for $175,000 voted for project.

B. C., Chilliwack—Drainage—Provincial Government, Victoria, plans to reclaim 30,000 acres in Sumas Lake area near here, by dyking and draining to prevent Fraser River overflowing banks. A. E. Foreman, c/o Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

N. J., West New York—Excavation—See "Buildings."

Wis., Sheboygan—Excavation—Until May 14, by J. Donahue, engr., York Bldg., excavating and laying 10-12 in. tile in D. D. No. 1, Sheboygan Falls Twp., Sheboygan Co. About $35,000. Work involves 1500 cu.yd. dry earth excav.

Wis., Sheboygan—Excavation—Until May 15, by J. Donahue, engr., York Bldg., excavating and laying 6500 cu.yd. 6-10 in. tile in drainage district in Cedar Grove Twp., Sheboygan Co. Cost between $25,000 and $30,000. Work involves about 6500 cu yd. dry earth excav.

Ia., Clinton—Dredging—Until May 5, by Bd. Supervs. Clinton Co., deepening and widening part of Old Goose Lake Drainage Ditch, 10,500 ft. long, drag-line work, involving 15,000 cu.yd. excav., $5250. J. W. Strohm, aud.; advertised in this issue.

Minn., Albert Lea—Ditch—Until May 5, by F. Davis, aud. Freeborn Co., building Co. Ditch No. 32, involving 110,331 ft. 6-34 in. tile, 30,521 cu.yd. open ditch main, 104 catch basins, 60 junction laterals, 12 rein.-con. bulkheads, 17 flood water inlets, extensions of abutments of highway bridges, retaining wall and spillway, etc. About $69,438. E. V. H. Brown, Albert Lea, engr.

S. D., Flandreau — Excavation — See "Streets and Roads."

Mo., Grant City—Drainage—Until May 16, at office of W. C. Okey, secy., Worth Co. D. D. No. 1., building main ditch and 8 laterals, involving 993,315 cu.yd. earth excav.; advertised in this issue.

Manitoba—Canal—Until May 6, by Dept. Pub. Wks., Ottawa, Ont., building 45,000 ft. canal between Little Pembina River and Pelican Lake, 11 ft. deep, 24 ft. wide, 37 ft. pile and timber bridge, 16 ft. wide, 40 ft. pile and timber dam and 50 ft. spillway. Work involves 30,000 cu.yd. earth excav. About $35,000. A Lafleur, c/o Dept. Pub. Wks., engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Trenton—Dredging—Bd. Commerce & Navigation, State House, let contract dredging section of proposed inland waterway connecting Barnegat Bay with Manasquan River, to Hill Dredging Co., Atlantic Ave. and Somerset Pl., Atlantic City, $0.22 per cu.yd. Noted Mar. 27.

★Colo., North Sterling—Excavation—North Sterling Irrigation Dist., Logan Co., Bank Bldg., let contract excavating canal involving 250,000 cu.yd. earth excav., to Quigley-Bonner Co., Carbon, Ind., 25c. to 37c. per cu.yd.

★Ont., Toronto—Excavation—Dominion Government, Ottawa, let contract excavating and demolishing existing buildings on Bay, Yonge and Front Sts., to be site of new customs warehouse, to P. Lyall Constr. Co., 120 James St., Montreal, Que. About $18,600.

Industrial Works

PROPOSED WORK

N. H., Keene—Plans are out for figures for 1 story, 62 x 106 ft. brick and concrete garage, sales and service station, etc., rein.-con. flooring, concrete foundation, for Cadillac Motor Car Co. agency. About $35,000. B. S. D. Martin, 86 Weybosset St., Providence, R. I., archt.

Mass., Boston—W. D. Young Co., 10 Washington St., plans to build 5 story rein.-con. factory and sales house, rein.-con. flooring, concrete foundation, on Babcock and Commonwealth Aves. About $225,000.

Mass., Dorchester (Boston P. O.)—Adams & Pond plan to build 2 story, 60 x 120 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, on Commonwealth Ave. About $50,000.

R. I., Pawtucket—Home Bleach & Dye Wks., Branch St., plans to build 4 story, 125 x 150 ft. storehouse. About $60,000.

Conn., Middletown—Rockfall Woolen Co., Maplewood St., plans to build brick addition to plant. About $50,000.

Conn., New Haven—J. Weinstein, archt., 6 Church St., soon receives bids building 2-story, 80 x 100 ft. brick and concrete bakery, rein.-con. flooring, concrete foundation, on Broad and Commerce Sts. About $50,000. Owner's name withheld.

N. Y., Brooklyn—Cushman Sons Inc., 49 Manhattan St., New York City, having plans prepared by L. S. Beardsley, archt., 40 West 32nd St., New York City, building 3 story, 140 x 200 ft. brick and steel bakery, rein.-con. flooring, concrete foundation, on Atlantic and Troy Aves., here. About $100,000.

N. Y., Brooklyn—Shampan & Shampan, archts, 50 Court St., receive bids about May 19, building 3 story, 60 x 100 ft., brick and steel garage, rein.-con. flooring, brick foundation, on Vanderbilt and DeKalb Aves., for W. Bauer, c/o archts. About $50,000. Noted Apr. 10.

N. Y., Buffalo—W. S. Brickell Co., archts., Mutual Life Bldg., soon receives bids building 2 story, 22 x 80 ft. steel and concrete, dairy product plant, concrete foundation, on Mesner St., for Beale & Son, 7375 Park Ave. About $25,000.

N. Y., Fredonia—Red Wing Grape Juice Co., soon lets contract building 4 story, 48 x 80 ft. rein.-con. and brick warehouse and factory, rein.-con. flooring, concrete foundation. About $40,000. W. H. Powers, c/o owner, archt.

N. Y., Glens Falls—Arrow Grip Mfg. Co. plans to build 2 story brick factory adjoining Delaware & Hudson R.R. About $150,000.

N. Y., New York—C. H. Allen, 138 William St., soon receives bids building 7-story brick and steel storage house, rein.-con. flooring, concrete foundation, at 119 Fulton St. and 56 Ann St. About $75,000. Montgomery & Riggs, 105 West 40th St., archts.

N. Y., New York—Industrial School, 418 West 41st St., having plans revised by G. M. McCabe, archt., 96 5th Ave., for 3 story, 50 x 99 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 418-420 West 41st St. About $55,000. Noted Apr. 3.

N. Y., New York—Terminal Warehouse Co., 17 South William St., having plans prepared by J. W. O'Connor, archt., 3 West 29th St., building two 9-story brick and steel warehouses, rein.-con. flooring, concrete foundation, at 29-31 South William St. About $100,000. J. H. Lynch, pres.

N. Y., Rochester—Whit-Field Map Co., Inc. plans to build factory. About $60,000. Address I. A. Whitman, Rochester.

N. J., Asbury Park—Victory Tire & Rubber Co., 385 East 149th St., New York City, plans to build 2 story, 75 x 165 ft., concrete and steel factory on Railroad Ave. here. About $125,000. E. A. Arend, Kinmoth Bldg., archt.

Pa., Nanticoke—Duplan Silk Co., 135 Madison Ave., New York City, soon lets contract building 1 and 2 story, 100 x 550 ft., brick and steel mill construction silk mill, rein.-con. flooring, concrete foundation, here. Ballenger & Perrott, 17th and Arch Sts., Phila., archts.

Ga., Columbus—Eagle & Phoenix Mills, Front St., plans to build brick power house and alter present plant. Lockwood, Greene & Co., Healy Bldg., Atlanta, engrs.

Ala., Cordova—Indianhead Mills plans to build 3 story, rein.-con. cotton mill. About $1,500,000. Lockwood, Greene & Co., Healy Bldg., Atlanta, Ga., engrs.

Tenn., Jackson—Bemis Bag Co., 601 South 4th St., St. Louis, Mo., plans to build two 4 story, 35 x 40 ft. rein.-con. locker towers at plant here. About $50,000. Stephen & Pearson, 820 Central Natl. Bank Bldg., St. Louis, Mo., archts.

O., Cleveland—Christain, Schwarzenberg & Gaede, engrs., 1900 Euclid Bldg., soon receive bids building 1 story, 60 x 131 ft. concrete, steel and brick addition for Fdry. Co., 3510 East 71st St. About $30,000.

O., Cleveland—Christain, Schwarzenberg & Gaede, engrs., 1900 Euclid Bldg., soon receive bids building 4 story, 90 x 100 ft., concrete, steel and brick factory for Grabler Mfg. Co., 6565 Bway Ave. About $100,000.

O., Cleveland—Cleveland Automobile Co., East 131st St. and St. Clair Ave., plans to build 4 story, rein.-con., steel and brick boiler house on London Rd. About $100,000. E. McGeorge, 1900 Euclid Ave., archt.

O., Cleveland—E. A. Curtiss, archt., 416 Guardian Bldg., soon receives bids for 2 story, 60 x 125 ft., rein.-con., steel and brick factory, at 9006-14 Woodland Ave., for J. H. Fisher, 2167 East 71st St. About $50,000.

O., Cleveland—Land & Home Co., Williamson Bldg., plans to build 5 story, concrete, steel and brick factory on East 30th St. and Perkins Ave.

O., Cleveland—Maurice Co., 410 Lakeside Ave., having plans prepared by Christain, Schwarzenberg & Gaede, engrs., 1900 Euclid Bldg., for 4 story, rein.-con., steel and brick factory on East 27th St. and Woodland Ave. About $50,000.

O., Cleveland—Natl. Lamp Assn., Nela Park, plans to build 6 story, rein.-con., steel and brick plant. About $250,000.

Industrial Works (Continued)

O., Cleveland—H. J. Walker, 12805 Taft Ave., having plans prepared by E. McGeorge, archt., 1900 Euclid Bldg., for 4 story, rein.-con., steel and brick factory, rein.-con. flooring, on East 131st St. and Taft Ave. About $75,000.

O., Dayton—G. W. Shroyer & Co., Main and 2nd Sts., plans to build 1 story, 50 x 200 ft., concrete and brick garage and service station, concrete foundation, on North Main St. Schenck & Williams, Mutual Home Bldg., archts.

O., Dayton—W. C. Wampler, 132-134 North St. Clair St., plans to build 4 story, 68 x 150 ft., rein.-con. and brick garage and salesroom, rein.-con. flooring, concrete foundation, on Main and Bruen Sts. About $75,000.

O., Dover—Tuscora Rubber Co., c/o W. C. Owen Eng. Co., archts., 1900 Euclid Bldg., Cleveland, having plans prepared for 3 story, concrete, steel and brick factory, here. About $100,000.

Mich., Pontiac—Hess-Pontiac Spring Co. plans to build 2 story brick and rein.-con. forge shop, concrete foundation. About $200,000. B. A. Litchfield, genl. mgr.

Ill., Chicago—Hydrox Co., 3543 Normal Ave., soon lets contract building 3 story, rein.-con. and brick ice factory, rein.-con. flooring, concrete foundation, on 4000 sq.ft. site, on Lake Park Ave. and 24th St. Schmidt, Garden & Martin, 104 South Michigan Ave., archts.

Ill., Chicago—Independent Packing Co., Halsted and 41st Sts., soon lets contract building 5-story, 60 x 65 ft. rein.-con slaughterhouse, rein.-con. flooring, concrete foundation. About $65,000. H. C. Christensen, 7258 Union Ave., archt.

Wis., Milwaukee—Jaeger Baking Co., Central Ave., soon lets contract building 3 story, 100 x 100 ft., brick and steel bakery, rein.-con. flooring, concrete foundation. About $100,000. L. S. Beardsley, 40 West 32nd St., New York City, engr.

Minn., Altura—Company being formed to build electric light and power plant. About $300,000. Address, Power Eng. Co., 510 Corn Exch., Minneapolis, engrs.

Minn., Minneapolis—Northwestern Catalogue Co., 800 Phoenix Bldg., soon lets contract building 4 story, 100 x 100 ft., rein.-con. and brick warehouse, rein.-con. flooring. About $100,000. Long, Lamereaux, Long & Phorshang, 1028 Andrus Bldg., archts.

Minn., St. Paul—J. H. Allen & Co., 6th St. and Bway., having plans prepared for wholesale grocery building. About $1,000,000.

Okla., Pauls Valley—M. M. Eagan & Sons plan to build molasses and feed plant. About $75,000.

Okla., Tishoningo—City voted $50,000 bonds to build electric light plant.

Idaho, Pocatello — Northwestern Auto Supply Co., Billings, plans to build 3 story plant here. About $32,000.

Wash., Hoquiam—J. Johnson and associates, Puget Sound, plan to build steel rolling mills at harbor here. First unit to cost $250,000.

Ore., Portland—D. Dahm and T. Hendricksen having plans prepared by Sutten & Whitney, archts., Lewis Bldg., building 4 story 75 x 112 ft. concrete plant, on 10th and Burnside Sts.

Ore., Roseburg—Umpqua Growers' Assn. plans to build new fruit and berry cannery. About $50,000. J. Busenbark, pres.

Cal., Bakersfield—J. M. Jameson soon lets contract building 2 story, 50 x 122 ft., brick garage, concrete foundation, on 22nd and Chester Aves. T. B. Wiseman, Brower Bldg., archts. Kitchen & Amell, agents for Overland Automobile, Bakersfield, lessee.

Cal., Beverly Hills—See "Miscellaneous."

Cal., Calexico—City having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for gas and electric light plant here. About $325,000. P. B. Steintorff, clk.

Cal., Fresno—Sperry Flour Co., Hamilton and J Sts., plans to build flour mill. About $400,000. J. L. Eischelberger, mgr.

Cal., Los Angeles—L. A. Times, 1st St. and Bway., having plans prepared by Krempel & Erkes, archts., 415 Henne Bldg., building 4 story, 25 x 100 ft., rein.-con. and brick newspaper plant, concrete foundation.

Cal., San Francisco—Sherman Estate, c/o J. L. Stewart, archts., C. Spreckles Bldg., having plans prepared for 5 story, 100 x 160 ft., rein.-con. warehouse, on 2nd and Brannan Sts.

Cal., Santa Paula—Limoneira Co. having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., Los Angeles, building 1 and 2 story hollow tile and concrete packing plant, concrete foundation. About $150,000.

N. S., Clarks Harbor—Town having plans prepared for electric light plant. About $60,000.

N. B., Boiestown—B. J. Thibedeau, plans to build plant. About $25,000.

Que., Lac Au Saumon — Salmon Lake Drive and Boom Assn. plans to build large wood and pulp plant.

Que., Sherbrooke—J. A. Beaudoin, East Angus, soon lets contract building warehouse for Eastern Twp. Provision Co., Sherbrooke. About $50,000. L. N. Audet, 37 King St., archt.

Que., Three Rivers—Page Wire Fence Co., Three Rivers, plans to build 99 x 290-ft. concrete and steel factory. About $50,000.

Ont., East London—(London P. O.)—Republic Motor Sales Co., 5101 Euclid Ave., Cleveland, O., purchased site here and plans to build factory. About $500,000.

Ont., Galt—McCormick & McCormick, Galt, plans to build steel and brick mill. About $72,000. W. J. Westaway, 72 James St. N., Hamilton, archt.

Ont., Hamilton—M. Michnik, 172 Cannon St., plans to build factory. About $25,000.

Ont., Hamilton — Zimmerman Reliance Knitting Co. plans to build factory. About $50,000.

Ont., Kitchener—Four Wheel Drive Auto Co., Kitchener, receives bids in about 2 weeks for brick and rein.-con. factory. W. C. Cowan, 430 King St., E., archt

Ont., London—A. Deviney, St. Marys, plans to build flax mills here. About $50,000.

Ont., Sarnia—W. D. Ferguson and J. McCutcheon, purchased building at 313 Front St. and plan to remodel same for cold storage plant. About $25,000.

Ont., Stratford—R. M. Ballantyne Knitting Co., Ballantyne Ave., having plans prepared by J. Russell, archt., Downie St., for 3-story brick factory. About $35,000.

Ont., Toronto—W. Harris & Co. soon receives bids building 4-story, 66 x 145 ft. rein.-con. and brick glue factory on Keating St. A. Chapman, Harbor Bldg., archt.

Ont., Toronto—Neptune Meter Co., 565 Washington Bldg., Chicago, Ill., plans to build plant here. About $55,000.

Ont., Welland—City plans to build ice plant. About $35,000.

Ont., Windsor—Champion Spark Plug Co., 14-16 Sandwich St., W., plans to build factory. About $95,000.

Ont., Windsor—City plans to establish dairy. About $40,000.

Ont., Windsor—B. H. Marsh, 132 Windsor Ave., plans to build steel and brick factory, concrete foundation. About $40,000. J. C. Pennington, La Belle Bldg., archt. Noted Apr. 24.

Ont., Windsor—Universal Car Agency, Windsor, plans to build concrete garage. About $50,000.

Alta., Calgary—Alberta Flour Mills, Ltd., soon receive bids building mills and elevators in southeast section of city. Cost to exceed $3,000,000.

B. C., Anyox—Granby Consolidated Ore Co. plans to build plant. About $50,000.

B. C., Vancouver—Coca Cola Co., Bannatyne and Dagman Sts., Winnipeg, Man., plans to build 3 story, rein.-con. factory, rein.-con. flooring, concrete foundatin, on Richard and Smythe Sts., here. About $1,000,000.

BIDS DESIRED

O., Cleveland—W. J. Carter, archt., 723 Illuminating Bldg., receiving bids for 4-story, 50 x 100 ft. rein.con., steel and brick, factory at 2978 Woodhill Rd., for Van Dorn Electric Co., 2978 Woodhill Rd. About $75,000. Noted Apr. 17.

Ia., Ottumwa—Henshein & McLaren, engrs., 37 West Van Buren St., Chicago, receiving bids building 2 story, 65 x 125 ft., rein.-con. and brick creamery, concrete foundation for Yorkshire Creamery Co. About $40,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Keene—G. Fairfield will build 2 story, 60 x 110 ft. brick and mill construction garage and service station, rein.-con. flooring, concrete foundation. About $25,000. Work will be done by day labor.

★Conn., Bridgeport—Post Publishing Co., 49 Cannon St., let contract building 2-story, 47 x 68 ft. brick and concrete printing plant, rein.-con. flooring, concrete foundation, on Middle St., to M. Tredennick Co., 188 Main St. About $60,000. Noted Apr. 17.

★Conn., South Manchester—Cheney Bros. let contract building 2 story, 60 x 90 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, to Aberthaw Constr. Co., School St., Boston, cost plus percentage basis.

★N. Y., Brooklyn—J. Bene & Sons, 541 Dean St., let contract building 2 story, 100 x 100 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Clinton Ave. and Fulton St., to W. Kennedy Constr. Co., 215 Montague St. Noted Apr. 3.

★N. Y., Brooklyn—Cairns Holding Co., Inc., let contract building 9 story, 75 x 119 ft. brick and rein.-con. factory, concrete foundation, on Atlantic and Classon Aves., to Gillies-Campbell, 101 Park Ave., New York City.

★N. Y., Brooklyn—I. Kalt, 44 Court St., will build 1 story, 100 x 154 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Bay 19th St. About $35,000. Work will be done by day labor.

★N. Y., Brooklyn—Lasky Motor Car Corp., 17 Graham Ave., will build 2 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Montrose Ave. and Leonard St. About $75,000. Work will be done by day labor under supervision of Shampan & Shampan, archts., 50 Court St. Noted Apr. 24.

★N. Y., Brooklyn—J. Liederman, c/o Shampan & Shampan, archts., 50 Court St., will build 2 story, 60 x 100 ft., brick and steel garage, rein.-con. flooring, brick foundation, at 305 Vernon Ave. About $35,000. Work will be done by day labor.

★N. Y., Buffalo—Mentholatum Co. 146 Seneca St., let contract building 4-story, 80 x 100 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, on Seneca St., to J. W. Cowper Co., Fidelity Bldg. About $225,000. Noted Apr. 10.

★N. Y., Long Island City—L. Gold, 44 Court St., Brooklyn, will build 2 story, 75 x 85 ft., brick and concrete factory, rein.-con. flooring, concrete foundation, on North Jane St. About $45,000. Work will be done by day labor.

★N. Y., Long Island City—L. Gold, 44 Court St., Brooklyn, will build 2 story, 90 x 130 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on 6th St. and Washington Ave. About $75,000. Work will be done by day labor.

★N. Y., New York—Commonwealth Ice Co., 7 East 42nd St., let contract building 2- and 3-story, 101 x 169 ft. brick and steel ice plant, rein.-con. flooring, concrete foundation, on 67th St. and West End Ave., to J. H. Taylor Constr. Co., 110 West 40th St. About $70,000.

★N. Y., Niagara Falls—Defiance Paper Co., Walnut and 3rd Sts., let contract building 1 story, 46 x 103 ft. rein.-con. and brick mill, concrete foundation, on Walnut St., to J. W. Cowper Co., Fidelity Bldg., Buffalo. About $25,000.

★N. Y., Rochester—Keenan & Keenan, Powers Bldg., received contract building 4 story, 100 x 120 ft. rein.-con. and brick garage, at 39 South Union St. About $100,000. Owner's name withheld.

★N. Y., Westfield—Armour & Co., 208 South La Salle St., Chicago, let contract building 3 story, 130 x 200 ft. brick and stone factory and 54 x 54 ft. power house, to Black Constr. Co., 20 West Jackson Blvd., Chicago. About $210,000.

S. C., Charleston—Sottile Cadillac Co., 261 Meeting St., received bids Apr. 5, building 2 story, 100 x 120 ft., rein.-con. garage, on Meeting St., from Palmer Spivey Constr. Co., Campbell Bldg., Augusta, Ga., $50,850; McDavitt Fleming Co., Chattanooga, Tenn., $52,102; South Ferro Concrete Co., Georgia Bldg., Atlanta, Ga., $53,733. Noted Mar. 6.

★Tenn., Memphis—A S Barboro & Co., 99 South Main St., let contract tearing down old building and constructing 2-story, 100 x 150 ft. brick and concrete storehouse on Wagner and Pontotoc Sts., to J. A. Alexander Constr. Co., 388 North Front St., $135,000.

★O., Akron—Mohawk Rubber Co., 2nd Ave., let contract constructing 1-story, 60 x 200 ft. brick and steel addition to present 2-story building to W. A. Franklin Sons Co., 247 Cuyahoga St. About $50,000.

★O., Cincinnati—Dolly Varden Chocolate Co., 411 Laurel St., let contract building 6 story, 53 x 100 ft. rein.-con. addition to factory, to Ferro Concrete Constr. Co., Richmond and Harriet Sts. About $80,000.

Industrial Works (Continued)

★**O., Cleveland**—Cream Cone Machine Co., 1836 Euclid Ave., let contract building 3 story, 60 x 100 ft. concrete, steel and brick factory, on East 59th St. and Hough Ave., to A. A. Lane Constr. Co., 1836 Euclid Ave. About $100,000.

★**O., Newark**—J. H. Carroll Co. let contract building 3 story, 71 x 170 ft., rein.-con., steel and brick factory, concrete foundation, to O. J. Hawkins & Son, Newark, $94,000.

★**Ill., Belleville**—Western Brewing Co. will build addition to plant. About $50,000. Work will be done by day labor.

★**Minn., St. Paul**—W. H. Schmelzel Co., Inc., 117 University Ave., W., let contract building 1-story, 130 x 390 ft. rein.-con. and brick tractor plant on Rice and Atwater Sts. to L. W. Baumeister, 1204 Pioneer Bldg., About $75,000.

★**Mo., Joplin**—Hulburt Undertaking Co., West 4th and Virginia Sts., let contract building 2 story, 60 x 110 ft. garage and 30 x 60 ft. chapel, brick, concrete foundation, to R. L. Hoffman, Royal Heights. About $35,000.

★**Mo., St. Louis**—Northwestern Consolidated Milling Co., 438 Theresa St., let contract building 3 story, 50 x 130 ft., concrete, steel and brick warehouse, rock foundation, at 438 Theresa St., to T. H. Ratz, 4333 Taft Ave., $60,000.

★**Ont., Toronto**—Dominion Government, Ottawa, let contract building 248 x 560 ft., steel and stone customs examining warehouse on Bay, Yonge and Front Sts., here, to P. Lyall Constr. Co., 120 James St., Montreal, Que. About $2,000,000.

★**B. C., Vancouver**—Morrison Steel & Wire Co., Industrial Island, let contract building 1-story factory to H. B. Leck, 1767 Tolmie St. About $28,500. Noted Mar. 27.

Buildings

PROPOSED WORK

Mass., Athol—Hall—Town plans to build hall. About $150,000. D. P. Kimball, clk.

Mass., Boston—Hospital—City had plans prepared for 3 story brick hospital on Charles St. About $150,000. H. G. Desmond, 15 Beacon St., archt.

Mass., Springfield—Theatre—A. Goodside, Fidelity Bldg., Portland, Me., having plans prepared by G. H. Desmond, archt., 15 Beacon St., Boston, building 5 story, 60 x 154 ft., on Main and Pynchon Sts., here. About $200,000.

R. I., Pawtucket—Synagogue and School—Congregation Chaive-Sholam, High St., plans to build synagogue and school. About $60,000.

R. I., Thornton—School—Johnston Twp. appropriated $50,000 to rebuild school on School St., here, recently destroyed by fire. S. K. Luther, Thornton, clk.

Conn., Hartford—Hotels—H. G. Bond, 320 Asylum St., plans to build 2-story brick, steel and concrete addition to Hotel Sherman, rein.-con. flooring, concrete foundation, on Allyn and High Sts., cost $60,000; also 7 story building on Allyn St., to be known as Hotel Bondmore. Whiton & McMahon, 36 Pearl St., archts.

Conn., New Britain—Home—Erwin Home, Bassett and Ellis Sts., plans to build home. Late D. Miller donated $50,000 for project.

Conn., New Britain—Institute—New Britain Institute, High and West Main Sts., plans to build institute. Late D. Miller donated $50,000 for project.

Conn., New Haven—Business—Besse, Ritchey & Co., 784 Chapel St., plans to construct new front to present building and 5 story addition in rear. About $50,000. Brown & Von Beren, 185 Church St., archts.

Conn., New Haven—Business—Plans are out for figures for 2 story, 70 x 100 ft. brick, rein.-con. flooring, concrete foundation, on Bway. and Howe St., for Beecher & Bennett Co., 280 Elm St. About $60,000. C. S. Palmer, 191 Church St., archt. Noted Mar. 6.

Conn., New Haven—Hospital—Jewish Home for Aged, 169 Davenport Ave., plans to build hospital. About $200,000.

Conn., Norwich—Hospital—Norwich Hospital for Insane having plans prepared by Cudworth & Thompson, archts., Thayer Bldg., for psychopathic and tuberculosis buildings, on hospital grounds. About $200,000.

Conn., Torrington—Dormitory—Charlotte Hungerford Memorial Hospital, Litchfield Rd., having plans prepared by E. Greene, archt., 5 Beekman St., New York City, for dormitory on hospital grounds. About $50,000.

Conn., Waterbury—School—Bd. Educ. plans to build brick, concrete and steel addition to Croft St. school, rein.-con. flooring, concrete foundation. About $125,000 L. A. Walsh, 51 Leavenworth St., archt.

N. Y., Albany—Theatre—M. Spiegel, Strand Theater Bldg., New York City, soon lets contract building 2 story, 75 x 175 ft. brick and steel, brick foundation, on Monroe St., here. About $150,000. T. Lamb, 644 8th Ave., New York City, archt.

N. Y., Brooklyn—Home and Hospital—Brooklyn Hebrew Home and Hospital for Aged, Howard and Dumont Aves., plans to build 4 story, 90 x 100 ft. brick and steel addition, concrete foundation. About $100,000. L. A. Abramson, 220 5th Ave., New York City, archt.

N. Y., Brooklyn—Theatre—Washington Amusement Co., c/o Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, having plans prepared for 1½ story, 100 x 137 ft. brick and steel, brick foundation, on Washington Ave. and Prospect Pl. About $100,000.

N. Y., Buffalo—Bank—Peoples Bank, 224 Main St., having plans prepared for bank on Main and Seneca Sts., extending to Pearl St. About $1,000,000.

N. Y., Central Islip—Hospital, etc.—State Hospital Comn., Capitol, Albany, soon receive bids building 3 story, 30 x 300 ft. addition to building for acute patients, with 2 wings 30 x 60 ft. and one 40 x 60 ft. brick and rein.-con., concrete foundation. About $150,000. Noted Jan. 30.

N. Y., Greenburg—School—Bd. Educ. having plans prepared by Tooker & Marsh, archts., 101 Park Ave., New York City, building 2 story brick and steel, brick foundation. About $90,000.

N. Y., New York—Office—60 Wall St. Corp. soon lets contract building 5 story brick and steel addition. About $100,000. Clinton & Russell, 32 Liberty St., archts. Noted Mar. 27.

N. Y., New York—Office—Clinton & Russell, archts., 32 Liberty St., plan to build 30 story, 100 x 100 ft. brick and steel, brick foundation, at 93 Maiden Lane to run through to 205-207 Pearl St. and 4-6 Gold St. Owners name withheld.

N. Y., New York—Office—Crescent Realty Co., 26 East 23rd St., soon lets contract building 6-story, 50 x 100 ft. brick and steel, brick foundation, at 210-212 West 42nd St. About $60,000. A. Brociner, 11 West 40th St., archt. and engr.

N. Y., New York—Store and Office—Wendell Estate, 175 Bway., having plans prepared by C. E. Birge, archt., 29 West 34th St., altering 6 story brick and steel building at 181 Bway. F. G. Shattuck, 62 West 23rd St., lessee.

N. Y., Ossining—Hall, etc.—State Hospital Comn., Capitol, Albany, soon receives bids building 4 story, 50 x 200 ft. clinic building No. 8; 4 story, 40 x 260 ft. detention building and outside cells No. 5; 1 story, 50 x 200 ft. mess hall and kitchen No. 4, with 2 wings, 50 x 80 ft.; 1 story, 30 x 30 ft. pumphouse and 30 x 90 ft. reservoir; and 3 story, 50 x 90 ft. outside cell No. 7, all rein.-con. and brick construction.

N. Y., Rochester—Church—Episcopal Church of the Ascension having plans prepared for church. About $100,000. W. C. Compton, rector.

N. Y., Syracuse—Academy—Bd. Educ. and City Eng. Dept. having plans prepared by M. L. King, archt., Snow Bldg., building 3 story brick, to be known as Onondago Academy. About $250,000.

N. J., Harrison—School—Town plans to build school. About $325,000.

N. J., Riverside—Bank—Riverside Trust Co., plans to build 1 story, 60 x 67 ft., limestone, here. About $75,000. W. A. Klemann, 1st Natl. Bank Bldg., Trenton, archt.

Pa., Phila.—Theatre—W. Freihofer, 20th St. and Indiana Ave., plans to build 2 story, 72 x 190 ft., concrete and steel on Frankford Ave. near Oxford Lane. About $125,000. H. C. Hogens, 1312 Walnut St., archt.

Pa., Phila.—Theatre—H. C. Hogens, archt., 1312 Walnut St., preparing plans for 2 story, 100 x 200 ft., steel and concrete on Germantown and Lehigh Aves. About $200,000. Owner's named withheld.

Md., Baltimore—Loyloa College received bequest of $300,000 to construct new buildings on University Parkway. Address J. A. McEneany, pres.

D. C., Wash.—Memorial—George Washington Memorial Assn., Scott Circle, having plans prepared by Tracy & Swartout, archts,. 18 West 34th St., New York City, building 4 story, 200 x 220 ft., steel and brick, concrete foundation. About $1,000,000.

Fla., Green Grove Springs—School—Bd. Educ. Clay Co., plans election soon to vote on $50,000 bonds to build school here.

Fla., Jacksonville—Bank—Atlantic Natl. Bank soon lets contract building 1 story 50 x 100 ft., brick and steel, brick foundation. About $100,000. Mowbray & Uffinger, 56 Liberty St., New York City, engrs. Noted Mar. 20.

Fla., Pensacola—High School—Escambia Co. School Bd. plans to issue $100,000 bonds to build school and $25,000 bonds to improve rural schools.

O., Akron—Bank and Office—State Savings & Trust Bldg. Co., Main and Market Sts., having plans prepared by Harpster & Bliss, archts., Hamilton Bldg., for 16 story, 52 x 72 ft., steel and brick, rein.-con. flooring, on Main and Market Sts.

O., Akron—Welfare—Walker & Weeks, archts., 1900 Euclid Bldg., Cleveland, soon receive bids building 4 story, concrete, steel and brick, on East Market St., for Goodyear Tire & Rubber Co., Market St. About $100,000.

O., Cleveland—Bath House—City soon lets contract building 2 story, 70 x 76 ft., concrete, steel and brick, at 2526 Central Ave. About $50,000. F. H. Betz, 604 City Hall, archt.

O., Cleveland—Club House—Knights Columbus, (Forest City Council), 1770 West 25th St., plans to build 5 story, concrete, steel and brick, on West 65th St. and Detroit Ave. About $150,000.

O., Cleveland—Commercial—Schoeder & Glickman, 416 Guardian Bldg., having plans prepared by E. A. Curtiss, archt., 416 Guardian Bldg., for 3 and 4 story, concrete, steel and brick, on East 149th St. and Lake Shore Blvd. About $90,000.

O., Cleveland—Office—Paul Bros., Citizens Bldg., having plans prepared by G. A. Grieble, archt., Sloane Bldg., for 11 story, rein.-con., steel and brick, on East 6th St. and Vincent Ave. About $750,000.

O., Cleveland—Office—United Cigar Stores Co., 44 West 18th St., New York City, plans to build 6 story, rein.-con., steel and brick, on East 6th St. and Euclid Ave. About $75,000.

O., Cleveland—Theatre and Store—E. Huberty, archt., 8017 Whitehorn Ave., soon receives bids building 2 story, concrete, steel and brick, on Fulton Rd. and Bush Ave., for Amer. Amusement Co., 4108 Bway Ave. About $80,000.

O., Columbus—Bank and Office—F. L. Packard, archt., Hayden Bldg., revising plans and soon receives bids building 6 story, 26 x 95 ft., rein.-con. and brick, concrete foundation, on High and Main Sts., for Franklin Loan & Savings Co., Main and High Sts. About $110,000. Former bids rejected. Noted Mar. 13.

O., Columbus—Institution—State Legislature passed bill providing for appropriation of $650,000 to purchase site and build institution for Care of Feeble-minded. Work will be done under supervision of Ohio Bd. of Administration.

O., Columbus—Sales—Carroll-Thompson Co., East Long St., plans to build 4 story, 75 x 100 ft., on East Long St. About $150,000. E. C. Matthews, 79 Brighton St., archt.

O., Dayton—Bank—West Dayton Commercial & Savings Bank, West 3rd St., plans to build 3 story, 85 x 120 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on 3rd St. and Western Ave.

O., Springfield—Y. M. C. A., North Fountain Ave., plans to construct building on High and Center Sts. About $150,000.

O., Steubenville—Hotel—W. R. Johnson and associates plan to build 9 story, steel, brick, limestone and granite, on 4th and Washington Sts. About $900,000. J. S. Hershey, Altoona, Pa., archt.

O., Warren—Hotel—J. Warner Hotel Co., plans to build 8 story, rein.-con., steel and brick. About $300,000.

Mich., Detroit—Bank and Office—Detroit Savings Bank, Penobscot Bldg., having plans prepared by A. Kahn, archt., Marquette Bldg., building 2 story steel and granite, on Griswold and State Sts. About $300,000.

Buildings **(Continued)**

Mich., Detroit—Music Hall and Stores—Dirs. Detroit Symphony Orchestra, c/o C. H. Crane, archt., 2325 Dime Bank Bldg., having plans prepared building 2-story, 100 x 174 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Woodward Ave. and Parsons St. About $300,000. W. H. Murphy, chn.

Mich., Detroit — School — St. Ambrose congregation, Wayburn Ave., soon lets contract building 2 story, 75 x 100 ft. brick and rein.-con., rein.-con. flooring, concrete foundation, on Wayburn Ave. and Alter Rd. About $100,000. Donaldson & Meier, 1314 Penobscot Bldg., archts.

Mich., Detroit—Synagogue—Alfred St. Jewish congregation having plans prepared by R. Finn., archt., 1144 David Whitney Bldg., for 2 story, 55 x 76 ft. brick and steel, concrete foundation, on Alfred St. About $50,000.

Mich., Detroit—Theatre and Store—H. Kramer & Sons, 1697 Gratiot Ave., having plans prepared by C. H. Crane and E. G. Kiehler, archts., 2325 Dime Bank Bldg., for 2 story, 80 x 230 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Michigan Ave. between Bushey and Greusel Aves. About $250,000.

Ill., Chicago — Church — Fourteenth Church of Christ Scientist, c/o N. M. Dunning, archt., 310 South Wabash Ave., soon lets contract building 1 story, 105 x 140 ft. stone and terra cotta, on Paulina and Sunnyside Aves. About $175,000. Noted Jan. 2.

Ill., Chicago—Church—Sixteenth Church of Christ. Scientist, 1700 Lunt Ave., had plans prepared by H. L. Cheney, archt., 208 South La Salle St., building 1 story, 100 x 160 ft. brick and timber, concrete foundation, on Ashland and Kenilworth Aves. About $200,000.

Ill., Danville—High School—City plans election to vote on $500,000 to $1,000,000 bonds to build new high school.

Ill., Forest Park—Theatre and Store—O. P. Speyer, archt., 6507 Greenview Ave., Chicago, receives bids about Aug. 1, building 3 story, 75 x 125 ft., brick, steel and concrete, concrete foundation, on Madison and Harlem Aves., for Carelin & Manos, c/o archt. About $150,000.

Ill., Moline—Church—Sacred Heart congregation, 419 East 11th St., plans to build church, on 17th Ave. and 13th St. About $75,000.

Ill., Moline—School—Bd. Educ. plans to build 1 story school. About $70,000.

Ill., South Chicago (Chicago P. O.)—Church—Worthmann & Steinbach, archts., 155 North Clark St., receives bids about May 10, building 1 story, 48 x 105 ft. brick and steel, concrete foundation, on East 103rd St. and Ave. H, for Bethlehem Lutheran congregation, c/o archt. About $75,000.

Ia., Council Bluffs—Bd. Educ. having plans prepared by Proudfoot, Bird & Rawson, archts., Hubbell Bldg., Des Moines, for school here. About $240,000.

Minn., Balaton—School—City plans election soon to vote on $60,000 bonds to build school. E. H. Feff, clk. bd. educ.

Minn., Grasston — School — City soon receives bids building 2 story, 36 x 76 ft. About $50,000. Foss & Foss, St. Cloud, engrs.

Minn., Holdingford—Grade School—City soon receives bids building 2 story, 38 x 76 ft., concrete and brick, brick foundation. About $50,000. L. W. Schaefer, St. Cloud, archt.

Minn., Minneapolis—Auditorium and Gymnasium—Ascension Catholic congregation soon receives bids building 3-story, 75 x 100 ft., rein.-con. and brick on 18th and Bryant Aves., N. About $125,000. Bertrand & Chamberlain, 616 North West Bank Bldg., archts.

Minn., Moorhead — High School—City plans to issue $200,000 bonds to build high school. R. G. Price, clk.

Minn., Waubun—School—Village voted $60,000 bonds to build school. G. A. Lee, village clk. Noted Jan. 30.

N. D., Dickinson—Sanitarium—Dickinson Sanitarium Co. having plans prepared by N. Ressler, archt., Mandan, for 3 story, 42 x 150 ft., on Marquette Blvd.

N. D., Great Bend—Church—Lutheran Congregational Church plans to build 45 x 105 ft. brick and stone. About $50,000. Long, Lamoreaux & Long, 1028 Andrus Bldg., Minneapolis, archts.

Mont., Anaconda—School—City voted $50,000 bonds to enlarge Prescott and Bryan Schools.

Mont., Great Falls—Store—Paris Dry Goods Co., 306 Central Ave., received bids about July 1, building 10 story, 100 x 150 ft., on Central Ave. About $500,000. G. H. Shanley, 511 1st Natl. Bank Bldg., archt.

Mo., St. Joseph—City Hall—City election May 27, to vote on $450,000 bonds to build city hall.

Mo., St. Joseph—Hospital—City election May 27, to vote on $100,000 bonds to build hospital for contagious diseases.

Tex., Austin—Hotel—Hogg-Wroe Syndicate had plans prepared for 12 story, 60 x 160 ft. on Congress Ave. between 10th and 11th Sts. About $360,000. L. J. Schneider, c/o Amer. Natl. Bank, Littlefield Bldg., secy.-treas.

Tex., El Paso—Church—Central Baptist congregation plans to build 1 story, brick and steel on Virginia and Montana Sts. About $100,000. O. H. Thorman, 725 1st Natl. Bank Bldg., archt.

Okla., Amorita—School—City voted $50,000 bonds to build school.

Idaho, Idaho Falls—High School—City voted $85,000 bonds to build high school.

Idaho, Nampa—Hall—City plans election soon to vote on $60,000 bonds to build new city hall.

Ariz., Chandler—High School—School Trustees having plans prepared by Lescher & Kobbey, archts., 400 Arizona Natl. Bank Bldg., Phoenix, building 2 story, concrete brick or hollow tile walls, concrete foundation. About $55,000.

Ariz., Chandler—High School—School Trustees having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., Los Angeles, constructing three 2 story buildings, consisting of administration, class room and study hall building, commercial and science building and domestic science building. About $125,000. Noted Apr. 3.

Ariz., Gilbert—School—Gilbert School Dist., voted $65,000 bonds to build school. E. B. Cordell, principal.

Ariz., Miami—School—School Dist. No. 26 will sell $100,000 bonds May 6, to build school.

Ariz., Phoenix—Court House and City Hall—Bd. Supervs. Maricopa Co. and City Comrs. plan to build combined courthouse and city hall. About $1,000,000. V. A. Thompson, city mgr. Noted Jan. 16.

Ariz., Tucson—Schools—Bd. Educ. plans election to vote on $375,000 bonds to build high school, industrial training buildings at Drachman and Davis Schools; grade school at 10th St. and Park ave.; and additions to existing buildings. J. E. White, pres.

Wash., Centralia—Temple—B. P. O. E., No. 1083, plans to build temple on Pearl and Magnolia Sts. About $55,000. J. H. Dumon, chn.

Ore., Astoria—Hall—Astor Lodge, No. 6, Knights of Pythias, plans to build 3 story concrete and brick. About $50,000. J. E. Wicks, archt.

Ore., Gervais—Hospital—Company being formed to build and equip hospital. T. Laird, Gervais, chn.

Cal., Burbank—School—School Dist. having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., Los Angeles, building 1 story, brick, concrete foundation. About $75,000. Bonds will be voted for project.

Cal., Long Beach—Bank and Office—Cheroske Bros., 443 West Bway., plans to build 6 story, concrete, brick and steel, on 4th and American Aves.

Cal., Los Angeles—Church—St. John's Episcopal congregation, 512 West Adams St., plans campaign to raise $250,000 to build church on Adams and Figueroa Sts. G. Davidson, rector.

Cal., Redwood City—Engine House—See "Bridges."

Cal., San Rafael—Theater and Store—Burtchaell Estate, c/o Reid Bros., archts., 105 Montgomery St., San Francisco, having plans prepared building brick or concrete, on 4th and A Sts. About $125,000.

Cal., Santa Cruz—Theatre—F. D. Hihn, Insurance Merchants Exch. Bldg., San Francisco, having plans prepared by Reid Bros., archts., 105 Montgomery St., San Francisco, building brick or concrete. About $155,000.

N. S., Wolfville—Gymnasium, etc.—City soon receives bids for gymnasium and skating rink. About $100,000.

Que., St. Marie—Hospital—M. Fecteau plans to build 5 story, 60 x 80 ft. brick, concrete foundation. About $100,000. E. Tanguay, 20 D'Aiguillon St., Quebec, archt.

Ont., Midland—Opera House—Midland Opera House Co. plans to build. About $60,000.

Ont., Ottawa—Office—A. McMillen, 82 Sparks St., plans to build 6 story, steel and brick, concrete foundation, on Bank and Laurier Sts. About $60,000.

Ont., St. Catherines—Sunday School—Building Com. Welland Ave. Methodist Church having plans prepared for brick and stone Sunday school on Henry and Elizabeth Sts. About $60,000.

Ont., Simcoe—School—Bd. Educ. soon receives bids building 2 story, brick. Chapman & McKiffin, 95 King St., E., Toronto, archts. G. R. Marston, Simcoe, chn.

Ont., Sudbury—Hotel—New Amer. Hotel Co., Sudbury, plans to build hotel. About $150,000.

Ont., Windsor—Bank—Imperial Bank of Canada, 32 Wellington St. E., plans to build 7 story steel and brick, rein.-con. flooring, concrete foundation, on London and Quellet Sts. About $150,000.

Ont., Windsor—Temple— Masonic Lodge, Windsor, having plans prepared by J. C. Pennington, archt., Windsor, for 3 story, brick. About $200,000.

Man., Winnipeg — Church — Home St. presbyterian congregation having plans prepared for church on Portage Ave. and Heme St. About $50,000.

Sask., Saskatoon — Station — Canadian Natl. Rys., 27 Wellington St. E., Toronto, Ont., plans to build station here. About $300,000. A. F. Stewart, div. engr.

B. C., Point Grey—School—School Bd., Kerrisdale, receives bids in about 6 weeks building 3-story, rein.-con and brick, concrete foundation, in Shaughnessy Dist. About $50,000. R. P. S. Twizell, 837 Hastings St. W., Vancouver, archt.

BIDS DESIRED

Conn., Hartford—Market—Until May 6, by city, building 1 story public market on Connecticut Blvd. About $100,000. Whiton & McMahon, 36 Pearl St., archts. Noted Mar. 20.

N. Y., Buffalo—Theatre—J. S. Savage, 26 Triangle St., is receiving bids for rein.-con. moving picture theatre. About $60,000.

N. Y., Cohoes—High School—Until May 21, by Tooker & Marsh, archts., 101 Park Ave., New York City, building 3 story, brick and steel, for Bd. Educ. About $210,000.

N. Y., Long Island City—High School—Until May 6, by Bd. Educ., 500 Fifth Ave., New York City, building 3 story, 100x100 ft. brick and steel addition to Bryant High School on Wilbur Ave., concrete foundation. About $500,000. C. B. J. Snyder, Municipal Bldg., New York City, archt.

N. Y., New York—Loft and Office—Until May 2, by R. Higgins, archt., 126 East 38th St., building 5 story, 25 x 100 ft. brick and steel, concrete foundation, at 45 Maiden Lane, for Lawyers Realty Co., 160 Bway.

N. Y., Troy — Market — Until May 7 (change of date), by Mohican Co., 280 Bway., New York City, building 3 or 4-story, 56 x 100 ft. brick and steel, rein.-con. flooring, concrete foundation. About $150,000. Noted Feb. 20.

N. J., West New York—Until May 5, by Town Council, building rein.-con. and brick school. About $300,000; $10,000 extra for excav.

Pa., Farrell—Bank—Until May 15, by A. C. Bosson, archt., 336 5th Ave., New York City, building 3-story, 55 x 125 ft., brick and steel, concrete foundation, for Colonial Trust Co. About $75,000. Noted Apr. 24.

W. Va., Athens—Dormitory—Until July 10, by A. F. Wysong, archt., Princeton, building 3 story brick at Normal School here. About $60,000.

W. Va., Montgomery—High School—Until May 10, (change of date) by A. F. Wysong, archt., Princeton, building 2 story brick, for Bd. Educ. About $80,000.

Buildings (Continued)

S. C., Charleston—School—Until May 19, by A. B. Rhett, supt. city schools, building 2 story, 100 x 170 ft. brick and concrete on King St. Cost between $90.000 and $100,000. Benson & Barbot 26 Broad St., engrs.

O., Gallipolis—Dining Hall—Until May 26, by Bd. Administration, Oak St., building 2-story, 48 x 68 ft. rein.-con. and brick addition to West Hall. About $72,000.

O., Ironton—Store and Theatre—Until May 12, by F. L. Packard, archt., Hayden Bldg., Columbus, building 4-story, 66 x 133 ft., steel and concrete, concrete flooring, for H. A. Marting, Ironton. Bids will be received for theatre and store separately. About $190,000. Noted Feb. 6.

Wis., Sheboygan—Exchange and Office—Until May 10, by W. C. Weeks, archt., Ontario Ave., building 4 story, 70 x 80 ft., brick and steel, brick foundation, on 7th and Center Sts., for Citizens Telephone Co., 701 North 8th St. About $70,000. Noted Mar. 20.

Mich., Grand Rapids—School—Until May 16, by H. N. Morrill, business mgr. bd. educ., City Hall, building new Henry School. H. E. Crow, pres. H. H. Turner, 234 Division Ave. N., archt.; advertised in this issue. Noted Mar. 6.

Mich., Highland Park (Detroit P. O.)—Hospital—Until May 12, by city at 20 Gerald Ave., building 4-story hospital and 2-story power house and laundry with connecting tunnel. L. C. Whitsit, 28 Gerald Ave., city engr.; advertised in this issue. Noted Mar. 13.

Minn., Campbell—School—Until May 5, by C. P. Carlson, clk. bd. educ., building 2 story, 50 x 75 ft., rein.-con. and brick addition. About $75,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul. archt. Noted Apr. 17.

Minn., Duluth—Grade School—Until May 7, by C. A. Bromson, secy. bd. educ., Glencoe Bldg., building 3-story, 64 x 180 ft., with wing 1½ story, 40 x 60 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Riverside Townsite. About $110,000. Croft & Boerner, Lonsdale Bldg., archts. Noted Apr. 24.

Minn., Duluth—Grade School—Until May 7, by C. A. Bronson, secy. bd. educ., Glencoe Bldg., building 3 story, 54 x 64 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on East 3rd St. About $70,000. Croft & Boerner, Lonsdale Bld., archts.

Minn., Red Lake Falls—Hotel—Until May 7, by Red Lake Falls Hotel Co., building 3 story hotel. B. D. Lecl, 1st Natl. Bank Bldg., Grand Forks, N. D., archt.

N. D., Cathay—School—Until May 20, by Comrs. Wells Co., (Fessenden) building 2-story grade and high school here. About $50,000. W. D. Gillespie, Fargo, archt.

Idaho, Blackfoot—Church—Until May 1, by Bldg. Com. Mormon Church, building 2 story, brick. About $150.000. Pope & Burton, New House Bldg., Salt Lake City, engr.

Que., Cartierville — Theatre, etc. — P. Burdotti, 251 Sherbrooke St., W., Montreal, receiving bids for theatre, restaurant, crystal palace, palais de dance, scenic railway and park buildings; also for 2 bridges to connect mainland with Islands on Rivere des Prairies. About $1,000,000.

Ont., Guelph—School—Until May 5, by S. B. Coon & Son, archts., Excelsior Life Bldg., Toronto, building brick school for Bd. Educ. About $50,000. Noted Mar. 13.

Ont., Sault Ste. Marie—Bank—Until May 15, by A. Horsburgh, archt., Bank of Commerce Bldg., Toronto, building 2 story, brick and stone, here, for Bank of Commerce, Toronto. Cost between $50,000 and $60,000.

Ont., Sault Ste. Marie—School—Until May 9, by C. A. Findlay, archt., 527 Queen St. E., building 2 story brick addition to public school for Bd. Educ. About $60,000. E. P. Gibson, chn.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Taunton—Rectory—Immaculate Conception congregation let contract building 2 story, 40 x 45 ft., brick and concrete, concrete foundation, on Bay St., to C. H. Hodgate, 6 Durfee St., Fall River. About $50,000. Noted Mar. 13.

★Conn., Bridgeport—School—St. Michaels Polish congregation, 310 Sterling St., let contract building 3½ story, 90 x 150 ft., brick, steel and concrete, rein.-con. flooring, concrete foundation, on Sterling and Kossuth Sts., to Johnson Bros., 166 Devonshire St., Boston. About $160,000. Noted Apr. 3.

★N. Y., Brooklyn—Theater—Levy Bros., 189Montague St., will build 2-story, 130 x 180 ft. brick and steel, brick foundation, on Bedford Ave and Lincoln Rd. About $500,000. Work will be done by day labor.

N. Y., Long Island City—School—C. B. J. Snyder, supt. school building, Municipal Bldg., New York City, received bids building P. S. No. 3, 3 story, 105 x 108 ft., brick and steel, concrete foundation, on Colonial Ave. between Livingston and Meteor Sts., here, from Nugent Constr. Co., 505 5th Ave., $155,000; Emerson Bldg. Corp., 103 Park Ave., $155,687; J. McArthur, 101 Park Ave., $156,135. Contractors all of New York City. Noted Apr. 17.

N. J., Jersey City—Hospital—City received bids building addition, improving and installing new equipment in city hospital, from W. H. & F. W. Cane, Baldwin Ave., masonry, carpentry, and iron work, $963,145; W. Fairier Co., Montgomery St., plumbing work, $136,593; J. H. Cooney, 210 North 4th St., Harrison, heating, $199,287; Hoffman & Elias, 549 Columbus Ave., New York City, electrical work, $82,400. Plans include constructing new wing containing 4 wards, garage, morgue, fumigation building, laboratory, laundry building and tunnnels; also vacuum cleaning plant. Total cost, $1,381,000.

★O., Bellaire — Temple — United Mine Workers of Sub. Dist. No. 5, Bridgeport, O., let contract building 3 story, 82 x 120 ft., brick, on 34th and Belmont Sts., to R. R. Kitchen Co., Wheeling, W. Va., $125,000. Noted Mar. 27.

★O., Cleveland—Sales—Van Aken & Strock, 6523 Euclid Ave., let contract building 4 story, 80 x 270 ft., rein.-con., steel and brick, on East 66th St. and Euclid Ave., to A. W. Kilbourne Co., 6523 Euclid Ave. About $250,000. Noted Apr. 24.

★Wis., Sheboygan—School—School Bd. Dist. No. 3, Mosel Twp., let contract building 2 story, 40 x 110 ft., brick, brick foundation, to Verhulst Bros., Sheboygan.

★Mont., Hardin — High School — Bd. Educ. let general contract building 3 story rein.-con. steel and brick, rein.-con. flooring, concrete foundation, on 5th St., to Veatch Co., Billings, $53,000; plumbing, to F. G. Hatch, Hardin, $14,383. Noted Apr. 3.

★Mo., St. Louis—Hotel—Portorico Realty Co., 4549 Lindell Blk., will build 7 story, rein.-con., steel and brick, rock and concrete foundation, at 5370 Pershing Ave. About $275,000. Work will be done by day labor.

★Ore., Salem—Dormitory—State Bd. Control, Capitol Bldg., let contract building 2 story, 46 x 114 ft. boys dormitory, to Siewert & Engstrom, Salem, $25,411; 2 story, 46 x 114 ft. brick hospital dormitory, to M. W. Lorenz, Worcester Bldg., Portland, $25,372. Noted Apr. 3.

★Cal., Wasco—School—Trustees School Dist. let contract building 2 story, 146 x 182 ft., concrete foundation, to H. Eisler, Bakersfield, $59,900. Noted Mar. 20.

Federal Government Work

PROPOSED WORK

N. H., Portsmouth—Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build. Spec. 3876. About $7000.

Conn., Groton—Paving—U. S. Shipping Bd., Groton Park, soon receives bids for 4500 sq.yd. asphalt macadam pavement, 910 sq.yd. stone gutters and 12,200 sq.ft. broken stone sidewalks. C. D. Pollack, project engr.

N. Y., New York—Fire Protection Apparatus—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install additional fire protection apparatus here; Spec. 3874. About $5000.

N. Y., New York—Garage—Bureau Yards & Docks Navy Dept., Wash., D. C., plans to build at Medical Supply Base; Spec. 3873. About $60,000.

N. Y., New York—Marginal Parkway, Repairs and Alterations—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build marginal parkway, repair and alter kite balloon hangars, here; Spec. 3875. About $3000. Bids will be received at local yard.

Pa., Phila.—Pavement—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Marine Corps Barracks; Spec. 3877. About $7000. Bids will be received at local yard.

Pa., Phila.—Steam Distributing System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3878 Bids will be received at local yard.

Pa., Phila.—Tunnel—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3879. Bids will be received at local yard.

Wyoming—Road Work—J. S. Bright, acting dist. engr., U. S. Forest Serv., 301 Tramway Bldg., Denver, Colo., plans to grade 40 mi. Buffalo Tensleep Project, Big Horn National Forest, Johnson and Washakie Counties, cost, $210,000; 50 mi. Wind River Project, Washakie National Forest, Fremont Co.; 25 mi. Hoback Canyon Project, Lincoln Co.; 6 mi. Woods Landing-North Park Project, Albany Co.; 42 mi. Encampment-Slater Project, Carbon Co. and 11 mi. Alladin-Hulett Project, Crook Co.

Montana—Road Work—L. I. Hewes, dist. engr., bur. pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., Portland, Ore., plans to grade 4 mi. Swan River Project, 15 mi. North Fork Flathead Project, Flathead Co.; 4 mi. Glacier Park-Summit Project, Teton Co.; 7.3 mi. Gibbons Pass Project, Ravalli Co. Latter project contingent upon Idaho connection being constructed.

Mo., St. Louis—Waterways—Mississippi Valley Waterways Assn., will ask Congress to appropriate $100,000,000 for following waterway projects; deepening Mississippi River to 6 ft. channel from Minneapolis, Minn., to St. Louis, cost, $8,500,000; building 9 ft. channel in Mississippi River from St. Louis to New Orleans, La., $16,700,000; 6 ft. channel in Missouri River from Kansas City to St. Louis, $8,500,000; 9 ft. channel in Illinois River from Utica, Ill., to St. Louis; completion of remaining 3 of system of 53 locks in Ohio River to make stream navigable from Pittsburgh, Pa., to Cairo, Ill., $23,000,000. Address J. E. Smith, c/o Chamber Commerce.

Ore., Astoria—Marine Railway—U. S. Shipping Bd., Wash., D. C., and Astoria Marine Iron Wks., plan to build marine railway on Young's Bay, including incline rollway and automatic electric ship hauling power, to have 6000 tons deadweight capacity. About $500,000.

Ore., Engene—Roads—U. S. Dept. Agriculture, 628 Post Office Bldg., Portland, and Lane Co. plan to build county section of McKenzie Pass Rd. County to appropriate $15,000 toward cost.

Cal., Mare Island—Dike—Officials of Local Yard asked Bureau Yards & Docks, Navy Dept., Wash., D. C., to appropriate $1,700,000 to extend Dike No. 12, 2100 ft. into San Pablo Bay, also extend dikes on channel and Corquintez straits.

BIDS DESIRED

Conn., New London — Dredging — Until May 20, by U. S. Engr. Office, New London, for maintenance dredging in New Haven Harbor; advertised in this issue.

Pa., Phila.—Elevator and Shaft—Until May 19, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3851. About $14,000; $10 deposit required for plans and specification.

Pa., Phila.—Rip Rap—Until May 26, by Lighthouse Supt. Phila., furnishing rip rap and building mud banks at Baker Range Front Light Station, Delaware River, Del.; advertised in this issue.

Del., Wilmington—Dredging—Until May 27, at U. S. Engr. Office., Old Federal Bldg., Wilmington, dredging Maurice River, N. J.; advertised in this issue.

Va., Quantico—Officers' Quarters and Administration Building—Until May 5, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3835; $20 deposit required for plans and specifications. Noted Mar. 20.

W. Va., South Charleston—Cranes—Until May 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3670. About $1,805,000; $10 deposit required for plans and specifications.

S. C., Paris Island—Buildings—Until May 12, by Bureau Yards & Docks, Wash., D. C., constructing additional buildings, here; Spec. 3855. Noted Apr. 10.

Fla., Jacksonville—Jetty and Revetment—Until May 28, at U. S. Engr. Office, Jacksonville, building jetty and revetment in Miami Harbor (Biscayne Bay); advertised in this issue.

Federal Government Work (Continued)

Fla., Pensacola—Crane—Until May 19, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 20 ton electric traveling crane wet basin boat shed, here; Spec. 3869. About $10,000; $10 deposit required for plans and specifications. Noted Apr. 24.

O., Cincinnati—Lock and Abutment—Until May 28, by U. S. Engr. Office, 1st Dist., building lock and abutment for Dam No. 34, Ohio River, near Chilo; advertised in this issue.

Ill., Chicago—Superstructure—Until May 26, at U. S. Engr. Office, 508 Federal Bldg., building concrete superstructure on breakwater at Calumet Harbor, Ill., and Ind.; advertised in this issue.

Ill., Elgin—Conduit, Wiring and Lighting Fixtures—Until May 20, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing conduit and wiring and lighting fixtures. in post office, here; advertised in this issue.

Ia., Fairport—Laboratory—Until May 26, by Comr. Fisheries, Dept. Commerce, Wash., D. C., building laboratory at biological station, here.

Minn., Duluth—Dredging—Until May 21 by U. S. Engr. Office, Duluth, dredging Duluth-Superior Harbor, Minn. and Wis.

Minn., Duluth—Rip-Rap—Until May 22, by U. S. Engr. Office, Duluth, furnishing and placing stone rip-rap along lake face and over top of west breakwater, upper entrance, Keweenaw waterway, Mich.

S. D., Bellefourche—Post Office—Until June 6, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building, here; advertised in this issue.

Okla., Woodward—Post Office—Until May 6, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here. Noted Apr. 3.

Ariz., Sacaton—Dam and Bridge—Until June 2, by H. V. Clotts, supervising engr., U. S. Indian Serv., 528 Federal Bldg., Los Angeles, Cal., building dam and bridge 3 mi. east of here. Project involves 31,700 cu.yd. earth work, 17,740 cu.yd. concrete, 738,500 lb. reinforcing steel, 12,400 ft. round piling, 28,000 ft. wood sheet piling and 18 steel gates; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★**R. I., Providence**—Remodeling Post Office—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to Hope Bldg. Co., 87 Weybosset St., $35,793 (90 days). Noted Apr. 17.

★**N. Y., Albany**—Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract altering post office and custom house, to McCann Bldg. Co., Sheridan Ave. and Dove St., $22,940 (90 days). Noted Apr. 3.

★**N. Y., Brooklyn**—Heating Tunnel—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building heating service and tunnel from building "C" to "F" at Naval Hospital Reservation, here, to G. E. Eng. Co., 22 Laight St., New York City, $11,450 (75 days). Noted Apr. 10.

★**N. Y., Rockaway**—Pump House—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building pump house for gasolene system, to C. Meades & Co., 38 Park Row, New York City, $1664. Noted Apr. 24.

★**N. Y., Ward's Island**—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building roads at Naval Hospital, here, to Fleming, O'Brien & McEntegart, Inc., 116 Bway., New York City, $13,780 (60 days). Noted Apr. 3.

N. J., Cape May—Cold Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 28, building at Section Base, here,

(1) net price and time for work complete, in accordance with drawings and specification;

(2) net price and time added or deducted from (1) for each pile of a length of 25 ft. which is added or deducted from number shown on drawing;

(3) net price and time added or deducted from (1) or (2) for each foot increase or decrease in length of each pile from length of 25 ft. herein specified, from

Post McCord, 101 Park Ave., New York City. (1) $36,000 (180 days); (2) add $27.50, deduct $22.50; (3) add $1.10, deduct. $0.60.

ROAD WORK—JAMESTOWN, N. D.

Bids were received by Commissioners of Stutsman Co., April 11th, for grading Federal Aid Project No. 24, Sects. 1 and 2, also constructing bridges and culverts on same; Sect. 3, from (A) Stevens Bros., St. Paul, Minn.; (B) W. H. Noel, Jamestown; (C) Humphreys & Stanley Bros., St. Cloud; (D) C. C. Jackson, Jamestown; (E) J. A. Jardine, Fargo; (F) Stevens Bros., St. Paul, Minn. The unit bids were as follows:

SECT. NO. 1	A	B	C
14,607 cu.yd. turnpike excavation	$0.36	$0.25	$0.37½
71,863 cu.yd. earth excavation	.36	.39	.37½
48,593 cu.yd. station overhaul	.01½	.01½	.01½
350 lin.ft. wood guard rail	.60	.40	.65
SECT. NO. 2			
Extended totls	$32,068	$32,547	$33,383
	A	B	C
20,737 cu.yd. turnpike excavation	$0.25	$0.36	$0.37½
87,555 cu.yd. earth excavation	.39	.38	.37½
73,044 cu.yd. station overhaul	.01½	.01½	.01½
1,365 lin.ft. wood guard rail	.40	.60	.65
19cu.yd. loose rock excavation	2.00	2.00	2.00
SECT. NO. 3			
Extended totals	$41,010	$42,689	$42,630
	A	B	C
265.06 cu.yd. Class "A" concrete	$25.50	$28.00	$27.50
6,983 lb. metal reinforcement	.09	.07	.09½
1,400 cu.yd. structural excavation	.85	1.00	1.00
Extended totals	$8,586	$9,320	$9,363

ROAD WORK—UTAH

Bids were received by State Road Commission, Salt Lake City, for constructing Salt Lake-Provo Rd., from point south of Midvale to American Fork (excludnig city of Lehi), from (A) J. W. Mellen, Auditorium Bldg.; (B) P. J. Moran, Felt Bldg.; (C) Heuser-Packard Co., Atlas Bldg.; (D) Ryberg Bros., Kearns Bldg., $227,353; (E) Wattis-Samuels Co., Newhouse Bldg., $232,090; (F) J. Stewart Co., Walker Bank Bldg., $232,281; (G) Campbell Bldg. Co., Newhouse Bldg., $297,931; contractors all of Salt Lake City. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
25,782.3 cu.yd. total excavation without classification as per plans	$0.85	$0.96	$1.00
50,000.0 cu.yd. extra excavation	.30	.40	.35
8,700.0 cu.yd. gravel fill measured in wagons delivered on work including spreading and rolling	1.25	1.32	2.00
400.0 cu.yd. excavation for covered drains	1. 5	.92	1.00
117,466.0 sq.yd. concrete pavement as per plans 6 in. to 8 in. thick cement to be furnished by State Road Commission	1.29	1.28	1.30
117,466.0 sq.yd. steel mesh reinforcement in place, to be furnished by State Road Commission	.02½	0.1	.03
170,314.0 lin.ft. twisted plain or deformed steel bars, bending and placing, furnished by State Rood Commission	.01½	.005	.01½
26,424.0 lin.ft. elastite or Sarco expansion joint filler in place, to be furnished by State Road Commission	.02	.01	.01½
13,000.0 lb. steel in culverts. To be furnished by State Road Commission	.01½	.01	.01½
106.2 cu.yd. Class "A" concrete in structures	17.50	18.50	13.00
135.9 cu.yd. Class "B" concrete in structures	17.00	16.00	12.00
Laying vitrified pipe, to be furnished by State Road Commission:			
36.0 lin.ft. 30 in.	.80	.92	.90
88.0 lin.ft. 24 in.	.65	.66	.70
1,131.0 lin.ft. 18 in.	.55	.53	.50
704.0 lin. ft. 15 in.	.50	.47	.30
Laying machine made cement pipe, to be furnished by State Road Commission:			
36.0 lin.ft. 30 in.	.85	.92	.95
88.0 lin.ft. 24 in.	.68	.66	.75
1,131.0 lin.ft. 18 in.	.58	.53	.55
704.0 lin.ft. 15 in.	.53	.47	.35
Laying galvanized corrugated iron pipe, to be furnished by State Road Commission:			
36.0 lin.ft. 30 in.	.55	.66	.40
88.0 lin.ft. 24 in.	.45	.53	.40
1,131.0 lin.ft. 18 in.	.35	.32	.40
704.0 lin.ft. 15 in.	.30	.27	.40
Extended totals concrete pavement 6 to 8 in. thick, using machine made cement pipe	$211,324	$214,540	$224,438

RAILWAY—PHILADELPHIA, PA.

Bids were received (lowest 3) by W. S. Twining, dir. dept. city transit, Mershon Bldg., Apr. 15th, building first 4 sections of Frankford-Bustleton & Byberry surface passenger railway in Oxford, Castor and Bustleton Aves., from Frankford Ave. to Lott St., Contr. 701, from (A) North American Railway Constr. Co., 53 West Jackson Blvd., Chicago (awarded contract); (B) E. H. Vare, 1120 Race St.; (C) M. & J. B. McHugh, 892 North Markoe St. The unit bids were as follows:

	A	B	C
9,410 lin.ft. girder rail track (Oxford Avenue)	$12.45	$12.48	$12.53
7,160 lin.ft. girder rail track (Castor and Bustleton Avenues)	12.13	12.15	12.24
8,700 lin.ft. T-rail track, including excavation (Castor Avenue)	4.17	4.60	4.97
12,350 lin.ft. T-rail track, not including excavation (Castor and Bustleton Avenue)	3.93	3.75	4.59
504 lin.ft. T-rail track (Pennypack Creek Viaduct)	13.35	12.48	13.00
4 girder rail turnouts	2,573.00	2,460.00	1,660.00
6 T-rail turnouts	1,537.00	1,550.00	1,359.00
20,000 cu.yd. excavation	.86	1.10	1.20
100 cu.yd. (assumed) excess fill	.98	.75	.66
100 sq.yd. (assumed) granite block paving	5.50	5.90	4.84
40 cu.yd. (assumed) cement concrete paving	9.85	21.60	13.00
2,000 sq.yd. (assumed) bituminous Macadam paving	2.63	2.35	1.20
100 lin.ft. (assumed) armored granolithic curbing	1.50	1.40	1.75
6,000 ft.b.m. yellow pine lumber	78.00	100.00	90.00
35,000 lb. (assumed) cast-iron pipe culverts	.03	.04	.088
100 cu.yd. (assumed) 1:2:4 concrete	15.00	20.50	15.45
500 cu.yd. 1:3:6 concrete	11.28	13.25	13.75
2,000 lb. (assumed) reinforcing steel	.07	.0725	.055
400 reinforced concrete drainage troughs	3.25	6.37	3.85
500 lb. (assumed) rolled steel beams	.06	.09	.066
175,000 lb. steel in Pennypack Creek Viaduct	.07	.07	.066
9 trolley poles (pennypack Creek Viaduct)	60.00	71.00	44.00
Clearing right-of-way (Pennypack Creek Viaduct), lump sum	300.00	435.00	550.00
1,800 lin.ft. (assumed) T-rail additional with all appurtenances	1.10	.90	.83
15 cast iron track inlets	78.00	66.00	71.50
1,000 joints substituting continuous T-rail joints	1.92	2.15	3.30
1,000 joints substituting Abbott T-rail joints	1.29	1.90	3.30
100 days (assumed) use of 5-ton steam roller	16.00	15.0	08.50
$10,000 expenditure force account	10%	10%	15%
Extended totals	$370,892	$380.459	$392,198

Federal Government Work (Continued)

H. S. Roberts & Co., 1123 Bway., New York City, (1) $39,750 (180 days).

W. Linker & Co., 831 Cherry St., Phila., Pa., (1) $43,400 (180 days); (2) add $50, deduct $8; (3) add $100, deduct $0.10. Noted Apr. 17.

★Md., Aberdeen — Storage — Ordnance Dept., U. S. Army, Wash., D. C., let contract constructing twelve 1 story, 96 x 400 ft. concrete, temporary storage buildings, concrete and stone foundation, to Aberthaw Constr. Co., 27 School St., Boston, Mass., $450,000.

★Md., Indianhead—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building county roads, to Sutton & Carsen, 9th and Simpson Sts., Ocean City, N. J., $66,698 (75 days). Noted Apr. 24.

★Va., Arlington—Roads—Dist. Comrs., Dist. Bldg., Wash., D. C., let contract building macadam roads at Arlington Natl. Cemetery, here, to L. M. Johnston, Arlington, bituminous bound roads, $2.45 sq.yd., gravel walks, $1.20 sq.yd.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 28, building 1 story, rein.-con. storehouse, here,

(1) net price and time for superstructure complete in all details and in accordance with drawings and specification. The above price shall be based on using coaltar pitch, felt and slag roofing, based on 1300 sprinkler heads;

(2) amount added or deducted from net price under (1) for each timber pile in excess of or less than number indicated on drawings, based on length of 45 ft. for each pile;

(3) amount added or deducted from net price stated under (1) for each linear foot of timber pile in excess of or less than 45 ft. per pile. This includes both bearing and test piles;

(4) amount added or deducted from net price under (1) for each timber test pile in place based on length of 45 ft. All test piles will be paid for under this item. For all test piles remaining in place named under (1) will be made in accordance with price per pile named by bidder under (2);

(5) amount added or deducted from net price under (1) for use of gypsum precast roof slabs instead of gypsum case in place roof slabs;

(6) amount added or deducted from net price stated under (1) for use of asphalt mastic paving instead of asphalt block paving;

(7) amount and time deducted from net price and time stated under (1) for omission of sprinkler system complete, based on 1300 sprinkler heads;

(8) net price and time for sprinkler system installed complete based on 1300 sprinkler heads including all stand pipes;

(9) amount added or deducted from net price stated under (1) and (8), respectively for each sprinkler head in excess of or less than 1300 heads;

(10) amount added or deducted from net price under (1) for installations of built up asbestos roofing instead of coaltar pitch-felt and slag or gravel roofing specified in (1). Amount stated under this item shall take full account of changes in roofing and flashing requirements.

(11) amount added or deducted from net price under (1), for installation of built up asphalt roofing instead of coal-tar pitch-felt and slag or gravel roofing specified in (1). Amount stated under this item shall take full account of changes in roofing and flashing and counterflashing requirements;

Note—All bids under (1) must be accompanied with bids on (2), (3), (4), (5), (6), (7), (9), (10) and (11), from

H. F. Friedstet, 327 South La Salle St., Chicago, Ill., (1) $287,043, (210 days); (2) $11; (3) add $.50, deduct $.12; (4) $60; (6) add $9000; (9) $4.50.

Consolidated Eng. Co., 243 Calvert Bldg., Baltimore, Md., (1) $299,000, (210 days); (2) $13; (3) add $.45, deduct $.05; (4) $30; (6) deduct $4160; (7) $19,800; (8) $19,800; (9) $19; (10) add $1400.

Irwin & Leighton, 126 North 12th St., Phila., Pa., (1) $307,000, (200 days); (2) add $16.80, deduct $8.50; (3) add $.37., deduct $.18; (4) $20; ((5) add $800; (7) deduct $18,000 (9) add $6, deduct $5.00; (10) add $700; (11) $1200; (12) deduct $1500; (13) deduct $10,000. Noted Apr. 24.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 28, building 6 story rein.-con. storehouse at Naval Operating Base, here,

(1) net price and time for entire work, complete in accordance with drawings and specification, based on using coal-tar pitch, felt, and gravel or slag roofing and 3900 sprinkler heads;

(2) amount added or deducted from net price stated under (1) for each timber pile in excess of or less than number indicated on drawings, based on a length of 45 ft.;

(3) amount added or deducted from net price stated under (1) for each linear foot of timber pile in excess of, or less than 45 ft. per pile. This includes both bearing and test piles;

(4) amount added to net price stated under (1) for each timber test pile in place based on length of 45 ft. All timber test piles will be paid for under this item. For all timber test piles remaining in place as part of finished structure, deduction from price named under (1) will be made in accordance with price per pile named by the bidders under (2);

(5) amount added or deducted from net price stated under (1) for use of concrete pile footings instead of timber pile footings under all columns; concrete pile footings to be in accordance with drawings and specifications. Type of concrete pile proposed to be used to be specified by bidder with his proposal. Number of piles required for each type of footing is noted on drawings, and change in price stated under this item shall take full account of change in quantities of excavation, concrete, and reinforcing steel. Price stated under this item shall be based on total number of piles indicated on drawings, and on a length of 30 ft. from point to cut-off for each pile;

(6) amount added or deducted from net price stated under (1) for each concrete pile in excess of or less than number indicated on drawings, based on a length of 30 ft.;

(7) amount added to net price stated under (1) for each concrete test pile, in place, based on a length of 30 ft. All concrete test piles will be paid for under this item. For all concrete test piles remaining in place as a part of finished structure, deductions from price named under (1), will be made in accordance with price per pile named by bidder under (6);

(8) amount added or deducted from net price stated under (1) for each linear foot of concrete pile in excess of or less than 30 ft. per pile. This includes both bearing and test piles;

(9) amount added or deducted from net price stated under (1) for installation of built-up asbestos roofing instead of coaltar pitch, felt and slag or gravel roofing specified herein;

(10) amount added or deducted from net price stated under (1) for installation of built-up asphalt roofing instead of coal-tar pitch, felt and slag or gravel roofing specified herein;

(11) amount deducted from net price and time stated under (1) for omission of sprinkler system, including all stand piles; based on 3900 sprinkler heads;

(12) net price and time for sprinkler system complete including all stand piles; based on 3900 sprinkler heads;

(13) amount added or deducted from net price stated under (1) and (12) for each sprinkler head in excess of or less than number stated above;

(14) amount and time to be deducted from net price and time stated under (1) for omission of all elevators;

(15) net price and time for all elevators complete in building.

Note—All bids under (1) must be accompanied by bids on (2)-(11) inclusive and (13) and (14), from

Consolidated Eng. Co., 243 Calvert Bldg., Baltimore, Md., (1) $784,000 (210 days); (2) $13; (3) add $0.40, deduct $0.05; (4) $30; (5) add $3400; (6) $47; (7) $60; (8) add $1.80, deduct $0.75; (9) add $211; (10) deduct $452; (11) $39,375; (12) $29,375; (13) $5; (14) $64,375; (15) $63,375.

G. E. Wyne, 82 Home Life Bldg., Wash., D. C., (1) $790,000, (210 days); (2) add $15, deduct $5; (3) add $0.35, deduct $0.08; (4) add $40; (9) add $500; (10) $500; (11) deduct $39,500; (13) add $6, deduct $4.50; (14) deduct $79,500.

H. F. Friedstet Co., 327 South La Salle St., Chicago, Ill., (1) $809,713 (210 days); (2) $11; (3) add $0.50, deduct $0.12; (4) $60; (11) deduct $57,500; (13) $4.50; (14) deduct $63,696.

Otis Elevator Co., Metropolitan Bank Bldg., Wash., D. C., (15) $79,100 (180 days).

Rockwood Sprinkler Co., 134 South La Salle St., Chicago, Ill., (12) $46,096 (90 days); (13) $4.50. Noted Apr. 24.

Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Apr. 28, building 3 story, rein.-con. aircraft storehouse, at Naval Operating Base, here,

(1) net price and time for structure complete in all details and in accordance with drawings and this specification. The above price shall be based on use of coal-tar pitch, felt and slag or gravel roofing;

(2) amount added or deducted from net price stated under (1) for each timber pile in excess of or less than number indicated on drawings, based on a length of 45 ft. for each pile;

(3) amount added or deducted from net price stated under (1) for each linear foot of timber pile in excess of, or less than 45 ft. This includes both bearing and test piles;

(4) amount added to net price stated under (1) for each timber test pile in place, based on a length of 45 ft. All timber test piles will be paid for under this item. For all test piles remaining in place on part of finished structure, deductions from price named under (1) will be made in accordance with price per pile named by bidder under (2).

(5) amount added or deducted from net price stated under (1) for use of concrete pile footings instead of timber piles under all footings; concrete pile footings shall be in accordance with drawings and specifications. Type of concrete piles proposed to be used to be specified by bidder with his proposal. Number of concrete piles required for each type of footing is noted on drawings, and change in price stated under this item shall take full account of change in quantities of excavation; concrete, and reinforcing steel price stated under this item shall be based on total number of piles indicated on drawings, and on a length of 30 ft. from point to cut-off, for each pile;

(6) amount added or deducted from net price stated under (1) for each concrete pile in excess of or less than number shown on drawings, based on length of 30 ft.;

(7) amount added or deducted from net price stated under (1) for each linear foot of concrete pile in excess of or less than 30 ft. This includes both bearing and test piles;

(8) amount added to net price stated under (1) for each concrete test pile in place, based on a length of 30 ft. All concrete test piles will be paid for under this item. For all concrete test piles remaining in place as part of finished structure, deductions from price named under (1) will be made in accordance with price per pile named by bidder under (6);

(9) amount added or deducted from net price stated under (1) for use of gypsum precast roof slabs instead of gypsum cast in place roof slabs;

(10) amount added or deducted from net price stated, under (1) for installation of built-up asbestos roofing instead of coaltar pitch, felt and slag or gravel roofing specified in (1). Amount stated under this item shall take full account of changes in roofing and flashing and counter-flashing requirements;

(11) amount added or deducted from net price stated under (1) for installation of built-asphalt roofing instead of coal-tar pitch, felt and slag or gravel roofing specified in (1). Amount stated under this item shall take full account of changes in roofing and flashing and counter-flashing requirements;

(12) amount and time deducted from net price and time stated under (1) for omission of all elevators in building;

(13) net price and time for all elevators complete, installed in building;

Note—All bids under (1) must be accompanied by bids under (2)-(12) inclusive. from H. F. Friedstet, 327 South La Salle St., Chicago, Ill., (1) $1,143,040, (210 days); (2) $11; (3) add $0.50, deduct $0.12; (4) $60; (5) add $36,352; (6) $42; (7) add $1.65, deduct $0.75; (8) $60; (10) deduct $150; (11) $1000; (12) $69,443.

I. Lesley Co., 209 McKevitt Bldg., Norfolk, Va., (1) $1,212,000, (200 days); (2) add $20, deduct $20; (3) $0.40; (4) add $32; (5) deuct $38.50; (6) add $42, deduct $23; (7) add $1.70, deduct $0.75; (8) add $50; (10) add $1886; (11) add $2400; (12) deduct $64,900; (13) $64,900, (200 days).

H. Foulkrod, 1406 Commonwealth Trust Bldg., Phila., Pa., (1) $1,212,025, (210 days); (2) add $14, deduct $10; (3) add $0.40, deduct $0.05; (4) add $50; (5) deduct $61,840.

Otis Elevator Co., Metropolitan Bank Bldg., Wash., D. C., (13) $64,900 180 days

A. B. See Elevator Co., 220 Bway., New York City, $54,630; doors, $10,200; operating devices, $8450. Noted Apr. 24.

Federal Government Work (Continued)

W. Va., South Charleston—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at U. S. Naval Ordnance Plant, here,

(1) net price per foot and time of completion for completing construction of fence, including gates, in accordance with accompanying drawing and specification;

(2) net price for furnishing and erecting 4-ft. gates complete, including posts, struts, tie rods and hardware are, including locks;

(3) net price for furnishing complete as specified in (2), but not including erection;

(4) net price for furnishing and erecting 8 ft. gates complete, including posts, struts, tie rods and hardware, including locks;

(5) net price for furnishing complete as specified in (4), but not including erection;

(6) net price for furnishing and erecting 18 ft. gates complete, including posts, struts, tie rods and hardware, including locks;

(7) net price for furnishing complete as specified in (6), but not including erection;

(8) net price for furnishing and erecting 24 ft. gate complete, including posts, struts, tie rods and hardware, including locks;

(9) net price for furnishing complete as specified in (8), but not including erection, from

Wayne Iron Wks., 818 Commonwealth Trust Bldg., Phila., Pa., (1) $1.95 (140 days); (2) $56; (3) $46; (4) $75; (5) $65; (6) $147; (7) $129; (8) $125; (9) $110.

W. A. Snow Iron Wks., 32 Portland St., Boston, Mass., (1) $2.17 (107 days); (2) $60; (3) $45; (4) $75; (5) $55; (6) $1.25; (7) $105; (8) $175; (9) $150.

Cyclone Fence Co., 2787 Woolworth Bldg., New York City, (1) $2.25 (60 days); (2) $60; (3) $48; (4) $120; (5) $100; (6) $146; (7) $126; (8) $188; (9) $168; alternate on (1) $2.15.

W. Va., Wheeling—Rip Rap—U. S. Engr. Office, Cincinnati, O., received bids furnishing 4000 tons rip rap stone for Ohio River Dam Nos. 12, 13, 14, 15 and 16, from Armstrong & Cresap Co., Wheeling, $19,200; Ohio River Contg. Co., Ellwood City, Pa., $20,400; Foundation Co., Fulton Bldg., Pittsburgh, Pa., $23,600.

★Fla., Pensacola—Power Plant Improvements—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract for power plant improvements at Naval Air Station, here, to Carroll Electric Co., 714 12th St., Wash., D. C., $54,500 (150 days). Noted Apr. 3.

★Mich., Mt. Pleasant—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract, to Henry & Hatfield Constr. Co., 120 South Meridan St., Indianapolis, Ind., $55,992. Noted Apr. 24.

N. D., Bismarck—Dormitory—C. Sells, comr. Indian Affairs, Wash., D. C., received bids Apr. 28, building dormitory here, from W. O'Neil & Son Co., Faribault, Minn., $43,655 (200 days); McManus Taroski, St. Paul, $44,986 (200 days); W. D. Lovell, 1415 South East 8th St., $45,200 (160 days). Noted Apr. 10.

★Mont., Great Falls—Roads—Bureau Pub. Rds., Missoula, let contract building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co., to White & Brown, Great Falls, $103,488. Noted Apr. 3.

Tex., Gilmer—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Apr. 23, building post office here, from Henry & Hatfield Constr. Co., 120 South Meridian St., Indianapolis, Ind., $48,572; W. O'Neil & Sons, Halletteville, Tex., $48,971, alternate, omitting mezzanine, $46,418; W. D. Lovell, 1415 H St., S. E., Minneapolis, Minn., $49,972. Noted Mar. 13.

Ore., Portland—Roads—Bur. Pub. Rds., U. S. Dept. Agriculture, Post Office Bldg., received only bid building McClellan Pass National Rd., Ranier National Forest, Pierce Co., from Alfred, James & Hendricks, Box 826, Centralia, Wash., $167,584, using log culverts and furnishing explosives; $169,535, metal pipe; Blewitt Pass Rd., Kittitas and Chelan Counties, Wash., (a) concrete dry rubble headwalls, contractor to furnish explosive; (b) cement rubble headwall, metal pipe, government furnishing explosives, from O. Hansen, 408 Empire State Bldg., Spokane, Wash., (a) $134,441; (b) $141,051; Rojette, Fobert & Winters, Spokane, Wash., (a) $147,381; (b) $150,024; Schacht Constr. Co., Yakima, Wash., (a) $154,732; (b) $160,602. Noted Apr. 17.

Miscellaneous

PROPOSED WORK

Swimming Pool—Hanover, N. H.—Dartmouth College, Inc., plans to build 2 story, 30 x 90 ft. concrete swimming pool on south end of Alumnae Bldg. C. A. Rich, 320 5th Ave., New York City, engr.

Trestle—Springfield, Mass.—City soon receives bids building mass concrete trestle in Sumner St. yard. About $15,000.

Dam—East Hartford (Hartford P. O.) **Conn.**—Town plans to build concrete dam at junction of Coldbrook Stream and Roaring Brook, here. About $100,000. C. H. Olmstead, 1175 Main St., engr.

Transmission Line—Amsterdam, N. Y.—Adirondack Electric Corp., 30 East Main St., plans to build transmission line from here to Little Falls. About $45,000.

Tanks—Brooklyn, N. Y.—Polytechnic Institute, 85 Livingston St., plans to install 2 steel measuring or storage tanks in hydraulic laboratory, cylindrical or square, 84 in. maximum diam. over all, 100 in. maximum length, with 2000 gal. capacity, steel plate not less than $\frac{3}{16}$ in. thick, conical, dished or hopper bottom and open top. H. P. Hammond, professor of sanitary and hydraulic eng.

Tanks—Geneva, N. Y.—Standard Oil Co., 26 Bway., New York City, plans to build several oil tanks and containers and brick buildings here. About $20,000. Address P. O'Malley, local representative.

Sand—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro., rejected bids received Apr. 3, furnishing and delivering 6500 cu.yd. sand. Noted Apr. 10.

Driers—Schenectady, N. Y.—Bd. Contr. & Supply soon receives bids for 2 new driers in connection with garbage disposal plant.

Transmission Line—Watertown, N. Y.—Northern New York Utilities, Inc., Light & Power Bldg., plans to build 6½ mi. transmission line from here to Brownville, replacing present 3000 volt current with one of 22,000 volts.

Pipe—Port Huron, Mich.—City soon receives bids furnishing 7000 ft. 6-8 in. c.i. water pipe; five 5 x 6 x 4 in tees, Class B, twelve 6 x 6 x 6 in. tees, Class B, all hub ends, three 6 x 8 in. reducers hub and spigot, Class B, ten 6 x 6 x 6 x 6 in. crosses all hub ends, Class B, six 8 x 8 x 6 x 6 in. crosses, all hub ends Class B, six 4 in. Michigan fire hydrants steamer, six 6 in. gate valves, 5 tons lead. L. C. Elliott, city clk.

Telephone Lines—Ryegate, Mont.—Pub. Serv. Telephone Corp. plans to install telephone lines. About $40,000.

Park Entrance—St. Louis, Mo.—Bd. Pub. Serv. having plans prepared for entrance to Forest Park at Tamm Ave. About $20,000. N. Cunliff, park comr.

Body Gates, etc.—Colville, Wash.—City Water Comn. soon lets contract furnishing twelve 2 in. iron body gates, four hundred ¾ in. lead goose necks with Mueler corporation cocks for galvanized pipe, twenty-five ¾ unions galvanized, twenty 45 degree L. galvanized, fifty ¾ in. L. galvanized, and one hundred ¾ in. assorted nipples. J. H. King, clk.

Pier Extension—Astoria, Ore.—Port of Astoria Comn. soon lets contract building 300 ft. extension to Pier No. 1. R. R. Bartlett, engr. Noted Apr. 3.

Breakwater — Hammond, Ore. — Federal Government authorized city to construct breakwater at foot of Ford St. dock.

Ovens-Marshfield, Ore.—Mountain States Power Co. plans to rebuild dutch ovens under power plant boilers at Smith Mill. A. L. Martin, mgr.

Marine Ways — Portland, Ore. — Marine Repair & Constr. Co. plans to build new ways capable of handling 200 ft. ships, 30 x 190 ft. mold loft and 20 x 20 ft. office building, at foot of Albina Ave. H. D. Sandstone, pres.

Baulevards, Parkways, etc.—Beverly Hills, Cal.—A. Letts, proprietor, Bway. Dept. Store, 401 South Bway., purchased 3296 acre site between Sawtelle and Beverly Hills, and will engage landscape architect to plan system of boulevards, parkways, etc., and build streets, curbs, sidewalks, sewerage system, lighting system, etc., preparatory to placing tract on market as high class residential section.

Harbor Improvements—Los Angeles, Cal.—City election May 6 to vote on $4,500,000 bonds to improve Los Angeles Harbor, (San Pedro). Work involves dredging, bulkheads, land reclamation, grain elevators, coal bunkers, fuel and vegetable oil tanks, wharves, freight sheds, freight handling equipment and paving 10 mi. highway including tunnel under West Basin or bridge over same. J. W. Ludlow, City Hall, harbor engr.

Retaining Wall—Redwood City, Cal.—See "Bridges."

Skating Rink—Wolfville, N. S.—See "Buildings."

Retaining Wall—St. John, N. B.—City plans to build retaining wall on Main St. from Munway to Sheriff Sts. S. F. Fisher, comr.

Scenic Railway—Cartierville, Que.—See "Buildings."

Dam—Montmagny, Que.—City plans to build dam, eelctric line and power house. About $400,000. Gauvin & Lessard, Quebec, archts.

Incinerator—Ft. William, Ont.—City had plans prepared for incinerator. About $110,000.

Transmission Line—Galetta, Ont.—Galetta Electric Power Co., Galetta, having estimates prepared extending line to Arnprior

BIDS DESIRED

Stone—Cranston (Providence P. O.)—**R. I.**—Until May 1, by Bd. Contr. & Purchase, furnishing 5000 tons crushed and screened stone (bids will also be received for 10,000 tons). D. D. Waterman, clk.

Driving Piles—Syracuse, N. Y.—H. C. Allen, city engr., receiving bids for driving piles for foundations for 2 garbage disposal plant buildings on salt lands. Contract will include construction of embankment at one end. About $11,000.

Elevated Coal Bin, etc.—Harrisburg, Pa.—See "Waterworks."

Pipe—Detroit, Mich.—Until May 6, by Bd. Water Comrs., furnishing 20,930 ft. 54½ in. steel pipe and 20,930 ft. 48 in. lock bar pipe. G. H. Fenkell, 232 Jefferson Ave., engr.

Road Oil—Sheboygan, Wis.—Until May 6, by Bd. Pub. Wks., furnishing 30,000 gal. road oil. C. U. Boley, City Hall, engr.

Retaining Wall—Albert Lea, Minn.—See "Excavation and Dredging."

Road Graders—Grand Forks, N. D.—Until May 6, Comrs. Grand Forks Co., furnishing six man, 4 horse, blade road graders weighing not less than 1200 lb.

Lighting System—Mandan, N. D.—Until May 15, by City Comrs., furnishing and installing ornamental street lighting system on 80 blocks. Black & Griffin, engrs., advertised in this issue.

Granite Blocks, etc.—Sherbrook, Que.—Until May 12, by T. Tremblay, city engr., for paving 6889 sq.yd. with granite block, 16,750 sq.yd. asphalt on concrete base, 1836 sq.yd. concrete and 2000 ft. curbing. About $400,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Car Barn—Springfield, Mass.—Springfield St. Ry., 7 North Main St., let contract altering timber car barn, on Bond St., to E. J. Pinney, 264 Main St. About $15,000.

★Tanks, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, let contracts furnishing and delivering four 5000 gal. storage tanks to C. Meade & Co., 38 Park Row, $2914; 350,000 gal. road oil, 100,000 gal. bituminous road surfacing material and 75,000 gal. road oil, to Texas Co., 17 Battery Pl., $16,940, $5500 and $4125 respectively; 65,000 asphalt paving blocks, to Hastings Paving Co., 25 Broad St., $5736. All contractors of New York City. Noted Apr. 10.

Paving Material—New York, N. Y.—H. Bruckner, pres. Bronx Boro., received bids Apr. 22, furnishing 25 tons paving pitch and 150,000 gal. tar road oil, from Barrett Co., 17 Battery Pl., $475 and $15,000 respectively; 200,000 gal. asphaltic road oil, from Standard Oil Co., 26 Bway., $9430; Texas Oil Co., 17 Battery Pl., $9540; Warner Quinlan Asphalt Co., 79 Wall St., $9600. Noted Apr. 17.

★Motor Truck—Watertown, N. Y.—Bd. Pub. Wks. let contract furnishing 3½ ton motor truck to B & D Motor Sales Co., 352 High St. About $4085.

★Dyke—Jersey City, N. J.—City let contract building 8500 ft. sod-dyke at Droyers Point, Jersey City Meadows, to Stillman-Delahanty Ferris Co., Exch. Pl., $15,000.

Miscellaneous (Continued)

Steel—Phila., Pa.—W. S. Twining, dir. dept. city transit, Mershon Bldg., received lowest 3 bids furnishing and erecting in place 1500 tons steel for Frankford Elevated Ry., from Phoenix Bridge Co., Phoenixville, $176,399; Bethlehem Steel Bridge Corp., Bethlehem, $178,331; Amer. Bridge Co., Widener Bldg., $182,600. Noted Apr. 10.

★Pig Lead and Duct Pipe—Baltimore, Md.—Bd. Awards let contract furnishing pig lead, for use of City Water Dept., to J. Robertson Lead Co., 827 South Howard St., $13,600; duct pipe, for use of City Electrical Comn., to Shawmut Clay Mfg. Co., Shawmut, Pa., and Fibre Conduit Co., $20,000.

★Tanks—Baltimore, Md.—Standard Oil Co., Pier 2, Pratt St., let contract building eight 40 x 120 ft., steel oil tanks, on O'Donnell and 4th Sts., to Riter-Conley Co., Sparrows Point, $128,000.

★Valves—Baltimore, Md.—Bd. Awards let contract, to Rensselaer Valve Co., Ontario St., Troy, N. Y., $17,176, for two hundred and seventy-five 4 in., five hundred 6 in., six 8 in., twenty 10 in., ten 12 in., five 16 in., and five 20 in. iron body gate valves. Noted Feb. 6 under "Water works."

Paving Materials—Detroit, Mich.—Dept. Purchases & Supplies, 1302 Real Estate Exch. Bldg., received bids, Apr. 10, furnishing 75,000 bbl. Portland cement, (a) cloth sacks per bbl.; (b) paper sacks per bbl.; (c) in bulk per bbl., from Huron Portland Cement Co., foot Riopelle St., (a) $2.33; (b) $2.68; (c) $2.03; Wabash Portland Cement Co., 1824 Ford Bldg., (a) $2.04; (b) $2.39; J. Calvert Sons Co., 145 Griswold St., (a) $2.38; (b) $2.73; (c) $2.08; Wyandotte Port Cement Co., Wyandotte, (a) $2.23; (b) $2.58; (c) $1.93. Former bids rejected. Noted Apr. 3.

★Pipe, etc.—Detroit, Mich.—Bd. Water Comrs. 232 Jefferson Ave., let contracts furnishing 1200 ft. Class C 36 in. c. i. pipe, to Lynchburg Fdry. Co., Peoples Gas Bldg., Chicago, $56.60 per ton; 100,000 lbs. liquid chlorine, to Hooker Electro Chemical Co., 40 Wall St., New York City, $.055 per lb.; one hundred fifty 4 in. gate valves, to Flower Valve Co., Clayton and Parkinson Sts., $21 each; 1 concrete mixer ½ cu.yd. capacity, to Good Rds. Supply Co., 1408 Ford Bldg., $785. Noted Apr. 3.

Breakwater—Sheboygan, Wis.—City received bids building breakwater along shore of Lake Michigan opposite Vallrath Park, 490 lin.ft., from McCullen & Pitz Co. 8th St., Manitowoc, $14,455; Great Lakes Dredge & Dock Co., 491 Canal St., Milwaukee, $21,805. Noted Apr. 24.

★Elevated Roadway—Portland, Ore.—Multnomah Co. let contract furnishing lumber and hardware and removing old trestle and building elevated roadway at Sauvies Island, North approach to Burlington Ferry, to Jacobsen Contg. Co., McKay Bldg., $2425; driving piles, to R. Wakefield, Worcester Bldg., $.37 per ft. Noted Feb. 27.

★Pipe—Los Angeles, Cal.—Bd. Pub. Serv. let contracts, to N. O. Nelson Mfg. Co., 439 East 3rd St., furnishing 20,000 ft. ½ in., 2500 ft. 1½ in., 2500 ft. 2 in. and 1000 ft. 3 in. galvanized iron water pipe, at $5.55, $16.95, $22.80 and $47.15 per 100 ft. respectively; to Lacy Mfg. Co., Washington Bldg., 10,000 ft. 6 in. riveted sheet steel pipe, $0.625 ft.; to Water Works Supply Co., Los Angeles, three 18 in. gate valves, $494 each.

★Cement Flooring, etc.—Wineville, Cal.—C. Stern & Sons, Van Nuys Bldg., Los Angeles, let contract for 40,000 sq.ft. cement floors and concrete foundations for machinery, to G. Odemar, 1433 Valencia St., Los Angeles. This work in connection with converting winery into cannery. Noted Mar. 6 under "Industrial Works."

★Pipe, Valves, Fittings, etc.—Montreal, Que.—City let contract for 30 in. c. i. pipe, valves and fittings in connection with concrete conduit necessary to increase water supply from aqueduct, to J. Ballantyne Co., 163 Nazareth St. Noted Mar. 6 under "Waterworks."

★Sea Wall—New Toronto, Ont.—City let contract building 350 ft. seawall to protect pumping grounds, to R. C. Huffman, 14 Wellington St. E. Cost plus 10 per cent. Noted Mar 20.

ROADS—PROVIDENCE, R. I.

Contract No. 4

Bids were received by Water Supply Bd., Apr. 9, building east road from Plainfield Pike to Bald Hill Rd., from (A) E. W. Foley Contg. Corp., 34 Pine St., New York City, (awarded contract); (B) W. V. Polleys Co., 1405 Turks Heads Bldg., Providence; (C) Sperry Eng. Co., 82 Church St., New Haven, Conn. The unit bids were as follows:

	A	B	C
8 acres clearing and grubbing	$500.00	$200.00	$200.00
12,000 cu.yd. earth excavation	1.25	1.50	1.15
2,000 cu.yd. rock excavation	4.00	3.00	3.50
5,000 cu.yd. borrow	1.00	1.25	1.20
500 cu.yd. soil dressing	1.00	1.00	1.90
250 cu.yd. concrete masonry	20.00	15.00	15.00
350 bbl. Portland cement	3.75	4.00	4.30
50 cu.yd. paving and dry masonry	8.00	10.00	9.00
450 sq.yd. cobble gutters	2.00	1.50	1.25
1,500 cu.yd. stone fill base	2.00	2.00	4.90
50 cu.yd. gravel and broken stone	3.00	3.00	4.75
1,500 lin.ft. wooden guard rail	.60	.50	.35
2,000 lb. steel for reinforcing concrete	.10	.10	.07
500 lin.ft. tile pipe, 6 in. in diameter	1.00	.50	.50
100,000 cu.yd. overhaul, equivalent to 100,000 cu.yd. hauled 100 ft.	.01	.03	.02
Extended totals	$45,763	$45,950	$46,358

Contract No. 7

Bids were received by Water Supply Bd., Apr. 9, relocating Plainfield Pike, west of Clayville, from (A) Sperry Eng. Co., Inc., 82 Church St., New Haven, Conn., (awarded contract); (B) E. W. Foley Contg. Corp., 34 Pine St., New York City; (C) Famiglietti Bros., Inc., 166 B'way., Providence. The unit bids were as follows:

	A	B	C
15 acres clearing and grubbing	$175.00	$500.00	$264.00
20,000 cu.yd. earth excavation	.95	1.35	1.40
2,000 cu.yd. rock excavation	3.00	4.00	4.30
10,000 cu.yd. borrow	1.30	1.00	1.90
500 cu.yd. soil dressing	1.90	1.00	1.80
190 cu.yd. concrete masonry	15.00	20.00	21.00
270 bbl. Portland cement	4.30	3.75	3.90
50 cu.yd. paving and dry masonry	9.00	8.00	8.80
1,200 sq.yd. cobble gutters	1.25	2.00	1.55
400 cu.yd. stone fill base	4.90	2.50	2.40
60 cu.yd. gravel and broken stone	4.75	3.50	2.70
3,000 lin.ft. wooden guard rails	.35	.60	1.45
2,500 lb. steel for reinforcing concrete	.07	.10	.07
600 lin.ft. tile pipe, 6 in. in diameter	.50	1.00	.54
150,000 cu.yd. overhaul equivalent to 150,000 cu.yd. hauled 100 ft.	.02	.01	.015
Extended totals	$54,306	$65,973	$76,024

ROAD WORK—UTAH

Bids were received by State Road Commission, Salt Lake City, constructing Salt Lake-Weber State Road from Clearfield to Sunset, from (A) Lynch Constr. Co., McIntyre Bldg.; (B) A. J. Gillis, Kearney Bldg.; (C) P. J. Moran, Felt Bldg., contractors all of Salt Lake City. The unit bids were as follows:

	A	B	C
5,452.6 cu.yd. total excavation as per plans	$0.72	$1.00	$1.13
880 cu.yd. excavation	.90	.50	.92
34,466 sq.yd. bituminous concrete pavement 2-in. thick surface	......	......	.80
2,780 cu.yd. gravel fill measured in wagon delivered on work, including spreading and rolling	1.18	......	1.64
34,466 sq.yd. crushed stone base, 4 in. thick, after compression per sq.yd	......	......	......
1,400 cu.yd. excavation for covered drains	.80	1.00	.92
460 cu.yd. gravel backfill (drain pipe)	1.08	1.75	1.98
34,466 sq.yd. concrete pavement as per plans, 6 in. to 8 in. thick. Cement to be furnished by State Road Commission	1.18	1.25	1.34
34,466 sq.yd. steel mesh reinforcement in place. To be furnished by the State Road Commission	.03	.04	.02
42,500 lb. twisted plain or deformed steel bars (bending and placing) To be furnished by State Road Commission	.01	.02⅜	.01
7,800 lin.ft. Elastite or Sarco expansion joint filer. To be furnished by State Road Commission	.02	.02½	.01
34,466 sq.yd. concrete base as per plans, 4 in. to 6 in. thick. Cement furnished by State Road Commission	.85	......	.89
46.1 cu.yd. concrete class "B." Cement and steel furnished by State Road Commission. Price to include bending and placing reinforcement	13.00	25.00	16.00
Laying vitrified pipe to be furnished by State Road Commission:			
30 lin.ft. 24-in	.80	.30	.66
425 lin.ft. 18-in	.50	.20	.53
90 lin.ft. 15-in	.35	.20	.47
210 lin.ft. 12-in	.22	.20	.40
Laying second grade vitrified pipe to be furnished by State Road Commission:			
1700 lin.ft. 18-in	.45	.20	.40
900 lin.ft. 12-in	.22	.18	.27
1800 lin.ft. 15-in	.30	.20	.32
Laying machine made cement pipe to be furnished by State Road Road Commission:			
30 lin.ft. 24-in	.80	.40	.66
425 lin.ft. 18-in	.50	.35	.53
210 lin.ft. 12-in	.22	.35	.40
90 lin.ft. 15-in	.35	.35	.47
Laying galvanized corrugated iron pipe to be furnished by State Commission:			
425 lin.ft. 18-in	.25	.25	.32
90 lin.ft. 15-in	.18	.20	.27
210 lin.ft. 12-in	.12	.20	.20
30 lin.ft. 24-in	.40	.20	.47
Extended totals concrete pavement 6-8 in. thick with machine-made cement pipe	$54,316	$56,096	$63,714
Extended totals bituminous concrete pavement, 2-in. top, 4-6 in. concrete base machine-made cement pipe	......	......	$74,585

Bids Close		See Eng. News-Record
May 21	Paving—**Washington, D. C.** Adv. **May 8.**	May 8
May 21	Paving **Material—Washington, D. C.**	May 8
May 22	Rip **Rap—Duluth, Minn.**	May 1
May 22	Road **Work — Grangeville, Idaho**	May 8
May 26	**Laboratory—Fairport, Ia.**	May 1
May 26	**Superstructure — Chicago, Ill.** **Adv. May 1.**	May 1
May 26	**Bridge—Washington, D. C.**	May 8
May 26	**Tunnel—Spec. 3879—Philadelphia, Pa.**	May 8
May 26	**Medical Storage Building—Spec. 3462—Hampton Rds., Va.**	May 8
May 26	Steam **Distributing System—Spec. 3876—Philadelphia, Pa.**	May 8
May 26	**Motor Generator Sets and Switchboard—Spec. 3872—Hampton Roads, Va.**	May 8
May 26	**Rip Rap—Philadelphia, Pa.**	May 1
May 27	**School—Ft. Bidwell, Cal.**	May 8
May 27	**Dredging—Wilmington, Del.** **Adv. May 1.**	May 1
May 28	**Jetty and Revetment—Jacksonville, Fla.** **Adv. May 1.**	May 1
May 28	**Lock and Abutment—Cincinnati, O.** **Adv. May 1.**	May 1
May 28	**Post Office—Elkhart, Ind.**	May 8
May 28	**Dredging — New London, Conn.** **Adv. May 8.**	May 8
June 2	**Dam and Bridge—Sacaton, Ariz.** **Adv. May 1.**	May 1
June 4	**Air Station—Spec. 3864—Galveston, Tex.**	May 8
June 6	**Post Office—Bellefourche, S. D.** **Adv. May 1.**	May 1

MISCELLANEOUS

May 12	**Tower — Prince Rupert, B. C.**	Apr. 24
May 12	**Granite Blocks, etc.—Sherbrooke, Que.**	May 1
May 13	**Masons Material — Jersey City, N. J.**	May 8
May 15	**Lighting System—Mandan, N. D.** **Adv. May 1.**	May 1
May 21	**Road Machinery—Harrisburg., Pa.**	May 8
May 29	**Fill and Bulkhead—Astoria, Ore.**	May 8
June 3	**Coal Handling Equipment——Toledo, O.**	May 8

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Rochester—See "Streets and Roads."

O., Jewett—City having plans prepared by W. J. Sherman, engr., 613 Nasby Bldg., Toledo, building water-works system. Work includes sinking wells and building pumping plant and pipe lines.

Kan., Caldwell—City having plans prepared by Burns & McDonnell, engrs., Interstate Bldg., Kansas City, Mo., building water supply line. About $75,000.

N. D., Fargo—City had plans prepared laying 1000 ft. 6 in. and 1410 ft. 8 in. water mains in Bway. between 6th and 11th Aves. About $9000. W. Stevenson, city engr.

Mont., Roundup—City election May 15 to vote on $12,000 bonds to build additional water reservoir. F. Quinnell, Roundup, engr.

Mo., Jefferson City—State Legislature passed bill authorizing building water trunk line to supply large area in northern Missouri. Work involves iron pipe, steel tanks, pumping equipment, etc. Address A. L. McCawley, c/o pub. serv. comn.

Tex., Dallas—See "Streets and Roads."

Cal., Fresno—Fresno City Water Co. plans to drill well and build 2 pumping stations, 1 near Wishon Ave. and Atchison, Topeka & Santa Fe Ry., other near C and California Sts.

BIDS DESIRED

Ga., Griffin—See "Streets and Roads."

Minn., Albert Lea—Until May 13, by C. J. Dudley, city clk., building 1,500,000 gal. rein.-con. circular reservoir, 125,000 gal. rein.-con. tank and tower, 800 gal. per min. centrifugal pump direct connected to 15 hp. steam turbine, piping, valves, water mains, etc. About $50,000. J. H. A. Brahtz, 320 Commercial Bldg., St. Paul, consult. engr. Noted Apr. 10.

Minn., Fairmont—Until May 15, by city, building water purification plant. C. H. Currie, Webster City, engr. Noted Jan. 9.

Mont., Hardin—Until May 27, by City Council laying 13,910 lin.ft. 4-6 in. Matheson pipe, and installing 22 hydrants, necessary valves and fittings. E. C. Flickinger, Hardin, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Ga., Atlanta—City let contract building coagulating basin at waterworks system, to Case & Cothran, Candler Bldg. About $90,000. Noted Apr. 3.

★O., Toledo—Comrs. Lucas Co. let contract laying 7720 ft. 6-in. c.i. pipe in Water Line No. 4, Overland Heights, to S. L. Cothrel, Ohio Bldg., $12,678. Noted May 1.

Minn., New Ulm—City received bids building waterworks system, from Badger Constr. Co., 97 Wisconsin St., Milwaukee, Wis., $10,941; W. C. Frazer, 707 Guardian Life Bldg., St. Paul, $11,200; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, $11,123. Noted Apr. 24.

★Cal., Arcadia—City let contract furnishing and laying 3000 ft. 12-16 in. riveted steel pipe in Santa Anita Ave., to Western Pipe & Steel Co., 1758 North Bway., Los Angeles, $5094.

★Cal., Oildale—Bd. Supervs. Kern Co., Bakersfield, will build water system. Cost, using c.i. pipe, $34,890; soft steel pipe, $25,850. Work involves drilling wells, laying mains and laterals and providing for fire protection. Bonds for $20,000 voted for project and $20,000 additional bonds will be voted. Work will be done by day labor. A. E. Stegeman, Bakersfield, co. surv.

Sewers

PROPOSED WORK

N. Y., Carthage—J. Thompson, Carthage, purchased property between North Washington and North Clinton Sts. and plans to install sewer service to all lots on tract; also build sewage disposal plant. About $13,500.

Pa., Dormont (Pittsburgh P. O.)—See "Streets and Roads."

Pa., Pittsburgh—City plans to build sewers in Harbor, Helzel, Asylum, Bader, Admiral Sts., Fall Way and private property from Miles Way to existing sewer on Firth St. About $16,600. N. S. Sprague, city engr.

W. Va., South Charleston—City voted $144,500 bonds to build sewerage system and pave streets.

O., Akron—Comrs. Summit Co. rejected bids received Apr. 22, building sewerage system in Tallmadge Dist. No. 1., involving 2500 ft. 12 in. vitr. pipe. Work will be readvertised. Noted Apr. 10.

Mich., Lansing—City plans to trench, back fill and lay 5.1 mi. 8-46 in. sewers in Holmes, Bensch, Dakin, Lathrop, Allen, Shepherd and Leslie Sts. About $46,000. M. L. Moore, city engr.

Ia., Casey—Town Council receives bids about June 15, building 3 mi. vitr. pipe sanitary sewers in various streets. About $17,000. C. H. Currie, Webster City, engr.

Ia., Pomeroy—City receives bids about June 1, building 4 mi. vitr. pipe sanitary sewers in various streets. About $25,000. C. H. Currie, Webster City, engr.

Ia., Rock Valley—Town soon receives bids building 4 mi. vitr. pipe sanitary sewers and pumps in practically all streets in town. About $30,000. C. H. Currie, Webster City, engr.

Neb., Clay Center—See "Streets and Roads."

Mont., Cut Bank—City voted $48,000 bonds to complete sewerage system. H. P. Walters, Minot Bldg., Great Falls, engr. Noted Apr. 3.

Wash., Seattle—Bd. Pub. Wks. rejected only bid received Apr. 25, building sewer in Empire Way from 42nd to Orcas Sts. Work will be readvertised. A. H. Dimock, city engr. Noted Apr. 24.

Cal., Los Angeles—Bd. Pub. Wks. soon receives bids building 23,000 ft. cement pipe sewers in 63rd Pl., Vermont and Denker Aves., et al. About $95,000. W. T. Knowlton, sewer engr.

Ont., Dundas—Town plans to build sewage disposal plant. About $50,000. J. W. Tyrrell & Co., 7 Hughson St., S., engr.

Ont., Hamilton—City having estimates prepared for complete storm water overflow sewerage system. About $150,000. E. R. Grey, city engr.

Ont., Pembroke—Town having plans prepared and soon receives bids building sewers in various streets. About $13,675. W. J. Moore, town engr.

BIDS DESIRED

O., Barberton—Until May 17, by city building North Side Lateral Sewerage System, involving 35,940 ft. 8-12 in. vitr. pipe, earth excav., etc. A. W. Alcorn, city engr.

Wis., Beloit—Until May 12, by Bd. Pub. Wks., building sewers in Sewerage Dist. "B" in Prairie Ave., involving 2007 lin.ft. 10-in. and 109 ft. 8-in. vitr. pipe. G. E. Heebink, comr.

Wis., Beloit—Until May 16, by Bd. Pub. Wks., building sewer, water and gas mains, from present mains to 1 ft. back of curb line, in Bluff, Brooks, 8th, Elm, Mill, North 6th and Vine Sts., Dewey, Lincoln, McKinley, Nelson, Park, Prairie and Woodward Aves. G. E. Heebink, comr.

Wis., Milwaukee—Until May 15, by Sewerage Comn., City Hall, building extension to intercepting sewer, involving intercepting and regulating structures together with all connections to existing sewers and other appurtenances. J. H. Fowles, secy.; advertised in this issue.

Wis., Milwaukee—Until May 22, by Sewerage Comn., City Hall, building extensions to intercepting sewer, involving hauling and laying 2370 lin.ft. 72 in. pre-moulded rein.-con. pipe, 1 valve chamber complete, including 72 in. sluice gate together with all manholes and other appurtenances. J. H. Fowles, secy.; advertised in this issue.

Minn., Litchfield—Until May 15, by F. O. Holm, village recorder, laying 1125 ft. 10-in., 3360 ft. 8-in. and 2770 ft. 8-in. pipe. R. P. McNamara, Litchfield, engr.

Okla., Frederick—Until May 13, at office of D. W. Womack, clk., extending sanitary sewerage system. Work involves 26,775 cu.yd. trench excav., 5-17 ft. deep, 45,310 lin.ft. 6-15 in. vitr. or cement pipe, 1032 specials and 86 manholes; advertised in this issue.

Cal., Fresno—Until May 19, by C. Dillon, city clk., building sewers, Sect. 1 involving 36,014 lin.ft. 8-27-in. pipe, 23 drop manholes and 65 standard manholes; Sect. 2, 656 lin.ft. 8-in. and 3708 lin.ft. 6-in. pipe, 10 standard manholes and 5 standard lamp holes. C. Murray, city engr. Contract will be let in 2 sections.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contracts)

★Conn., Bridgeport—City let contract building sanitary sewers in Evergreen St., Wood and Lincoln Aves., to Pierce Mfg. Co., 785 Housatonic Ave., $15,781; in Grand St., to L. Jacques Constr. Co., 608 Montgomery Ave., Elizabeth, N. J., $10,560. Noted Apr. 24.

★Conn., Ridgefield—City let contract laying 5200 ft. 8 in. tile sewer in Byron Park, to T. F. Foley & Co., 23 Quintard St., South Norwalk. About $20,000. Noted Apr. 17.

★Pa., Coatesville—City let contract building Gibbons Run Drain, to Dunleavy Bros., Coatesville, $94,532. Noted Apr. 10.

★O., Akron—Coventry Land Impvt. Co., 1115 South Main St., let contract furnishing material and completing various sanitary sewers, house branches and water services in Firestone Park, to Shullo Bros., 41 Byers Ave. About $16,000. Noted Apr.

Sewers (Continued)

★O., Cincinnati—City let contracts building sewer in (a) Rulison, Corondo, Jula and Loretta Aves., etc., involving 6235 ft. 8-22 in. vitr. pipe; (b) extending Paxton Ave. sewer and branch of interceptor to Brotherton Rd. and Penn. R. R., 1254 ft. 15-24 in. vitr. pipe, (c) relief sewer in Ballard Ave. right of way, 1635 ft. 27 in. vitr. pipe; (d) Winston Rd. and Hannan Ave., 2540 ft. 8-18 in. vitr. pipe, to J. B. McLean Co., (a) $30,343; (b) $39,304; T. P. Strach & Co., 31 Goodall Bldg., (c) $23,713; (d) $17,603.

☆O., Cleveland—City let contract building sewer in East 87th St. from Euclid to Hough Aves., to Manson Co., The Arcade, $11,848; East 174th St. from Lake Shore Blvd. to Grovewood Ave., to Brookside Constr. Co., 3905 West 20th St., $11,661. Noted May 1.

O., Cleveland—City received bids building sewers in (a) East 40th St. from Central to Scoville Aves., (b) East 82nd St. from Superior to Decker Aves., from Amata Constr. Co., 343 The Arcade, (a) $44,396, (b) $54,849; Manson Co., 435 The Arcade, (a) $45,382, (b) $50,044; River Constr. Co., 12109 Mayfield Rd., (a) $46,114; W. P. Gibbons Co., 430 Leader News Bldg., (b) $50,613. Noted May 1.

★O., Toledo—Comrs. Lucas Co. let contract building Sewer No. 34, Overland Heights, involving 6265 ft. 8-in. vitr. pipe, to J. Kelly, 626 Avondale Ave., $13,786.

★Ind., Terre Haute—City let contract laying 1650 ft. 20-24 vitr. and 1010 ft. 30 in. segmental block sewer pipe in Poplar St., to W. H. Harris, Terre Haute, $14,967. Noted Apr. 10.

★Ill., Chicago—J. McGillen, clk. sanitary dist., Room 700, 910 South Michigan Ave., received lowest 3 bids building Des Plaines River sewage treatment works, Div. A, from Leyden-Ortseifen Co., 53 West Jackson Blvd., $384,281; J. O. Heyworth, 606 South Michigan Ave., $386,533; J. W. Page, 189 West Madison St., $404,834; Div. C, from Milwaukee Bridge Co. 1400—34th St., Milwaukee, $4800; Kenwood Bridge Co., 38 South Dearborn St., $4800; Gage Structural Steel Co., 3141 South Hoyne Ave., $5100; Div. N, Bedford Fdry. and Machine Co., 806 Jackson Blvd., $2300; Whiting Fdry. Equipment Co., 140 S. Dearborn St., $3335; Div. O, E. E. Maher, 332 South Michigan Ave., $9050; Kling Bros. Eng. Wks., 1300 North Kostner Ave., $11,924; Div. P, W. A. Jackson Co., 37 West Van Buren St., $22,375; Div. R, Stannard Power Equipment Co. 53 West Jackson Blvd., $22,795; Div. V, Coffin Valve Co., $6250; Chapman Valve Co., 111 West Washington St., $6400; Div. W, Builders Iron Fdry., 209 South La Salle St., $12,760. J. W. Page, bid on all divisions, $489,044. Noted Apr. 10.

★Wis., Sheboygan Falls—City let contract to A. Mollman, Sheboygan Falls, excavating and laying 1.5 mi. storm sewer in Main and Division Sts., involving 950 ft. 10 in. and 1570 ft. 12 in. vitr. pipe, cost $18,500; to A. Zurherde, Michigan Ave., Sheboygan, building sewer and water connections, excavating and laying 18,000 ft. sewers in Bway. and Main Sts., $0.95 per ft.

★Okla., Miami—City let contract building tile sewers and sanitary sub main in Dist. Nos. 37, 38, and 39, to Owings & Shafer Co., Miami, $16,717.

★Wash., Coulee City—City let contract extending sewers, to J. C. Broad, Jamieson Bldg., Spokane, $32,695.

Wash., Seattle—Bd. Pub. Wks. received bids Apr. 25, building sewer in 44th Ave. S. W., involving 11,768 lin.ft. 8-12 in. clay or concrete pipe, from Coluccio & Niblett, $48,412; F. N. Badolato, $50,142; S. A. Moceri, $56,834.

Wash., Seattle—Bd. Pub. Serv. received bids building Firlands Sanitorium Sewer, involving 10,710 ft. 8 in. pipe. (a) clay, (b) concrete, from J. De Julio, Seattle, (a) and (b) $28,021; F. N. Badolato, Seattle, (a) $33,553, (b) $33,017.

★Cal., Los Angeles—See "Streets and Roads."

★Que., Montreal—City let contract building sewer in Rachel St., to De Keyser-Wanters Co., 3091 Lagerunse St. About $12,000.

★Ont., Hamilton—City let contract building sewers in various streets, to Brennen Holling, 100 Melrose St. About $37,000. Noted Mar. 13.

Bridges

PROPOSED WORK

Conn., Darien—See "Streets and Roads."

N. Y., Warsaw—Village purchased 5 acre site and plans to build concrete and timber trestle and loading bins for coal, coke, crushed stone, sand, etc. About $12,000.

N. J., Jersey City—City plans to build concrete and steel viaduct through 12th St. from here to Hudson City Sect. About $200,000. State Highway Comn., Trenton, may bear half of cost.

Pa., Wilkes-Barre—Comrs. Luzerne Co. plan to build rein.-con. and steel memorial bridge 1200 to 1500 ft. long, 80 to 100 ft. wide, over Susquehanna River on Market St. About $1,000,000. B. H. Davis, 17 Battery Pl., New York City, engr. Carrere & Hastings, 52 Vanderbilt Ave., New York City, archts.

O., Akron—Summit Co. having plans prepared building 48 ft. rein.-con., slab and girder bridge, 42 ft. wide, over old Ohio Canal on Ash St., 33-ft. roadway and one 9-ft. brick sidewalk. C. Costigan, co. engr.

O., Greenlawn (Briggsdale P. O.)—Franklin Co. (Columbus) having plans prepared building 735 ft. concrete arch bridge over Scioto River, 28 ft. wide. Work involves grading and building coffer dam and two 6 ft. sidewalks. About $400,000. J. A. Dunn, co. engr.

Mich., Detroit—City voted $3,000,000 bonds to build 2200 ft. steel framed cantilever type bridge from Grand Blvd. to Belle Isle, 85 ft. wide, rein.con. floors, to consist of 19 spans; middle roadway 59 ft. wide with 12 ft. sidewalks on each side. M. E. Cooley, Ann Arbor, engr. Noted Jan. 9.

Ia., Humboldt—Bd. Supervs. Humboldt Co. soon receives bids building 3 span concrete arch bridge, 200 ft. long, 20 ft. wide. About $25,000. L. D. Snyder, co. engr.

Ia., Leon—Bd. Supervs. Decatur Co. soon receives bids building 200 ft. steel bridge, 20 ft. wide, over Little River on Jefferson Highway, concrete abutments and approach spans. About $15,000. O. Sjolander, co. engr.

Ia., Logan—Bd. Supervs. Harrison Co. soon receives bids building 58 bridges and culverts in various townships. About $35,000. A. W. Gaines, co. engr.

Ia., Marshalltown—City soon receives bids building 106 ft. rainbow arch bridge, 42 ft. wide, 12 ft. sidewalk on each side. About $30,000. Marsh Eng. Co., East 7th and Vine Sts., Des Moines, engrs.

Ia., Mt. Ayr—Bd. Supervs. Ringgold Co. soon receives bids building 55 bridges and culverts on Ringgold Co. Federal Aid Project. About $30,000. S. E. Sime, co. engr.

Mo., Clayton—St. Louis Co. soon lets contract building one 18 ft. span T beam bridge over Moline Creek on Florissant Rd.; one 12 ft. span slab bridge over Wild Horse Creek, and one 10 ft. span slab over Bonhomme Creek, all rein.-con.; also building end wall and rein.-con. slab on 3 x 4 ft. box culvert and end wall on 18 ft. pipe culvert, rubble masonry. W. Elbring, co. engr.

Tex., Dallas—See "Street and Roads."

Wash., Adna—Comrs. Lewis Co. (Chehalis) rejected bids received Apr. 7, building 220 ft. steel span bridge with 500 ft. approach, 16 ft. wide, over Chehalis River, here. About $25,000. Work will be readvertised. Noted Apr. 24.

Cal., Bakersfield—Bd. Supervs. Kern Co. plans to build steel bridge over outlet canal at Western Waterworks plant, 24 mi. west of here. A. E. Stegeman, co. surv.

Que., L' Assomption—Municipal Council plans to build concrete and steel bridge, concrete flooring, 340 ft. long, 16 ft. wide over L' Assomption River. I. E. Vallee, Parliament Bldg., Quebec, engr

Que., Yamachiche—Municipal Council had plans drawn for 70 ft. concrete and steel bridge, rein.-con. flooring, 18 ft. wide, over Yamachiche River. I. E. Vallee, Parliament Bldg., Quebec, engr.

BIDS DESIRED

Conn., Stratford (Bridgeport P. O.)—Until June 5, by State Highway Dept., Hartford, building bridge over Housatonic River between Stratford and Milford Twps., Fairfield and New Haven Counties, main structure to be 100 ft. clear span, 60 ft. wide, 5 arches, 2 girder approach spans about 52 ft. long, to be paved; advertised in this issue.

N. Y., Rome—Until May 14, by Supt. Pub. Wks., Capitol, Albany, building 8 ft. pipe culvert over Barge Canal here, involving 11,000 cu.yd. excav., 164,000 lb. metal in culvert pipe, 160 lbs. steel reinforcement, etc.

Ga., La Fayette—Util May 19, by Bd. Comrs. Walker Co., building bridge over Lawrence Creek, near Rock Springs, consisting of two 25-ft. spans, 12-ft. roadway, pier and abutments; 45-ft. span bridge over Rock Creek, near Henkles, 12-ft. roadway and 2 abutments; 30-ft. span bridge over creek near here, 12-ft. roadway and 2 abutments; bridge over East Armuchee Creek, near Villanow, two 27-ft. spans, 12 ft. roadway, 1 pier and 2 abutments, 25-ft. span bridge over Dry Creek, near Rossville, 12-ft. roadway and 2 abutments. All rein.-con. J. L. Rowland, clk.

Ga., Monroe—Until June 6, by Comrs. Walton Co. (Monroe) and Oconee Co., (Watkinsville) building bridge with 4 steel spans, at Carithers Mill, 11 mi. from here. Work involves 49 cu.yd. Class B concrete in pier caps, 120 cu.yd. Class A concrete in floor and 16,100 lbs. reinforced steel in place. T. C. Aycock, Monroe, chn. Garrett & Slack, Bell Bldg., Montgomery, Ala., engrs.

Ala., Montgomery—Until June 9, by Rd. Revenue Montgomery Co., Building 1288 ft. rein. con. bridge, 16 ft. roadway, over Catoma Creek, on Norman Bridge Rd., 5 mi. south of here. W. S. Keller, Montgomery, state highway engr.; advertised in this issue.

Ill., Watseka—Until May 16, by Iroquois Co., building 60 ft. rein.-con. span bridge, 20 ft. roadway, Sect. J-15d, involving 227 cu.yd. concrete, 37,090 lbs. reinforcing steel, etc., cost $6415; also 100 ft. span, Sect. I-15d, 20 ft. roadway, 123 cu.yd. Class "A" concrete, 40 cu.yd. Class X, 11,370 lb. reinforcing steel, 81,420 lb. structural steel, etc., $10,164. C. Older, state highway engr.

Ark., Harrisburg—Until May 27, by Bd. Comrs. Ozark Trail Rd. Impvt Dist., Poinsett Co., at Marked Tree, building four 50 ft. steel plate girder spans or steel truss spans, 18 ft. wide; two 50 ft. steel truss spans, 16 ft. wide; 400 lin.ft. concrete viaduct, 18 ft. wide; 112 lin.ft. I-beam spans, 16 ft. wide and 95 cu. yd. rein.-con. culverts. W. H. Dilatush, secy.; advertised in this issue.

Wash., Marysville—Until May 19, by State Highway Bd., Olympia, building one 50-ft., one 40-ft. and two 20-ft. rein.-con. arch bridges on Pacific Highway between here and Silvana, Snohomish Co. J. Allen, state highway comr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

Pa., Leetsdale—Comrs. Allegheny Co., (Pittsburgh), received bids building 110 ft. stone and concrete bridge, 50 ft. wide, with 37 ft. arch, over Sewickley Creek, between Allegheny and Beaver Counties, from E. W. Falck, Leetsdale, $48,106, A. Laidlaw, Bessemer Bldg., Pittsburgh, $48,910, Pitt Constr. Co., Fulton Bldg., Pittsburgh, $50,925. Noted May 1.

★Ia., Independence—Bd. Supervs. Buchanan Co. let contracts, to J. B. Elliott, Fairbank, building 23 concrete box culverts, 11 circular culverts, 1 concrete slab bridge and 1 concrete headwall, cost, $11,246, to F. E. Reinhold, Quasqueton, 22 concrete box culverts, 2 circular concrete culverts and 2 concrete slab bridges, $12,171. Work involves 1280 cu.yd. rein.-con. and 43 tons reinforcing steel.

★Ia., Onawa—Bd. Supervs. Monona Co. let contract building 11 concrete box culverts, 1 concrete slab bridge and 2 concrete headwalls, to J. P. Riddle, Creighton, Neb., $12,793. Work involves 537 cu.yd. rein.-con. and 18 tons reinforcing steel.

★Ia., Sigourney—Comrs. Keokuk Co. let contract building 37 concrete box culverts and 1 concrete circular culvert, to J. Ritzinger, Sigourney, $23,268. Work involves 29 tons reinforcing steel, 950 cu.yd. rein-con. and 990 cu.yd. earth excav.

★Ia., Waverly—Bd. Supervs. Bremer Co. let contract building bridges in various townships, to C. H. and J. H. Russell, Waverly, $18,681. Noted Apr. 17.

★Mo., Granby — Comrs. Newton Co. (Neosha) let contract building 200 ft. rein.-con. bridge, 18 ft. wide, over Shoal Creek on Granby-Diamond Rd., 3 mi. north of here, to Joplin Concrete & Steel Constr. Co., Independent Bldg., $14,600.

Bridges (Continued)

Wash., Orting—Comrs. Pierce Co., Tacoma, received bids building 180 ft. Baltimore truss bridge, concrete piers and trestle approaches, near here, from A. McCullough, 3609 North Mullen St., Tacoma, $22,439; C. Huber, Central Blvd., Seattle, $24,750; D. Rutherford, Municipal Dock, Tacoma, $24,200.

★Ore., Moro—State Highway Comn., Portland, let contract building bridge over John Day River, consisting of two 126 ft. wooden truss spans, to Portland Bridge Co., Yeon Bldg., Portland. About $24,500. Noted Apr. 24.

Ore., Moro—State Highway Comn., Portland, received 3 lowest bids building 7 steel plate girder bridge over Deschutes River near Miller Sta., from A. Guthrie & Co., Sherlock Bldg., $74,938; Lindstrom & Feigensen, foot of Glisan St., $74,195; Portland Bridge Co., Yeon Bldg., $77,925. All contractors of Portland. Bids considered excessive, may be rejected and readvertised. Noted Apr. 24.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co., received bids building 60 ft. single span Howe truss timber bridge on pile foundation over San Gabriel River on Center St., from Ross Constr. Co., Forum Bldg., Sacramento, $22,962; W. Simpson Co., Marsh-Strong Bldg., $23,225; Merceneaun Bridge & Constr. Co., Pacific Electric Bldg., $23,814.

Structural Steel

PROPOSED WORK

Ia., Leon—See "Bridges."

Tex., Dallas—See "Streets and Roads."

BIDS DESIRED

Ga., Monroe—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tex., Lockhart—See "Streets and Roads."

★Man., St. Boniface—See "Miscellaneous."

Reinforced Concrete

PROPOSED WORK

Tex., Dallas—See "Streets and Roads."

Tex., Jasper—See "Streets and Roads."

Que., L'Assomption—See "Bridges."

Que., Yamachiche—See "Bridges."

BIDS DESIRED

Ala., Montgomery—See "Bridges."

Wis., Milwaukee—See "Sewers."

Minn., Albert Lea—See "Waterworks."

Wash., Marysville—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ia., Independence—See "Bridges."

★Ia., Onawa—See "Bridges."

★Ia., Sigourney—See "Bridges."

★Ia., Spencer—See "Streets and Roads."

★Mo., Granby—See "Bridges."

★Cal., Calexico—See "Industrial Works."

Streets and Roads

PROPOSED WORK

Conn., Darien—City plans to vote on $100,000 bonds to build new sidewalks and small bridge.

Conn., New Haven—City soon lets contract paving 7300 sq.yd. Putnam and York Sts., asphalt or National. F. L. Ford, city engr.

N. Y., Rochester—City soon receives bids paving Elmwood Ave., with concrete, 20 ft. wide; also relaying water mains and setting hydrants. About $47,700. A. Poole, city engr.

N. Y., Syracuse—See "Miscellaneous."

N. J., Morristown—Bd. Freeholders Morris Co. plans to improve main road between here and Whippany. About $25,000. Plans include widening road from 12-18 ft. and laying bituminous surface.

N. J., Newark—Bd. Freeholders Essex Co. soon receives bids paving 15,310 ft. Stuyvesant Ave., bituminous concrete on concrete base. About $204,350. F. Reimer, co. engr.

N. J., North Bergen—Town plans to improve Cortlandt St., bituminous pavement. About $10,000.

Pa., Brookville—Jefferson Co. election June 10 to vote on $500,000 bonds to improve highways.

Pa., Clearfield—Town voted $57,000 bonds to build improved roads, $30,000 for state roads and $27,000 for county aid roads. Owen & Plummer, Inc., Johnstown, engrs.

Pa., Harrisburg—City Council plan to pave Turner St. from Seneca to Schuylkill Sts., pave and curb Home St. from Berryhill to Kensington Sts., David St. from Park to Whitehall Sts., Helen St. from 19th to David Sts., Kunkel St. from 16th to 17th Sts. and open York St. from 17th to 18th St., sheet asphalt on concrete base, granite or granolithic curbing. R. R. Seaman, clk.

Pa., Kittanning—Armstrong Co. election soon to vote on $1,000,000 bonds to improve roads.

Pa., McKees Rocks—City election about May 21, to vote on $85,000 bonds to improve streets. Douglas & McKnight, Columbia Bank Bldg., Pittsburgh, engrs.

Pa., Pittsburgh—City plans to pave Andover Terrace from Bryn Mawr Rd. to Alpena St. About $44,000. N. S. Sprague, city engr.

Del., Wilmington—City receives bids about June paving 1 block 25th St., 5 blocks Delaware Ave., 1 block Grant Ave., 6 blocks Washington St., 1 block West St., 2 blocks 20th St., 1 block 19th St., 2 blocks McCabe Ave., 2½ blocks Van Buren St., 1 block Harrison St., 2 blocks 27th St., 2 blocks 20th St., 2 blocks Poplar St., 1 block 14th St., 1 block 23rd St., 1 block Hamilton St. and 1½ blocks Madison St. Work involves 70,000 sq.yd. asphalt on 5 in. concrete base. About $450,000. Noted Mar. 20.

W. Va., Buckhannon—Comrs. Upshur Co. having plans prepared building 5.2 mi. Buckhannon-Lorentz Rd., grading 26 ft. wide, surfacing 16 ft. wide. Work involves 20,000 cu.yd. excav., and 49,000 sq.yd. cement concrete surfacing. About $129,000. W. C. West, Buckhannon, engr.

W. Va., Fairmont—Comrs. Marion Co. plan to build 0.76 mi. Buffalo Pike, grading 24 ft. wide, surfacing 16 ft. wide. Work involves 7000 cu.yd. excav. and 7000 sq.yd. concrete surfacing. About $33,000. W. M. Linn, Fairmont, engr.

W. Va., Fayetteville—Fayette Co. plans election to vote on $379,000 bonds to improve roads in Kanawha Dist.

W. Va., Fayetteville—Fayette Co. plans election to vote on $125,000 bonds to improve roads in Mt. Cove Dist. J. K. McGrath, Fayetteville, engr.

W. Va., Harrisonville—Comrs. Ritchie Co. plan to grade and hard surface 5 mi. Pennsboro Rd. and ¾ mi. Ellenboro Rd., 16 ft. wide. About $112,040. A. Renshaw, Harrisonville, engr.

W. Va., Kingwood—Comrs. Preston Co. having plans prepared grading and hard surfacing 2.56 mi. Morgantown-Kingwood Pike, 10 ft. wide. About $30,000. H. E. Wilhelm, Kingwood, engr.

W. Va., Middlebourne—Comrs. Taylor Co. plan to pave 2 mi. Fettermon-Pruntytown Rd., 14 ft. wide, involving 18,000 sq.yd. vitr. brick on concrete base. About $45,000. J. A. Suisel, Grafton, engr.

W. Va., Middlebourne—Comrs. Tyler Co. soon receive bids grading and hard surfacing 1.5 mi. Middlebourne—Salem Rd., 16 ft. wide, probably bituminous macadam. About $41,000. P. P. Berkley, Middlebourne, engr.

W. Va., Parkersburg—Comrs. Wood Co. plan to build 2 mi. Clay Dist. Rd., 14 ft. wide, concrete. About $37,000. Woodyard & Alexander, Parkersburg, engrs.

W. Va., South Charleston—"See Sewers."

W. Va., Sparta—Comrs. Monroe Co. had plans prepared improving 2 mi. Union-Ronceverte Rd., grading 26 ft. wide, and surfacing with waterbound macadam of local stone, 16 ft. wide. About $18,000. J. W. Hancock, engr.

W. Va., Spencer—Comrs. Roane Co. having plans prepared grading and hard surfacing 3.75 mi. Spencer-Walton Rd., 16 ft. wide. About $94,000. H. R. Muldoon, Spencer, engr.

W. Va., Wayne—Comrs. Wayne Co. plan to grade and hard surface 2 mi. Wilson Creek-Elmwood Rd., 16 ft. wide. About $60,000. H. A. Levering, Wayne, engr.

W. Va., West Union—Comrs. Doddridge Co. plan to grade and hard surface 0.58 mi. Greenwood-West Union Rd., 14 ft. wide. About $25,000. J. R. Wilson, Clarksburg, engr.

W. Va., West Union—Comrs. Doddridge Co. receive bids about June 1, paving 3½ mi. Northwestern Pike, concrete, 16 ft. wide.

W. Va., Wheeling—Comrs. Ohio Co. receive bids about June 1, building 1 mi. National Rd., 18 ft. wide, concrete. About $36,000. W. O. McCluskey, Wheeling, engr.

Fla., South Jacksonville (Jacksonville P.O.)—Duval Co. soon receives bids paving 4.2 mi. on Kings Rd., Hendrix Ave., and other roads in South Jacksonville. About $16,000.

Miss., Brandon—Highway Comn. Pelahatchie Precinct Separate Rd. Dist., Rankin Co., soon lets contract improving 6 mi. Federal Aid Rd. No. 5, between Jackson and Meriden. Work involves 12 acres clearing and grubbing, 39,000 cu.yd. grading, 6900 cu.yd. gravel. X. A. Kramer, Magnolia, state highway engr.

Michigan—State Highway Comn., Lansing, soon lets contract grading, draining and surfacing 20 mi. highway, Muskegon and Oceana Counties, 16 ft. wide, gravel or stone.

Mich., Detroit—Dept. Pub. Wks. receives bids about May 20, paving with asphaltic concrete on 6 in. concrete base, Berea or Medina curbing, Harper Ave., Sect. 1 from Hurlburt to Montclair Aves., 40 ft. wide less 18 ft. track space, cost $28,660; Sect. 2 from Montclair to Connors Aves., 30 ft. wide, $34,860; Arizona Ave. from Woodward Ave. to John R. St., 24 ft. wide, $8863; Greeley Ave. from Westminster Ave. to Caniff Rd., 26 ft. wide, $27,518; Schroeder Ave. from Jefferson Ave. to South St., 26 ft. wide, $16,850; Platt St. from westerly end of street to Moran St., 26 ft. wide, $7675; Otsego Ave. from Joy Rd. to Graham Ave., 26 ft. wide, $13,733; Sylvan St. from McKinley to Vinewood Aves., 24 ft. wide, $5702; "T" alley between Beniteau Blvd., St. Jean, Kercheval and Waterloo Aves., 20 ft. wide with 1 course concrete, $5830. Noted Apr. 17.

Mich., Port Huron—St. Clair Co. Rd. Comn., receives bids about May 20, shaping, surfacing and draining 6.75 mi. State Rd. Assessment Dist. No. 22, 18 ft. wide. D. Belyea, co. engr.

Ill., Chicago—Bd. Local Impvts. withdrew advertisement for bids to be opened Apr. 21 for paving streets and alleys. Work will be readvertised. C. D. Hill, ch. engr. Noted Apr. 17.

Ill., Ottawa—La Salle Co. having plans prepared building 1.5 mi. state aid road, north of Marseilles, 15 ft. wide, cement concrete. About $30,000. M. M. Trumbull, co. supt. highways.

Ill., Waukegan—Lake Co. Rd. & Bridge Com. soon lets contract building Belvidere Rd. from Milwaukee Ave. to Volo, 16 and 18 ft. wide, concrete. About $300,000. Work will be let in 1, 2 or 3 sections. C. E. Russell, co. supt. highways.

Wis., Chilton—City having plans prepared by J. Donahue, engr., York Bldg., Sheboygan, paving, curbing and guttering 30,000 sq.yd. Main St., 20 ft. wide, concrete. About $50,000.

Wis., Neenah—City plans to pave 4 blocks, 30 ft wide, brick, asphalt or concrete. About $20,000. Work involves 7847 sq.yd. pavement and 5129 ft. curbing. H. Le Tourney, Neenah, engr.

Wis., Sheboygan—City having plans prepared by C. U. Boley, city engr., paving, curbing and guttering 15,000 sq.yd. Martin Ave. from 15th St. to city limits, 18 ft. wide, concrete. About $45,000.

Ia., Eldora—State Bd. Control, Des Moines, soon receives bids grading, subgrading and paving 1½ mi. road bordering Iowa State Industrial School for boys, 18 ft. wide, concrete or monolithic brick. About $35,000. A. M. McColl, chn.

Ia., Mason City—Bd. Supervs. Cerro Gordo Co. rejected bids received Apr. 21, paving with concrete 9646 ft. roads from here to Plymouth and Manly, 16-18 ft. wide. About $48,444. Work will soon be readvertised. Noted Apr. 17.

Minn., Duluth—City soon lets contract grading and paving with concrete, asphalt or Scoora block on concrete base, 7 blocks 26th Ave., E., grading 66 ft. wide, paving 20 ft. wide, with 5 ft. walk on either side. About $40,000. J. A. Farrell, comr.

Kan., Manhattan—City soon receives bids paving 1200 ft. North 17th St. from Leavenworth St. to Anderson Ave., 30 ft. wide, involving 4000 sq.yd. brick or 2 course concrete on concrete base. A. Rhodes, city engr.

N. D., Dickinson—City plans to pave 24 streets.

Streets and Roads (Continued)

N. D., Stanley—Mountrail Co. appropriated $186,000 bonds to build roads. State and Federal Government will be asked to appropriated like amount.

Mo., Glendale (St. Louis P. O.)—City soon receives bids paving and curbing 3000 ft. Beverly St. from Berry Rd. to Austin Pl., 30 ft. wide, concrete. About $10,000. L. J. Dziatzko, Empire Bldg., Webster Groves, engr.

Ark., Marshall—Searcy Co. plans to grade, drain and build three 150 ft. steel span bridges on 14 mi. road from Marshall to Snow Ball, Dist. No. 3, cost $50,000; 26 mi. road from St. Joe to Witts Springs, 16 ft wide, Dist.No. 4, including 1 bridge over Buffalo River, cost $150,000; also grade and surface with macadam 47 mi. road, 15 ft. wide, Dist. No. 2, including 1 bridge over Buffalo River, $300,000. Winn Eng. Co., 207 Riegler Bldg., Little Rock, engrs.

Tex., Dallas—Comrs. Dallas Co. soon lets contract improving 9.125 mi. road known as Ft. Worth-Dallas Highway, 20 ft. wide. About $53,093 per mi. Work involves building rein.-con. bridges and culverts and waterways, 213,151 sq.yd. concrete, 77,677 cu.yd. unclassified grading, 153 ft. 30 in. and 314 ft. 24 in. rein.-con. pipe, 108 cu.yd. rein.-con. for culverts and 56,250 lbs. reinforcing steel for pavement. J. F. Witt, 813 4th Ave., engr.

Tex., Houston—Comrs. Harris Co. had plans prepared by Howe & Wise, engrs., 628 Chronicle Bldg., building 9.2 mi. Katy Rd., 12 ft. wide, gravel with shell binder. About $41,593. Work involves scarifying old roadway, hauling, placing, spreading and rolling gravel and shell binder. H. L. Washburn, co. aud.

Tex., Jasper—Comrs. Jasper Co. had plans prepared by G. R. Abney, engr., Jasper, improving 4.23 mi. road known as Highway No. 7 running from here to Angelina Co. line, 16 ft. wide. About $16,025. Work involves 200 cu.yd. concrete, building drainage structures, rein.-con. box culverts, clearing and grubbing 24 acres and 18,820 cu.yd. earth excav.

Tex., McKinney—Comrs. Collin Co. soon let contract building Sherman-Dallas Rd. About $40,000. J. B. Crockett, Wichita Falls, engr.

Arizona—State had plans prepared paving 6.38 mi. road between Tempe and Mesa, Maricopa Co. About $200,000. Work involves 83,500 sq.yd. paving and 826 lin.ft. culvert pipe. County will apply to Federal Government for appropriation for part of work. T. Maddock, Phoenix, state engr. Noted May 1.

Ariz., Tombstone—Bd Supervs. Cochise Co. plans election to vote on $1,000,000 bonds to build highways. Plans include 68 mi. road from Douglas to Wilcox via West Wells, Pearse and Cochise, cost $475,000; 6 mi. from Benson north to county line, $30,000; 20 mi. from Benson north, $150,000; 28 mi. from junction of Hereford-Naco Rd. to Forest Reserve, via Ramsey Canyon, $450,000; 19 mi. from Forrest Ranch to Gleeson and surfacing 8 mi. Double Adobe Rd., $140,000; 19 mi. from West Wells to Chiricahua Mts., $50,000; 10 mi. road from point on Borderland route near Arizona-New Mexico line to Hill Top Rd., $60,000.

Wash., Goldendale—Comrs. Klickitat Co. soon let contract grading, draining and hard surfacing ¾ mi. Goldendale-Maryhill Rd.

Wash., Montesano—Grays Harbor Co. voted $400,000 bonds to be added to state and Federal funds to build various roads. Noted Mar. 27.

Wash., South Bend—Comrs. Pacific Co. soon let contract paving section Natl. Park Highway, known as Ocean Beach Highway; grading and improving 2.5 mi. state road No. 20; Highway 3-D, rock base with rock top; 8 mi. road from Chehalis to South Bend, concrete.

Wash., Wenatchee—Comrs. Chelan Co. soon let contract paving Columbia River bridge, 2½ in. concrete, cost to be borne equally by Chelan and Douglas Counties and Wenatchee Recl. Dist.; also paving Wenatchee River bridge, 2½ in. asphalt.

Oregon—State Highway Comn., Portland, soon lets contract paving 6.5 mi. Old Oregon Trail, Union Co., Island City-La Grande-Hot Lake Sect.; 5.5 mi. Pacific Highway, Lane Co., Eugene-Goshen Sect., involving 10,000 cu.yd. excav.; 14.8 mi. Pacific Highway, Jackson Co., Green Springs Mountain Rd. to California line, 11,000 cu.yd. excav.; 7.6 mi. Sexton Mountain Sect., Josephine Co., 118,000 cu.yd. excav.; 4.3 mi. West Side Highway, Hillsboro-Forest Grove Sect., Washington Co.; grading 6.8 mi. Pacific Highway, Oregon City to Oswego, Clackmas Co., 40,000 cu.yd. excav.; 12.3 mi. Columbia River Highway, Arlington-Morrow Co. line section, Gilliam Co., 88,000 cu. yd. excav.; grading and macadamizing 12.2 mi. Pacific Highway, Gold Hill to Josephine Co. line, Jackson Co., 24,000 cu.yd. excav.; Comstock-Pass Creek Sect., 5000 cu.yd. excav., 2000 cu.yd. rock surfacing, Douglas Co.; Monroe to Lane Co. line, 18,000 cu.yd. excav., 6750 cu.yd. rock surfacing, Benton Co.; 1.2 mi. Oakland south Sect., 2500 cu. yd. rock surfacing, 14,000 cu. yd. excav., Douglas Co.; 3.25 mi. Loraine-Drain Sect., Douglas Co., 6800 cu.yd. rock surfacing, 19,000 cu.yd. excav.; 2 mi. Roseburg-Winchester Sect., 9000 cu.yd. excav., 400 cu.yd. rock surfacing; 5.85 mi. Ashland-Green Spring Rd., 24,500 cu.yd. excav., Jackson Co.; 6.7 mi. Roseburg-Dillard Sect., Douglas Co., 51,000 cu.yd. excav. 7500 cu.yd. rock surfacing; Jacques Pl. to Johns Pl., Douglas Co., 28,000 cu.yd. excav., 11,200 cu.yd. rock surfacing.

Ore., Heppner—Morrow Co. plans election in June to vote on $290,000 bonds to build 31 mi. Oregon-Washington highway between Gilliam Co. line and here; 31 mi. from here to Umatilla Co. line; Heppner-Ritter Rd. from here to Grant Co. line; Butter Creek Rd. between Lena and Jarmans Corner; Eight Mile Rd.; Ione-Gooseberry Rd. and road from here to Grant Co. line via Parkers Mill and Hardman.

Ore., Portland—City having plans prepared improving Haight Ave. from north line Skidmore St. to south line Alberta St.; Elliott Ave. from north line Division St. to south line Hawthorne Ave.; Jarrett St. from Union Ave. to East 9th St.; Prescott St. from west line Concord St. to west line of block 6, Multnomah; East 8th St. from Ainsworth Ave. to Jarrett St. G. R. Funk, city aud.

Ore., Portland—City soon lets contract excavating old concrete and replacing with 1 in. binder and 2 in. top, asphaltic concrete No. 1 or 2 or sheet asphalt on East Harrison, Locust and Cypress Sts., unnamed street southeast from East Park to center line East Harrison St.; redress with asphaltic concrete No. 1 or 2 Morris St. from center line Chapman St. to center line Stout St.; artificial stone or asphalt sidewalks on not less than 3 in. foundation, East 17th St. from south line of Insley Ave. to south line of Holgate St.; concrete or asphalt pavement No. 1 or 2 on crushed rock or bituminous base, Concord St. from Skidmore to Prescott Sts.; paving central roadway, 18 ft. asphaltic concrete No 1 or 2 on crushed rock or bituminous base, on Francis Ave. from east line Kenilworth addition to 42nd St., S. E.; East 39th St. from Francis Ave. to Powell Valley Rd.; East 29th St. from Belmont to East Stark Sts. G. R. Funk, city aud.

Cal., San Diego—Bd. Supervs. San Diego Co. plans election to vote on $2,000,000 bonds to grade and pave county highways. J. B. McLees, co. clk.

Cal., San Diego—City receives bids about June paving with concrete, grading and building cement curbs, culverts, etc. on 3½ mi. Morena Blvd. between Old Town and Pacific Beach. About $60,000. G. Crowell, city engr.

Que., Lachine—Town plans to spend $25,000 to pave streets.

Ont., St. Thomas—M. Ferguson, engr., St. Thomas, receives bids about May 15, building 5500 ft. roads, 22 ft. wide, for city. Work involves 13,000 sq.yd. waterbound macadam, 11,000 lin.ft. concrete curbing and guttering. About $55,000.

BIDS DESIRED

Massachusetts—Until May 13, by State Highway Comn., 212 State House, Boston, resurfacing and draining 5200 ft. State Highway, Wenham Twp., 18-24 ft. wide, bituminous macadam. A. W. Dean, state highway engr.

Mass., Boston—Until May 13, by Park Comn., building playground, drains, walks, drives, etc., at Franklin Park. About $12,000. C. E. Putnam, 33 Beacon St., engr.

Mass., Brockton—Until May 20, by city, laying bituminous concrete surfacing or other mixed bituminous surfacing or pavement on North Main, Howard and Copeland Sts. H. S. Crocker, city engr.; advertised in this issue.

Rhode Island—Until May 16, by State Bd. Pub. Rds., State House, Providence, building 9297 ft. East Main Rd., Portsmouth Twp., 10,560 ft. Hartford Pike, Johnston and Scituate Twps., both bituminous macadam; 8180 ft. Waterman Ave., East Providence Twp. and 3550 ft. Mendon Rd., Lincoln Twp., both cement concrete; advertised in this issue

N. Y., New York—Until June 3, by L. Nixon, supt. pub. wks., Capitol, Albany, paving barge canal terminals, Pier 6, East River, Contr. 52-P.; advertised in this issue.

N. J., Jersey City—Until May 13, by city, repaving Hutton Ave. between Liberty Ave. and Hudson Blvd., bituminous concrete. C. A. Van Keuren, city engr. Noted Apr. 3.

N. J., Nutley (Newark P .O.)—Until May 20 by town, paving Park Ave. from Passaic to Washington Aves. Work involves 7800 sq.yd. concrete 8 in. thick in center and 6 in. at sides, 1600 lin.ft. bluestone curb reset in concrete and 3500 lin.ft. integral concrete curb. E. N. Smith, town engr.; advertised in this issue.

N. J., Plainfield—Until May 19, by City Council, paving certain streets with rein.-con. and others with vitr. brick on concrete base. Work involves 14,700 sq.yd. vitr. brick, 2300 cu.yd. cement concrete and 9400 lin.ft. concrete abutments in place of curbs. J. Gavett, city engr.; advertised in this issue.

Pennsylvania—Until May 26, by State Highway Comn., Harrisburg, building roads in counties as follows:

Blair Co., 13,623 ft. bituminous or rein.-con. surface course on concrete foundation.

Butler Co., 32,229 ft. bituminous or rein.-con. surface course on concrete foundation.

Cameron Co., 11,065 ft. bituminous or rein.-con. surface course on concrete foundation.

Clarion Co., 26,648 ft. rein.-con. and Hillside vitr. brick.

Clinton Co., 4984 ft. rein.-con.

Crawford Co., 16,552 ft. bituminous or rein.-con. surface course on concrete foundation.

Dauphin Co., 33,917 ft. bituminous concrete Hillside vitr. brick or rein.-con. and Hillside vitr. brick surface course on concrete foundation.

McKean Co., 53,472 ft. rein.-con.

Mercer Co., 17,891 ft. bituminous or rein.-con. surface course on concrete foundation.

Somerset Co., 10,554 ft. rein.-con. and Hillside vitr. brick.

Union Co., 13,464 ft. bituminous or rein.-con. surface course on concrete foundation.

Venango Co., 9550 ft. rein.-con.

Warren Co., 7783 ft. rein.-con. and Hillside vitr. brick.

Wayne Co., 27,688 ft. bituminous or rein.-con. surface course on concrete foundation.

Westmoreland Co., 2085 ft. rein.-con. L. S. Sadler, state highway comr.; advertised in this issue.

Pa., Barnesboro—Until May 21, by Boro. Council, c/o Cambria Co. Controller, Ebensburg, building 3300 ft. road with vitr. fire clay or shale paving brick on combination concrete base and curb. C. E. Schlichter, Spangler, engr. I. H. Williams Barnesboro, secy.

Pa., Ebensburg—Until May 9, by Supervs. East Taylor Twp., c/o Cambria Co. Controller, rebuilding 1 mi. and 600 ft. road from Wesley Chapel to West Point, 16-ft roadway, vitr. brick on concrete base. Separate bids for 386,000 No. 1 repressed vitr. brick. O. P. Thomas, Leader Bldg., Johnstown, engr.

Pa., Ebensburg—Until May 9, by Supervs. Adams Twp., c/o Cambria Co. Controller, rebuilding 3 mi. road, on Elton-Selix-Lovett-St. Michael Rd., 16-ft. roadway, vitr. brick block on concrete base and curb. Separate bids for 1,035,000 No. 1 repressed vitr. paving block. O. P. Thomas, Leader Bldg., Johnstown, engr.

Pa., Ebensburg—Until May 9, by Supervs. Middle Taylor Twp., c/o Cambria Co., Controller, rebuilding 2 mi. and 2300 ft. road from Minersville to Brelini's Corner, 16-ft. roadway, vitr. brick on concrete base and curb. Separate bids for 842,000 No. 1 vitr. repressed block. O. P. Thomas, Leader Bldg., Johnstown, engr.

Pa., Ebensburg—Until May 9, by Supervs. Patton Boro, c/o Cambria Co. Controller, rebuilding 2829 ft. vitr. brick block road, 20 ft. wide, concrete base and curb. Separate bids for 238,000 vitr. block. O. P. Thomas, Leader Bldg., Johnstown, engr.

Pa., Gallitzin—Until May 12, by Supervs. Gallitzin Twp., c/o Controller Cambria Co., (Ebensburg), rebuilding 1.05 mi. road leading from Cupon to State Highway Route No. 221, vitr. fire clay or shale paving brick. Owen & Plummer, Otto Bldg., Johnstown, engrs.

Pa., Newport—Until May 16, by T. W. Turner, secy. bd. comrs. Newport Twp., 87 Robert St. Alden, improving streets in village of Sheatown, Alden, Wanamie, Glen Lyon, and building concrete retaining wall, in village of Alden, and concrete pier in village of Glen Lyon. W. S. Norton, Alden Sta., twp. engr.

Streets and **Roads (Continued)**

Pa., Pittsburgh—Until May 22, by Comrs. Allegheny Co., Room 303, Court House, grading, paving and curbing 2050 ft. Maine St., Baldwin Twp., from Library Improved Rd. to Carrick Boro. line, 24 ft. roadway. Work involves 5470 sq.yd. vitr. brick on 6 in. concrete base and 4100 lin.ft. concrete curbing.

W. Va., Elkins—Until June 2, by Comrs. Randolph Co. building 19 mi. roads and streets in Leadville Dist.; advertised in this issue.

W. Va., Grafton—Until May 19, by Comrs. Taylor Co., completing 2 mi. Fettermon Pruntytown Rd., 16 ft. wide, vitr. brick on concrete base. About $50,000. J. A. Sincell, Grafton, engr.

N. C., Albemarle—Until May 20, by Comrs. Stanly Co. building Salisbury-Albemarle-Wadesboro Highway. Work involves 70,000 cu.yd. rock excav., 27,000 cu.yd. top soil surfacing, 6 acres clearing and grubbing, etc. J. M. Boyett, clk.

Ga., Griffin—Until June 3, by E. P. Bridges, city mgr., grading, curbing, draining and paving certain streets with vitr. brick, concrete, bituminous concrete, patented or other pavement. Work involves 10,000 cu.yd. earth excav., setting 34,500 lin.ft. granite curb and building 6500 lin.ft. concrete curb, laying storm drains, furnishing and laying 47,500 sq.yd. pavement and all necessary work incident thereto. G. M. Harrington, city engr.; advertised in this issue.

Ky., Madisonville—Until May 13, by Comrs. Hopkins Co., improving 1¼ mi. Madisonville-Princeton Rd., State Aid No. 54 E 2, involving 6000 cu.yd. earth and 50 cu.yd. rock excav., 40 cu.yd. concrete, 1 acre grubbing and 3950 cu.yd. crushed stone for waterbound macadam surfacing; 1¼ mi. Madisonville-Greenville Rd., earth and State Aid No. 54 B 2, involving 3950 cu.yd. crushed stone for waterbound macadam surfacing. R. C. Griffin, co. engr., advertised in this issue.

O., Cleveland—City receiving bids paving Hamlen Ave. from East Blvd. to East 121st St., involving 1750 cu.yd. excav., 32,120 sq.ft. 4-in. brick on 6-in. concrete base and 2470 ft. 5-in. stone curbing; Cobb Court from East 93rd St. to east end, 4010 sq.ft. 5-in. brick paving and 431 ft. 5-in. stone curbing; Champion Ave. from West 101st Pl. to West Blvd., 1140 cu.yd. excav., 20,450 sq.ft. 4-in. brick on 6-in. concrete base and 1550 ft. 5-in. stone curbing; East 125th St. from Kinsman Rd. to Union Ave., 1240 cu.yd. excav., 26,250 sq.ft. 4-in. brick on 6-in. concrete base and 1990 ft. 5-in. stone curbing; West 24th St. from Franklin Ave. to Willeyville Allt., 850 cu.yd. excav., 15,585 sq.ft. 5-in. brick on 6-in. concrete base and 1215 ft. 5-in. stone curbing; West 24th St from Moore Court to Willeyville Allt., 1340 cu.yd. excav., 25,190 sq.ft. 5-in. brick on 6-in. concrete base and 1500 ft. 5-in. stone curbing; West 58th St. from Bridge to Detroit Aves., 1000 cu.yd. excav., 48,580 sq.ft. 5-in. brick on 6-in. concrete base and 3100 ft. 5-in. stone curbing; West 98th St. from Loretta Ave. to Walford Rd., 1870 cu.yd. excav., 32,290 sq.ft. 4-in. brick on 6-in. concrete base and 2190 ft. 5-in. stone curbing; East 121st St. from Kinsman Rd. to point 1046 ft. north of Luke Rd., 2075 cu.yd. excav., 43,460 sq.ft. 4-in. brick on 6-in. concrete base and 3500 ft. 5-in. stone curbing; East 114th St. from Harvard to Miles Aves., 2070 cu.yd. excav., 24,590 sq.ft. 4-in. brick on 6-in. concrete base and 1950 ft 5-in. stone curbing; Vulcan Court from West 93rd to 95th Sts., 235 cu.yd. excav. and 4340 sq.ft. 5-in. brick paving; Trent Ave. from Fulton Rd. to West 41st St., 1600 cu.yd. excav., 39,200 sq.ft. 5-in. brick on 6-in. concrete base and 2950 ft. 5-in. stone curbing; Marah Ave. from East 93rd to 102nd Sts., 2180 cu.yd. excav., 39,755 sq.ft. 4-in. brick on 6-in. concrete base and 3635 ft. 5-in. stone curbing; Kraus Ave. from East 20th to 26th Sts., 1650 cu.yd. excav. and 21,720 sq.ft. 5-in. brick paving; Ignatius Ave. from West Blvd. to West 105th St., 1950 cu.yd. excav., 27,830 sq.ft. 4-in. brick on 6 in. concrete base and 2040 ft. 5-in. stone curbing; Glenview Ave. from East 108th to East 110th Sts., 405 cu.yd. excav., 12,050 sq.ft. brick paving and 900 ft 5-in. stone curbing. R. Hoffman, city engr.

O., Columbus—Until May 20, by G. A. Borden, pub. serv. dir., grading, draining, curbing, laying water mains and paving 783 ft. Stanley St. from Parsons Ave. to eastern terminus, 26 ft. wide, involving 2250 brick block or 1850 sq.yd. asphalt, cost $9892 and $8242 respectively; 913 ft. Leonard Ave. from Bryden Rd. to Main St., 24 ft. wide, brick or asphalt, $7597; 1269 ft. 21st St. from Broad St. to Franklin Ave., 14 ft. wide, brick or asphalt, $10,060; 1023 ft. Noble St. from Washington St. to Parsons Ave., 17 ft. wide, brick, $9495. H. Maetzel, city engr.

Michigan—Until May 29, by State Highway Comn. Lansing, draining, grading and paving 2¾ mi. highway, 18 ft. wide, Washtenaw Co., asphaltic concrete and cement concrete.

Michigan—Until June 1, by State Highway Dept., Lansing, grading, paving and draining 7 mi. highway, Cass Co., 16 ft. wide, cement concrete.

Illinois—Until May 21, by State Highway Comn., Springfield, improving Springfield-Peoria and Peoria-Henry Highways in following counties:

(a) Sangamon Co., 9389 ft. Sect. A. Springfield-Peoria, 18 ft. wide, involving 18,779 sq.yd. pavement, 8864 cu.yd. excav., 75 cu.yd. concrete in culverts and bridges; 15,477 ft. Sect. "O-15d," 18 ft. wide, 30,995 sq.yd. pavement, 13,817 cu.yd. excav., 249 cu.yd. concrete; 2197 ft. Sect. "N," 18 ft. wide, 4394 sq.yd. pavement, 3759 cu.yd. excav., 10 cu.yd. concrete;

(b) Sangamon-Menard Co., 36,508 ft. Sect. "B" Springfield-Peoria, 16-18 ft. wide, 67,003 sq.yd. pavement, 42,194 cu.yd. excav., 421 cu.yd. concrete;

(c) Menard Co., 20,549 ft. Sect. "C," Springfield-Peoria, 16 ft. wide, 36,531 sq.yd. pavement, 22,629 cu.yd. excav., 297 cu.yd. concrete; 28,649 ft. Sect. "D," 16 ft. wide, 51,020 sq.yd. pavement, 27,752 cu.yd. excav., 256 cu.yd. concrete; 4446 ft. Sect. "O,' 16 ft. wide, 7846 sq.yd. pavement, 3209 cu.yd. excav., 85 cu.yd. concrete;7027 ft. Sect. "F-15d," 16 ft. wide, 12,435 sq.yd. pavement, 2772 cu.yd. excav., 90 cu.yd. concrete;

(d) Menard-Mason Co., 14,326 ft. Sect. "E," 16 ft. wide, 26,275 sq.yd. pavement, 45,000 cu.yd. excav., 337 cu.yd. concrete;

(e) Mason Co., 23,403 ft. Sect. "F," Springfield-Peoria, 16 ft. wide, 41,964 sq.yd. pavement, 21,967 cu.yd. excav., 232 cu.yd. concrete; 4678 ft. Sect. "M," 16 ft. wide, 8316 sq.yd. pavement, 5047 cu.yd. excav.; 23,716 ft. Sect. "G," 16 ft. wide, 42,327 sq.yd. pavement, 25,904 cu.yd. excav., 160 cu.yd. concrete; 2900 ft. Sect. "P," 16 ft. wide, 5311 sq.yd. pavement, 2748 cu.yd. excav., 53 cu.yd. concrete; 8700 ft. Sect. "C-15d," 16 ft. wide, 15,410 sq.yd. pavement, 4657 cu.yd. excav., 66 cu.yd. concrete;

(f) Mason-Tazewell Co., 26,920 ft. Sect. "H," Springfield-Peoria, 16 ft. wide, 47,644 sq.yd. pavement, 14,384 cu.yd. excav., 321 cu.yd. concrete;

(g) Tazewell Co., 26,147 ft. Sect. "I," Springfield-Peoria, 16 ft. wide, 46,302 sq.yd. pavement, 16,239 cu.yd. excav., 293 cu.yd. concrete; 20,522 ft. Sect. "J,' 16 ft. wide, 36,500 sq.yd. pavement; 27,086 ft. Sect. "L-15d," 16 ft. wide, 42,475 sq.yd. pavement, 29,445 cu.yd. excav., 244 cu.yd. concrete; 7200 ft. Sect. "O," 16 ft. wide, 12,800 sq.yd. pavement, 6964 cu.yd. excav., 24 cu.yd. concrete;

(h) Peoria Co., 18,216 ft. Sect "B," Peoria-Henry, 16 ft. wide, 32,384 sq.yd. pavement, 17,033 cu.yd. excav., 230 cu.yd. concrete; 17,038 ft. Sect. "C," 16 ft. wide, 30,290 sq.yd. pavement, 8382 cu.yd. excav., 322 cu.yd. concrete; 24,087 ft. Sect. "M," 16 ft. wide, 43,220 sq.yd. pavement, 18,690 cu.yd. excav., 199 cu.yd. concrete;

(i) Peoria-Marshall Co., 21,185 ft. Sect. "D," Peoria-Henry, 26 ft. wide, 38,082 cu.yd. excav., 721 cu.yd. concrete;

(j) Marshall Co., 8457 ft. Sect. "G-15d," Peoria-Henry, 26 ft. wide, 16,192 cu.yd. excav., 258 cu.yd. concrete; 20,607 ft. Sect. "E," 26 ft. wide, 36,905 cu.yd. excav., 938 cu.yd. concrete. Alternative bids will be received for Portland cement concrete, monolithic brick 3 in. and 4 in., bituminous concrete (Spec. C1, C2, C3 or CT) with or without binder course. C. Older, ch. highway engr.

Ill., Chicago—Until May 12, by Cook Co., building roads (a) with bituminous concrete; (b) Portland cement concrete, 10 mi., Sect. 50-15d and 51-15d, Wheeling and Leyden Twps., 18 ft. roadway, 6 ft. earth shoulders, cost (a)$327,321; (b) $267,290.; 2687 lin.ft. in Norwood Park Twp., extending east from Narragansett Ave. and Irving Park Blvd., 11 ft. roadway, 6 ft. earth shoulders. (b) $13,168; 21,304 lin.ft. in Northfield, Wheeling and Main Twps., extending south from Desplaines River Rd. and Milwaukee Ave., 18 ft. roadway, 6 ft. earth shoulders, (a) $139,266; (b) $112,015; 27,960 lin.ft. in Main and Leyden Twps. extending south from Desplaines River Rd. at south limits of Desplaines Village, 18 ft. roadway, 6 ft. earth shoulders, (a) $188,054; (b) $155,275. B. D. Barker, co. supt. highways. Noted Apr. 17.

Minn., Buffalo—Until May 13, by Comrs. Wright Co., grading and graveling Sect. 5-121-26, State Rd. No. 2, Job No. 5, Silver Creek Twp.; north line Sects. 20 and 21-120-24. State Rd. No. 5, Job No. 4, Frankfort Twp.; north line Sects. 31, 32 and 33-119-28, State Rd. No. 6, Job No. 7, Cokato Twp.

Minn., Duluth—Until May 12, by J. A. Farrell, city comr., paving with asphalt, bitulithic or creosote blocks, 8000 ft. 1st St. from 6th Ave., E., to 23rd Ave., E., 34 ft. wide, concrete base. Cost between $98,000 and $114,000.

Minn., Henderson—Until May 27, by F. Hoppenstedt, aud. Sibley Co., grading and graveling 2.8 mi. State Rd. No. 2, 20 ft. wide, Severause Twp. S. F. Millen, Gaylord, engr.

Minn., Mahnomen—Until May 27, by Comrs. Mahnomen Co., building 4 mi. Federal Aid Project No. 102, State Rd. No. 3, 20 ft. wide, involving loading and hauling 4800 cu.yd. gravel surfacing material, etc. About $20,000. H. R. Chapin, Mahnomen, engr.

Minn., Preston—Until May 21, by J. Dunford, aud. Fillmore Co. building 8 mi. Federal Aid Project No. 39, State Rd. No. 1 About $50,000. W. Dunbar, Preston, engr. Noted May 1.

Minn., Willmar—Until May 28, by Comrs. Kankiyohi Co., paving 9.5 mi. Federal Aid Project No. 31, State Rd. No. 6, 20 ft. wide, involving 95,040 sq.yd. paving. About $225,000. L. H. Wadell, Willmar, engr.

Neb., Clay Center—Until May 22, by H. A. Swanson, clk., paving and laying storm sewers in main streets of business section, involving 22,880 sq.yd. rein.-con., asphalt or vertical fibre brick on 5 in. concrete base, 2775 lin.ft. concrete curbing, 8120 lin. ft. concrete guttering, and 5892 lin.ft. 8-24 in. tile pipe sewer. Grand & Fulton, Bankers Life Bldg., Lincoln, engrs. About $105,000.

Neb., Lincoln—Until May 17, by City, paving 21st St. from O to C Sts., and Greenway Ave. from 30th to 31st Sts., involving 11,390 sq.yd. asphaltic concrete on 5 in. concrete base, 660 sq.yd. concrete, 560 lin. ft. concrete curb and 8120 lin.ft. curb and gutter. About $34,900. A. Dobson, engr.

Wyo., Thermopolis—Until May 19, by A. J. Lowry, town clk., paving and building storm sewers in Paving Dist. No. 1. Work involves 7600 lin.ft. concrete curb, 26,000 sq.yd. pavement, 5000 lin.ft. storm sewers and laterals. Bids will be received on sheet asphalt, asphaltic concrete, bitulithic, rein.-con. and brick; advertised in this issue.

Mo., St. Louis—Until May 27, by Bd. Pub. Serv., building granitoid sidewalk pavements, 5 ft. wide, on both sides of Marquette Ave. from Ivanhoe to McCausland Aves.; Jamieson Ave. from Scanlan to Marquette Aves.; Ivanhoe Ave. from Scanlan to Marquette Aves.; McCausland Ave. from Marquette to Fyler Aves.; Arthur Ave. from Ivanhoe to McCausland Aves.; Bradley Ave. from Ivanhoe to Frisco Aves.; Fyler Ave. from Ivanhoe to McCausland Aves.; Hancock Ave. from Ivanhoe to McCausland Aves.; Penrose St. from Glasgow Ave. to Grove St.; Louisana Ave. from Neosho to Osceola Sts.; 4 ft. sdewalk pavement on Arsenal St., formerly known as Rosalie St., from Ellendale Ave. to city limits. W. W. Horner, city engr.

Ark., Harrisburg—Until May 27, by Bd. Comrs. Ozark Trail Rd. Impvt. Dist., Poinsett Co., at Marked Tree, building 16 mi. earth road embankment. Work involves 227,200 cu.yd. excav., 21 acres clearing, 36 acres clearing and grubbing, etc. W. H. Dilatush, secy.; advertised in this issue.

Tex., Comanche—Comrs. Comanche Co. receiving bids building section Ft. Worth-Alpine Highway. About $184,132. W. E. Dickerson, Comanche, engr.

Washington—Until May 19, by State Highway Bd., Olympia, clearing, grading, draining and surfacing 5.3 mi. Sunset Highway, near Baird, involving 9600 cu. yd. crushed rock, 17,505 cu.yd. earth and 1330 cu.yd. rock excav.; 6.1 mi. Sunset Highway from Waterville east, and 7.7 mi. Sunset Highway, from Douglas to Farmer, all in Douglas Co.; 7.1 mi. Central Washington Highway, Spokane and Lincoln Counties; 6.8 mi. Pacific Highway from Kelso north, Cowlitz Co. J. Allen, state highway comr. Noted Apr. 3.

Ore., North Bend—Until May 13, by city, improving Sherman St., 6, 8 and 14 ft. wide with center parking; side streets, 24 ft.; highway, 10 ft.; 1 and 2 course concrete, on concrete base, cost $51,803 and $52,440 respectively; bitulithic or asphalt, $58,311. Noted Mar. 6.

California—Until May 19, by State Highway Comn., 515 Forum Bldg., Sacramento, grading 11 mi. road between Adin Summit and Canby, 24 ft. wide, involving 48,000 cu.yd. excav., etc., Modoc Co.; 11 mi. between White Bar Creek and Helena, 24 ft. wide, 140,000 cu.yd. excav., Trinity Co.; 3 mi. between Glenwood and Sand Hill School; 6000 cu.yd. excav., Santa Cruz Co. A. B. Fletcher, highway engr.

Streets and Roads (Continued)

Ont., Brampton—Until May 19, by W. M. Treadgold, town engr., building about 14,000 sq.yd. rein. con. pavement, curb and underdraining, 28 ft. wide.

Ont., Mimico—Until May 17, by J. A. Telfer, clk., paving 6000 ft. Church St. and Mimico Ave., 28-34 ft. wide. Work involves 20,000 sq.yd. asphaltic concrete, bitulithic, bituminous or concrete on 5 in. concrete base, and 12,000 lin.ft. concrete curbing and guttering. James, Loudon & Hertzberg, 36 Toronto St., Toronto, consult. engrs.

Ont., Paris—Until May 12, by city, building Waterford, St. George and Burford Rds., concrete and tar macadam. About $121,604.

Ont., St. Catharines—Until May 14, by city, building 45,000 sq.yd. pavement and 25,000 lin. ft. concrete curbs and gutters. About $180,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Comn., Boston, let contract resurfacing and patching 6140 ft. of State Highway, Dennis Twp., 15-18 ft. wide, to J. W. Nickerson, Dennis, $1.04 per running foot.

★Mass., Boston—City let contracts building concrete sidewalks on Pearl St. et al, Dorchester, involving 984 sq.yd. granite block, 1390 sq.ft. concrete driveway, 5579 lin.ft. stone curbing and 31,380 sq.ft. concrete sidewalk, to F. Drinkwater, 35 Hemlock St., Roxbury, $11,179; East 1st St., South Boston, involving 5500 sq.yd. granite block, 2227 lin.ft. stone curbing, 2220 sq.yd. brick sidewalk, to G. Farello, 12 Pearl St., $9950; East 4th St., involving 7820 sq.yd. wood block on 6 in. concrete base, 41,740 sq.ft. concrete sidewalk, to J. E. Quinn, 28 Dorchester St., Roxbury, $57,486.

★Mass., Boston—City let contract building walks, drives and filling for Ripley Playground to J. Meltzer Co., Boston, $10,321. Work involves 2400 sq.yd. concrete, 2300 cu.yd. earth excav., etc.

★Mass., Fall River—City let contract building granolithic sidewalk for 1 year, to Beattie & Cornell, 30 North Quarry St., $2.45 per cu.yd. Noted Apr. 24.

R. I., Scituate (North Scituate P. O.)—See "Miscellaneous."

★Connecticut—C. J. Bennett, comr. state highway, Capitol, Hartford, let contracts building 5200 lin.ft. Killingworth Rd., trap rock macadam, Haddam Twp., to F. Arrigoni & Bro., 605 Main St., Middletown, $21,065; 3270 lin.ft. Deming St., Manchester Twp., to A. E. Douglas, 305 Main St., Glastonbury, $8352; 4283 lin.ft. Westfield Rd., both bituminous macadam, Meriden Twp., to Immich Co., State St., Meriden, $17,976; 3650 lin.ft. Black-Hall-Niantic Rd., 8 in. gravel, Old Lyme Twp., to J. Arborio, 36 Ward St., New Haven, $5187; 34,518 lin. ft. Sharon-Lakeville Highway, gravel telford, Salisbury and Sharon Twps., to L. Suzio Constr. Co., 98 State St., Meriden, $130,049. Noted Apr. 17.

Connecticut—C. J. Bennett, comr. state highway, Capitol, Hartford, received lowest 3 bids Apr. 25, building 6979 lin.ft. Stanley Quarter Rd., New Britain, Newington and Farmington Twps., (a) concrete; (b) Amiesite; (c) Topeka; (d) Asphalt; (e) Bitoslag; (f) Warrenite; from J. P. Maguire, 5 Fairview St., New Britain, (a) $31,921; Connecticut Hassam Paving Co., 902 Chapel St., New Haven, (a) $37,687; Acme Eng. Co., 868 Main St., Hartford, (a) $37,858; Connecticut & Rhode Island Co., Hall & Lewis Bldg., Meriden, (b) $39,641; E. Balf Co., 26 State St., Hartford, (c) $41,455; (d) $44,945; Connecticut Constr. Corp., 35 Colony St., Meriden, (c) $42,851; (e) $44,526; Warren Bros. Co., 142 Berkeley St., Boston, Mass., (f) $48,016; 7258 lin.ft. Thomaston Ave., Thomaston and Waterbury Twps., from J. De Michiel & Bro., 58 High St., Torrington, (a) $40,069; L. Suzio Constr. Co., 98 State St., Meriden, (a) $42,670; L. Lomghi & Bro., Inc., 43 Center St., Torrington, (a) $43,699; Warren Bros., 142 Berkeley St., Boston, Mass., (c) $47,514; E. Tracy, 200 Olivia St., Derby, (c) $54,254; (e) $54,738. Noted Apr. 17.

★Conn., Hartford—Bd. Contr. & Supply let contracts, resurfacing, repairing and paving Jewell, Wells and Morgan Sts., to E. Balf Co., 26 State St., $51,310; Morgan St., to O'Neil Bros., Hartford, $11,151. Noted Apr. 10.

★Conn., Waterbury—City let contract paving 3910 sq.yd. streets, with Hassan concrete, to Connecticut Hassan Paving Co., 902 Chapel St., New Haven, $2.77 per yd., total $10,842; 3983 sq.yd. with Bessemer dunn cut hillside blocks, to Barbara & D'Aurio, 63 Bank St., $5.96 per yd., $23,745; 25,291 sq.yd. with warranite on concrete base, to Warren Bros. Co., 173 Berkeley St., Boston, Mass., $3.19 per yd., $80,678; 8927 sq.yd., with Bermuda topeka on concrete base, and 10,800 sq.yd. with Bermudez sheet asphalt on concrete base, to E. Tracy, 200 Olivia St., Derby, $2.83 and $3.03 per yd., $25,263 and $32,724 respectively. Noted Feb. 20.

★Conn., Willimantic—City let contract improving streets, (a) concrete sidewalks and curbs, (b) resetting curbs, to D. P. Ahern, 147 Spring St., (a) $0.32 per lin.ft., (b) $0.40 per lin.ft. Noted Nov. 21.

New York—State Highway Comn., Albany, received lowest 3 bids Apr. 30, building roads in following counties: (a1) Albany Co., 1.03 mi., Rd. No. 1518, Albany-Rural Cemetery;

(2) 4.1 mi. No. 5643, Bethlehem Center-Beckers Corners;

(b) Chemung Co., No. 5208-A, Horsehead Montour Falls;

(c) Clinton Co., 3.34 mi. No. 1489, Chazy-Champlain Rd.;

(d) Essex Co., 4.95 mi. No. 1411, Wadhams Mills-Whallensburg;

(e) Hamilton Co., 6.82 mi. No. 1458, Morehouseville-Piseco Rd., Part 1;

(f1) Oneida Co., .97 mi. No. 1517, Utica-Maynard Rd.; (2) 1.05 mi. No. 1382, Rome-Ave Rd., Part 1;

(g1) Onondaga Co., .96 mi. No. 1505, Jordan Village, North Main St.; (2) 2.37 mi. No. 1073-A, Minoa-Manlius Center-Manlius; (3) No. 5630, 1.76 mi. Weedsport-Jordan, Part 2;

(h) Oswego Co., 5.43 mi. No. 5644, Parish-Camden, Part 3;

(i1) Wayne Co., 3.83 mi. No. 1516, Altom-Walcott, Part 1; (2) 3.21 mi. No. 8005, Alton-Wolcott, Part 2;

(j1) Westchester Co., 1.74 mi. No. 1370, Harts Corners-White Plains; (2) 1.09 mi. No. 1456, Westchester Ave.; also repairing following:

(k) Hamilton Co., Repair No. 1207, Rd. No. 848;

(l) Jefferson Co., Repair No. 1211, Rd. 236;

(m) Onondaga Co., Repair No. 1212, Rd. No. 5274, from T. P. B. Kennedy, Albany, (a1) $34,863; (g1) $28,349; (g3) $50,567.

Belmar Contg. Co., Inc., Troy, (a1) $35,697.

W. Ruhtz, Watervliet, (a1) $35,998.

E. J. Latus, Albany, (a2) $129,639.

Veeder Contg. Co., Schenectady, (a2) $130,696.

J. J. Guinan, 2314 Gravesend Ave., Brooklyn, (a2) $132,559.

J. W. Gurnett, Watkins, (b) $17,958.

Greenfield Constr. Co., 89 Main St., Hornell, (b) $17,984; (f1) $24,505; (g2) $65,350.

Spellman-Oliver Co., Lake St., Chateaugay, (c) $54,372.

McCambley, Day & Lobdell, Plattsburg, (c) $55,321.

L. Mayersohn, Albany, (c) $55,945.

Callanan Bros., Keeseville, (d) $104,784.

De Graf & Hogeboom Inc., Kingston, (e) $160,008.

H. A. Schaupp, Guilderland, (f1) $24,732.

Newport Constr. Co., 200 North Main St., Herkimer, (f1) $29,517.

H. W. Roberts, 610 Lansing St., Utica, (f2) $53,534.

F. S. Sporato, Syracuse, (g1) $30,889; (g3) $54,062.

J. Kelly, Syracuse, (g2) $63,395.

C. T. Hookway, Syracuse, (g2) $66,460.

J. Johnson Constr. Co., 765 Abbott Rd., Buffalo, (h) $94,622.

W. Semper, Watertown, (h) $94,748.

Dale Eng. Co. Inc., Mann Bldg., Utica, (h) $96,389.

Cleveland & Sons Co., Brockport, (i1) $109,198; (i2) $87,527.

Harradine Bros. Co., Inc., Spencerport, (i1) $113,688.

Monroe Roads Co., Pittsford, (i1) $118,818.

Hendrickson-McCabe Constr. Co., Syracuse, (i2) $96,937.

Cole & Smolley, Holley, (i2) $97,092.

Malloy & Murray Contg. Co., Yonkers, (j1) $58,424; (j2) $45,304.

Good Road Eng. & Contg. Co., Inc., Portchester, (j1) $58,718; (j2) $44,450.

Kennedy Contg. Co., Inc., Utica, (j1) $59,642.

L. Petrillo, Mt. Vernon, (j2) $44,310.

Chenango Constr. Co., Albany, (k) $40,606.

L. D. Sullivan, Utica, (k) $41,752.

J. E. Flood, Hudson Falls, (k) $43,915.

W. F. Cogley, Utica, (1) $32,403.

W. T. Thayer & Co., Chateaugay, (1) $32,783.

A. F. McConville, Ogdensburg, (1) $32,783.

Lane Constr. Co., 37 Colony St., Meriden, Conn., (m) $41,367.

Rossney Contg. Corp., Buffalo, (m) $45,023.

Brayer Bros., Pearson Blk., Auburn, (m) $45,621. Noted Apr. 10.

★N. Y., Buffalo—City let contract repaving 787 ft. Babcock St. from Elk to Prenatt Sts., 30 ft. wide, to Constantine Constr. Co., 240 Dewey Ave., $13,575. Work involves 2628 sq.yd. vitr. block on 6 in. concrete base and 1014 lin.ft. medina sand curbing.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contracts regulating and repaving Park Pl. from Bway to West Bway. and 155th St. from point 140 ft. west of Washington Heights line of Bway. to Riverside Dr., to O'Rourke Contg. Co., 150 Nassau St., $32,485 and $18,773 respectively: Beekman St. from Nassau to William Sts., to W. J. Fitzgerald, 547 West 45th St., $10,238; West 155th St. from Bway. to point 140 ft. west of Washington Heights Line of Bway., to Union Paving Co., Bway. and 112th St., $4633. Noted May 1.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contract regulating, grading and paving Park Ave. from 40th to 42nd Sts., to Burnside Constr. Co., 270 East Burnside Ave., Bronx, $35,845. Noted Apr. 3.

N. Y., New York—L. Nixon, supt. pub. wks., Capitol, Albany, received lowest 3 bids paving portions of terminal sites at Mott Haven, Greenpoint and Gowanus Bay, Contr. 44-P, from Asphalt Constr. Co., 208 Bway., $81,360; M. J. O'Hara, 557 3rd St., Brooklyn, $83,340; Continental Contg. Corp., 4-6 Washington Pl., $84,328. Noted Apr. 3.

N. Y., S. I. St. George—C. D. Van Name, pres. Richmond Boro., received bids May 2, regulating and repaving with concrete, Forest Hill Rd. from Colony Rd. to Rockland Ave., from J. Johnson Sons, $18,332; J E. Donovan, 2205 Richmond Terrace, Port Richmond, $19,475; C. Vanderbilt, 24 Elizabeth St., West New Brighton, $19,784. Noted Apr. 24.

★New Jersey—State Highway Com., Trenton, let contract building Morris-Plains-Morristown, Rd., in Newark, to T. F. Delaney Co., Newark, $42,177.

★N. J., Elizabeth—Bd. Freeholders Union Co. let contract repairing roads with bituminous concrete, to Weldon Constr. Co., Elizabeth, $17,720.

Pennsylvania — State Highway Dept., Harrisburg, received lowest 3 bids building roads in counties as follows: 5443 ft. rein.-con. Blair Co., from L. Brua, Holidaysburg, $29,987, E. H. Brua, Holidaysburg, $30,881, Standard Contg. Co., Altoona Trust Bldg., Altoona, $31,048; 16,177 ft. vitr. brick, Cambria Co., from R. R. Myers, Lewistown, $166,318, E. A. James, Johnstown, $187,862, Trimpey & Whipkey, Casselman, $195,754; 32,100 ft. bituminous surface on concrete foundation and Hillside vitr. brick, Centre Co. Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $249,332, Eastern Paving Co., Colonial Trust Bldg., Phila., $272,527, M. J. Malley, Sugar Notch, $276,684; 21,626 ft. rein.-con. Chester Co., McNichol Paving Co., 1923 Cherry St., Phila., $150,314, Warren Moore & Co., 13th and Market Sts., Phila., $156,686; T. W. Reilly & Co., Lancaster, $158,576; 2334 ft. rein.-con. Chester Co., Manwaring & Cummins, 24-32 East Church Lane, Germantown, $20,981, Fish & Young, Phila., $21,639, Juniata Co., Empire Bldg., Phila., $22,266; 1842 ft. vitr. brick, Clarion Co., L. H. Hileman Constr. Co., 1st Natl. Bank Bldg., New Kensington, $25,812, George & Boggs, Clarion, $25,903, J. E. Prunk, Clarion, $26,571; 8414 ft. rein.-con. and Hillside vitr. brick, Juniata Co., J. B. Trexler, Reading, $54,530, Valley Constr. Co., Athens, $56,379, Gregory Paving Co., Lewiston, $58,982; 22,452 ft. bituminous surface on concrete foundation, Luzerne Co., M. J. Malley, Sugar Notch, $160,899, Lane Constr. Co., 37 Colony St., Meriden, Conn., $164,882; P. J. Boyle Constr. Co., Wilkes-Barre, $166,606; 10,560 ft. rein.-con. Luzerne Co., T. W. Reilly & Co., Lancaster, $102,424, P. J. Boyle Constr. Co., Wilkes-Barre, $117,098, E. P. Arbogast, Stroudsburg, $117,389; 40,004 ft. rein.-con. and Hillside vitr. brick, Berks-Schuylkill Co., Neumeyer Bros., South Bethlehem, $304,110, D. G. Aronberg, Norfolk, Va., $408,661, R. T. and C. D. Stewart Contg. Co., 14 South 3rd St., Easton, $412,715; 26,310 ft. rein.-con. Tioga Co., Warren Moore & Co., 13th and Market Sts., Phila, $217,563, Horn & Devling, Main St., Galeton, $241,975, Dale Eng. Co., Inc., Mann Bldg., Utica, N. Y., $245,021; 10,717 ft rein.-con. Warren Co., J. McCormick &

Streets and Roads (Continued)

Bro., Erie, $69,540, Keystone Contr. Co., Meadville, $72,923, Erie Concrete & Steel Co., 13th and Cranberry St., Erie, $74,591. Noted Apr. 10.

★**Pa., Dormont** (Pittsburgh P. O.)—Boro. let contracts to Pittsburgh Paving Co., Bakewell Bldg., Pittsburgh, grading, paving, curbing and guttering sections of Delwood, Dormont, Eastmont and Montpelier Aves., involving 4610 sq.yd. vitr. brick on 5 in. concrete base, 2530 cu.yd. earth excav. and 3280 lin.ft. concrete curb and gutter, cost $26,000; P. A. Bennetend & Bro., 310 Down Ave., West Liberty, Glenmore Ave., 2520 sq.yd. vitr. brick on 5 in. concrete base, 1500 cu.yd. earth excav. and 1720 lin.ft. concrete curb and gutter, $14,000; F. Donatelli, Pittsburgh, 1940 sq.-yd. vitr. brick on 5 in. concrete base, 2500 cu.yd. earth excav. and 1000 lin. ft. concrete curb and gutter, also grading and sewering Ocean Ave., 8 and 15 in. terra cotta pipe, etc.; $14,000.

★**Pa., Ebensburg**—Cambria Co. let contract paving 5 mi. Yoder Twp. Rd., 16-21 ft. wide, brick, to Vipond Constr. Co., 2222 Beale Ave., Altoona. About $350,000.

★**Pa., Johnstown**—City let contract grading and paving Fronheiser and McMillen Sts., Bell Alley and Central Ave., also building sewer, to Loomis & King, Central Trust Bldg., Altoona; about $32,000.

★**Pa., Pittsburgh**—City let contract grading, paving and curbing McCandless Ave. from 56th St. to Stanton Ave., to M. O'Herron, South 1st and McKean Sts.; about $14,234. Noted Apr. 17.

★**Pa., Pittsburgh**—Allegheny Co. let contract building 2900 ft. Duncan Ave., from Butler Plank Rd. to Butler Pike. Hampton Twp., 18 ft. wide, telford macadam, to M. O'Herron, South 1st and McKean Sts.; about $26,989. Noted Apr. 3.

★**Pa., Washington**—Washington Co. let contracts resurfacing Taylorstown Rd., slag concrete, to F. Donatelli, Pittsburgh, $14,282; Pike Run Rd., gravel concrete, to W. Pickett & Co., Forrest Ave., Washington, $22,025; Monongahela-Donora Rd., gravel concrete, to L. F. Edwards & Bro., Greensburg, $65,101. Noted Apr. 3.

★**Pa., Waynesburg**—Comrs. Greene Co. let contract rebuilding 4765 lin.ft. Smith Creek Rd., 16 ft. wide, rein.-con., Franklin Twp. About $42,976. Noted Apr. 17.

★**Maryland**—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract building (a) 1.63 mi. Defense Highway from Bladensburg toward Lanham, 16 ft. wide, Contr. P-16; (b) 1.67 mi. road from Largo to Western Branch, 15 ft. wide, Contr. P-17; (c) 0.65 mi. road through Greensboro, 15 ft. wide, Contr. Co.-19; (d) 1.5 mi. road from end of Quantico State Aid Rd. toward Catch Penny, 15 ft. wide, Contr. No. WI-13; all concrete, 8 in. thick in centre and 6 in. on side, from Piel Constr. Co., 2519 Edmondson Ave., Baltimore; (a) $52,084, (b) $56,064; Juniata Paving Co., Empire Bldg., Phila., (c) $17,935; Aetna Constr. Co., 1107 Amer. Bldg., Baltimore, (d) $50,981. Noted Apr. 17.

★**Maryland**—State Rd. Comn., 601 Garrett Bldg., Baltimore let contract building 0.5 mi. Baltimore-Washington Blvd. from Laurel to Hyattsville, Prince George Co., to Fisher & Carozza, 803 Calvert Bldg., Baltimore, $128,476. Noted Apr. 17.

★**Md., Baltimore**—Bd. Awards let contract grading and paving 2.8 mi. private alleys, 3-12 ft. wide, 6 in. cement concrete, Contr. No. 40, to Arundel Constr. Co., 416 East Lexington St., $28,935. Noted Apr. 17.

★**W. Va., Fairmont**—Marion Co. let contracts, grading, draining and paving 1.5 mi. road from Dakota to Rivesville Rds., 14 ft. wide, vitr. brick and concrete, to Shuttle & Sacci, Fairmont, $40,512; 4.75 mi. Fairview Pike, 14 ft. wide, concrete, to N. M. Leigh, Mannington, $139,439; 2 mi. Watson-Boothville Rd., 14 ft. wide, concrete, to Hamilton & Bambridge, Fairmont, at $2.12 per sq.yd.; 0.31 mi. Monongah Rd., 14 ft. wide, concrete, to J. Fucci, Weston, $2.40 per sq.yd. Noted Mar. 6.

★**W. Va., West Union**—Doddridge Co. let contracts to Cisler & Morse, Marietta, O., paving 1.86 mi. Rock Run Rd., and 1.75 mi. Blue Stone Rd., 14 ft. wide, concrete, 6 in. thick on side and 7¾ in. thick in center, $51,718 and $41,700 respectively.

Ohio—State Highway Comn., Columbus, received bids Apr. 30, building roads as follows:

Clinton Co., Sect. "O", Cincinnati-Zanesville Rd., 2.37 mi. grading, constructing bridges and culverts and paving with waterbound macadam, Brewer & Brewer Sons, Chillicothe, $32,942; Wilson Eng. & Constr. Co., Xenia, $33,405; Sect. "P", $46,021; Sect. "Q," $65,590; S. M. Timberlake, Amer. Central Life Bldg., Indianapolis, Sect. "P", $49,978.77; Sect. "Q", $69,665; J. W. Weeks, Dayton, Sect. "P," $51,600.15; Sect. "Q," $71,928.

Coshocton Co., Sect. "C-1", Newark-Coshocton Rd., 2.48 mi. grading, constructing bridges and culverts and paving with monolithic brick, John Hall, Coshocton, $100,695; Dunsweiler Costr. Co., Zanesville, $101,928; Henderson Bros., Coshocton, $102,914; rein.-con. Henderson Bros., $91,821; Dunsweiler Constr. Co., and John Hall, both, $92,067.81.

Delaware Co., Sect. "A-2", Delaware-Marysville Rd., 2.85 mi., grading, constructing bridges and culverts and paving with waterbound macadam, A. B. Shaw, Delaware, $50,677; Horners-Renick, Williamsport, $55,908; S. C. Kisner & Sons, Delaware, $57,220.51; bituminous macadam, A. B. Shaw, $54,677; A. W. Burns & Co., 55 East State St., Columbus, $58,292; S. C. Kisner & Sons, $58,864.

Sect. "B", 5.02 mi. grading, constructing bridges and culverts and paving with waterbound macadam, A. B. Shaw, $88,982; C. W. Neff, Circleville, $100,974; Horners-Renick, Williamsport, $101,034; bituminous macadam, A. B. Shaw, $95,467.47; A. W. Burns, $103,880; Horners-Renick, $104,327.

Fairfield Co., Sect. "F", Lancaster-Newark Rd., 2.05 mi., grading, constructing bridges and culverts and paving with waterbound macadam, H. W. Curry, Eaton, $41,732; J. C. McCann, 262 Midland Ave., Columbus, $42,694; F. H. Vogelmeir, Newark, $43,709.

Holmes Co., Sect. "H-1', Millersburg-Canal Dover Rd., 2.5 mi., grading constructing bridges and culverts, L. B. Wilson, Newark, $21,306; Miller & Rothrock, Ada, $21,475; Holmes Constr. Co., Millersburg, $22,288.

Knox Co., Sect. "A", Mt. Vernon-Newark Rd., 3.79 mi., grading, constructing bridges and culverts and paving with monolithic brick, Dorsey Constr. Co., Findlay, $162,759; H. P. Streicher Co., 319 Terminal Bldg., Toledo, $163,143; Graham & Knight, Columbus, $164,814.

Marion Co., Sect. "F", Marion-Kenton Rd., 5.36 mi., grading, constructing bridges and culverts and paving with rein.-con. Williams & Little, Marion, $154,705; P. Drake & Sons, Marion, $163,769; Galion Constr. Co., Galion, $163,828; bituminous macadam, Brady & Connell, Marion, $134,767; J. Wroe, Dayton, $147,514.

Ottawa Co., Sect. "E-2", Oak Harbor-Genoa Rd., 1.59 mi., grading, constructing bridges and culverts and paving with concrete, Wise Bros. & Berman, Elmore, $44,521; Highway Constr. Co., Elyria, $46,269; York & Studebaker, Greenville, $46,395.

Tuscarawas Co., Sect. "O-1", Millersburg-Canal Dover Rd., 1.5 mi., grading, constructing bridges and culverts and paving with concrete, Spring & Rogers, New Philadelphia, $41,686.

Sect. "O" Canal Dover-Wooster Rd., 2.52 mi., grading, constructing bridges and culverts and paving with concrete, Hahn Constr. Co., Canton, $76,686; Springer & Rogers, New Philadelphia, $76,706; brick, F. H. Beckler, Athens, $90,000; Hahn Constr. Co., $95,957; Springer & Rogers, $96,182.

Union Co., Sect. "B-1", Marysville-Kenton Rd. 2.88 mi., grading, constructing bridges and culverts and paving with waterbound macadam, C. O. Hurd, Marysville, $41,463; Perry & Fox, Richwood, $42,431; J. C. McCann, Columbus, $44,171.

Vinton Co., Sect., "G-2", McArthur-Athens Rd., 1.06 mi., grading, constructing bridges and culverts and paving with concrete, E. N. Turner, Logan, $26,820; W. C. Brown, Chillicothe, $26,893; F. H. Beckler, Athens, $27,600.

Washington Co., Sect. "J-1", Marietta-Caldwell Rd., 3.027 mi., grading, constructing bridges and culverts and paving with plain concrete, Appenzeller, Stokley & Friedman, Greenville, $94,413.

Wyandot Co., Sect. "B", Tiffin-Upper Sandusky Rd., 166 mi., grading, constructing bridges and culverts and paving with asphaltic concrete, H. F. Streicher Co., 319 Terminal Bldg., Toledo, $61,756; Modern Constr. Co., Fremont, $61,666.

Lucas Co., Sects. "B", "C" and "D" and Sections "A" and "B" of several roads, maintenance and repair, H. W. Curry, Eaton, $10,995.

Sections of 3 roads, maintenance and repair, H. W. Curry, Eaton, $17,144.

★**Ohio**—State Highway Comn., Columbus, let contracts improving roads in counties as follows:

Gallia Co., Sect. "H", Ohio River Rd., .56 mi., grading, constructing bridges and culverts and paving with waterbound macadam to Rush Wolfe, Gallipolis, $19,998.

Holmes Co., Sect., "B-1", Millersburg-Wooster Rd., 3.59 mi., grading, constructing bridges and culverts and paving with concrete and gravel, W. H. Gray, Bowling Green, $70,232.

Muskingum Co., Sect. "L-2", Zanesville-Cincinnati Rd., .445 mi., grading, constructing bridges and culverts and paving with tarbound macadam, Adams Bros., Muskingum Ave., Zanesville, $16,478.

Lake Co., Sect. "T", Cleveland-Buffalo Rd., 7.71 mi., grading, constructing bridges and culverts and paving with monolithic brick, Freshwater & Son, Toledo, $275,823.

Lake Co., Sect. "Q-2", Clevland-Buffalo Rd., 5.43 mi., grading, constructing bridges and culverts and paving with monolithic brick, Freshwater & Son, Toledo, $195,366.

Guernsey Co., Sect. "S", Steubenville-Cambridge Rd., 1.81 mi., grading, constructing bridges and culverts and paving with waterbound macadam, S. W. Wrightsel & Son, Logan, $30,690. Noted Apr. 3.

★**O., Cleveland**—City let contract paving Claybourne Ave. from West 38th St. to west end, involving 1595 cu.yd. excav., 42,695 sq.ft. 4 in. brick on 6 in. concrete base and 3475 ft. 5 in. stone curbing, etc., to O. J. Leach, 751 East 117th St., $25,527.

O., Cleveland—City received bids paving (a) West 95th St., from Almira to Maywood Aves., (b) West 44th St. from Denison Ave. to south end, (c) West 35th St. from Mapledale to Trowbridge Aves., (d) Aetna Rd. from East 93rd St. to Erie R.R., (e) Bessemer Ave. from East 65th to 75th Sts., (f) Carnegie Ave. from East 89th to 100th St., (g) Franklin Ave. from Franklin Circle to West 65th St., (h) Roanoke Ave. from West 30th to Broadview Rd., (i) East 117th St. from Kinsman Rd. to Ely Ave., (j) East 74th St. from Aetna Rd. to Union Ave., (k) East 49th St. from Czar to Barkwell Aves., (l) East 119th St. from Kinsman Rd. to Union Ave., from Freshwater Constr. Co., 11712 Detroit Ave., (a) $21,452, (b) $6726, (c) $38,489; Baldwin Bros., 4500 Euclid Ave., (a) $22,292, (b) $6758, (c) $38,481, (d) $22,881, (h) $18,876, (i) $20,962, (j) $21,093, (k) $9769, (l) $20,783; R. P. Burnett, Society for Savings Bldg., (a) $22,836; Roehl Bros., West 25th and Clark Sts., (b) $6473, (c) $37,156, (h) $18,403; Enterprise Paving Co., 8436 Bway Ave., (d) $22,304, (j) $21,195, (k) $10,020, (l) $20,937; Rieley Bros., The Arcade, (d) $23,441, (e) $66,729, (h) $19,674, (i) $21,874; O. J. Leach, 751 East 117th St., (e) $64,696; McHugh Bros., (e) $67,371; W. F. Goltra Tie Co., 910 Rockefeller Bldg., (f) $85,988; Cleveland Trinidad Paving Co., The Arcade, (f) $91,410, (g) $35,395; Bentley Bros., Electric Bldg., (f) $91,608, (j) $20,906; Amer. Paving Co., Marshall Bldg., (g) $34,895; A. M. Pepsa, 2359 East 93rd St., (i) $21,545, (l) $21,111. Noted May 1.

O., Toledo—City received bids Apr. 22, paving 1494 ft. Burnham Ave. from Sylvania to Maple Aves., 24 ft. wide, involving 3000 lin.ft. curbing, 2345 cu.yd. excav. and 4300 sq.yd. pavement (a) concrete, (b) brick, from Vollmayer & McMahon, 444 Melrose Ave., (a) $17,092, (b) $21,352; McKinney Bros., 371 Spitzer Bldg., (a) $20,785, (b) $26,754; P. H. Watters, 323 Nasby Bldg., (a) $21,140, (b) $26,678. Noted Apr. 10.

★**O., Toledo**—City let contract grading, curbing and paving 5132 ft. Adams St. from Summit St. to Ashland Ave., 40 ft. wide, involving 14,345 sq.yd. wood block on 7 in. concrete base and 5000 cu.yd. excav., to Russell & Jennison, 2463 Bway, $119,721. Noted Mar. 27.

★**Ind., Terre Haute**—City let contract grading and paving ½ mi. Poplar St., 36 ft. wide, involving 11,420 sq.yd. 8-in. concrete, to Pfizenmayer Constr. Co., Terre Haute, $31,250. Noted April 24.

★**Ind., Terre Haute**—City let contracts, to Pfizenmayer Constr. Co., Terre Haute, grading, paving, guttering and curbing ½ mi. South 11th St., 33 ft. wide, involving 10,170 sq.yd. 8-in. concrete, $26,559; ½ mi. Garfield Ave., 26 ft. wide, involving 8170 sq.yd. 8-in. concrete, $22,750. Noted Jan. 16.

Mich., Detroit—Dept. Pub. Wks. received bids paving streets with asphaltic concrete on 6-in. concrete foundation, Berea curbstone, and alleys with 1 course concrete with wood retaining plank: (1) Caleron St. from Junction to Cavalry Aves., 26 ft. wide; (2) Goodwin Ave. from Caniff Ave.

Streets and Roads (Continued)

to north city limits, 26 ft. wide; (3) Goodwin Ave. from Holbrook to Owen Aves., 26 ft. wide; (4) Greeley Ave. from Wellington to Holbrook Aves., 26 ft. wide; (5) Longfellow Ave. from Linwood to Lawton Aves., 26 ft. wide; (6) Marquette Ave. from Wabash to Lawton Aves., 26 ft. wide; (7) Springwells Ave. from Ferndale to Dix Aves., 26 ft. wide; (8) Woodland Ave. from Oakland Ave. to Detroit, Grand Haven & Michigan R.R., 26 and 30 ft. wide; (9) Colby Ave. from Russell St. to Detroit & Bay City R.R., 26 ft. wide; (10) Gould St. from Crossley to Anderson Sts., 20 ft. wide.

From Cleveland Trinidad Paving Co., 2940 Woodward Ave., (1) $15,075; (2) $17,817; (3) $8845; (4) $20,976; (5) $17,385; (6) $37,228; (7) $27,928; (8) $24,060.

From Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) 14,932; (2) $17,867; (3) $8914; (4) $19,827; (5) $17,527; (6) $36,337; (7) $27,326; (8) $24,308.

From W. B. Brady Constr. Co., 1972 Grand River Ave., (1) $14,998 (2) $17,885; (3) $8876; (4) $20,002; (5) $17,275; (6) $36,466; (7) $28,194; (8) $24,200.

From J. Porath, 24 McGraw Bldg., (9) $5105; (10) $2908.

From R. Porath, 1131 McKinley Ave., (9) $5826; (10) $2731. Noted Mar. 20, 27 and Apr. 3.

★**Mich., Detroit**—Dept. Pub. Wks. let contracts, to Detroit Asphalt Paving Co., 20 McGraw Bldg., paving Waterloo Ave., $28,341; Alexandrine Ave., $25,408; Fulton St., $14,366; Leland St., $13,824; Huron St., $11,206; Van Court Ave., $38,204; Drexel Ave., $14,983; Military Ave., $7858; to Cleveland Trinidad Paving Co., 2940 Woodward Ave., Leslie Ave., $30,699; Beuna Vista Ave., $23,117; Grand Ave., $15,155; Waverly Ave., $14,749; Tyler Ave., $14,478; Highland Ave., $15,163; Monterey Ave., $14,219; to W. B. Brady Constr. Co., 1972 Grand River Ave., 12th St., $115,490; to T. E. Currie, 20 McGraw Bldg., Alley No. 979, $4937; No. 982, $1202; No. 983, $3610; to Otis Cement Constr. Co., 806 Hammond Bldg., Alley No. 980, $4973; No. 981, $4853; to Lennane & McIlvenna, Union Trust Bldg., Alley No. 984, $2158. Noted Apr. 24.

★**Ill., Chicago**—Cook Co. let contracts building 16,124 lin.ft. Lincoln Highway extending east from Matteson Village, involving 32,628 sq.yd. 5 in. cement pavement, 10,626 cu.yd. excav., 152 cu.yd. concrete in bridges, 9784 lbs. steel reinforcing, etc., to J Mackler, Chicago Heights, $82,235; 31,784 lin.ft. extending east of South Chicago Heights, 67,750 sq.yd. 5 in. cement pavement, 25,092 cu.yd. excav., 607 cu.yd. concrete in bridges, 42,452 lbs. steel reinforcing, etc., to Russell & Ashdown, Chicago Heights, $170,839. Noted Apr. 24.

★**Wis., Sheboygan**—City let contract paving, curbing and guttering 16,000 yd. Bway. and Main Sts., 18 ft. wide, 2 course rein.-con. to Braun Constr. Co., 1317 Pennsylvania Ave., $36,815. Work involves 16,000 sq.yd. concrete.

★**Ia., Spencer**—Comrs. Clay Co. let contract paving, curbing and excavating 30,000 ft. Grove, 4th, Hough, 5th, Park, 1st, 6th, 8th, Prairie, Mill, State, West, Water, Miller, 12th and 14th Sts., 18-40 ft. wide, to McLaughlin & Sons, Red Oak, $290,000. Work involves 93,000 sq.yd. rein.-con. at $2.72 sq.yd. 55,000 lin. ft. integral curbing, $0.61 and 12,000 cu.yd. earth excav., $0.80.

★**Minn., Minneapolis**—Comrs. Hennepin Co. let contract paving, grading and surfacing 6 mi. Osseo-Champlin Rd., 18-20 ft. wide, to General Contg. Co., 1254 Plymouth Bldg., $196,506. Noted Mar. 27.

★**Kan., Council Grove**—City let contract for 4016 sq.yd. paving, to E. W. Geiger Constr. Co., Leavenworth, $2.99 per sq.yd.

★**Neb., Albion**—City let contract paving 15 blocks, involving 25,380 sq.yd. asphaltic concrete on 5 in. concrete base, to Natl. Roofing Co., 627 Paxton Blk., Omaha, $76,880.

★**South Dakota**—State Highway Comn. at Co. Auditor's Office, Belle-Fourche, let contract building 11.8 mi. Belle Fourche-Alzada Rd., 36 ft. wide, to A. D. Sears, Chadron, Neb., $33,538. Noted Mar. 20.

★**South Dakota**—State Highway Dept., Pierre, let contract grading, graveling and draining 8.6 mi. Millbank-Clear Lake Canby Rd., 18 ft. wide, Denel Co., to L. E. Gage, West 12th St., Sioux Falls., $26,428. Noted Mar. 6.

★**South Dakota**—State Highway Dept., Pierre, let contract grading, graveling, and draining 16.5 mi. Watertown-Redfield Rd., 18 ft. wide, Clark Co., to Roush Bros., Clark, $74,671. Noted Mar. 13.

★**N. D., Grand Forks**—City let contract paving all cement walks and street crossings during year, to J. A. Dunnie Co., Grand Forks, $0.16 and $0.20 per sq.ft. respectively.

★**Ark., Jonesboro**—Bd. Comrs. Craighead Co. let contract building 165 mi. road in Lake City, Nettleton and Bay Rd. Impvt. Dist. No. 1, 18 ft. wide, waterbound macadam, with bituminous surface treatment, to J. E. Edwards Constr. Co., 618 West Capitol Ave., Little Rock, $430,830.

★**Tex., Lockhart**—Comrs. Caldwell Co. let contracts to C. M. Schoenfield, 320 Hunstock Ave., San Antonio, building 3.74 mi. road known as Middle Buster Highway, Dist. No. 6, involving surfacing with gravel and bituminous treatment, 10,266 cu.yd. earth, 100 cu.yd. loose rock and 10 cu.yd. solid rock excav., $15,905; putting in drainage structures involving 178 cu.yd. concrete, 285 cu.yd. structural excav., 12,450 lb. reinforcing steel and 10 ft. 24 in. c. i. pipe, $4791; Finley Method Co., Great Southern Life Bldg., Dallas, furnishing 17,550 gal. bituminous material and cover material of 780 cu.yd. trap rock, for above highway, $11,702; J. A. Coopwood, Lockhart, improving 6.61 mi. Middle Buster Highway, Rd. Dist. No. 1, including grading, surfacing, placing and spreading gravel, rolling, sprinkling, etc., and clearing and grubbing 1.9 acres, involving 22,811 cu.yd. earth, 400 cu.yd. loose rock and 100 cu.yd. solid rock excav., $23,326; Austin Bros. Bridge Co., 1815 Coombs St., Dallas, building drainage structures on same highway, involving 960 cu.yd. concrete, 56,516 lb. reinforcing steel, 78 ft. 18 in. and 28 ft. 24 in. vitr. pipe, $25,439.

★**Washington**—State Highway Bd., Olympia, let contract grading and gravel surfacing 4 mi. State Rd. No. 18 from Morton to Kosmos, to Gibson & Graham, Chehalis, $51,731. Noted Apr. 17.

★**Wash., Bremerton**—City Council let contract grading, paving and curbing Park Ave., involving 12,000 sq.yd. Portland Cement, 7000 cu.yd. earth excav., 500 lin.ft. 10 in. sewer and 8000 lin.ft. concrete curbing and guttering, to D. W. Metler, Bremerton, $49,692. Noted Mar. 27.

★**Wash., Davenport**—Lincoln Co. let contract grading 1½ mi. road near Almira, to Thompson & Kullander, Wilbur. About $10,000. Noted Mar. 27.

Wash., Everett—Snohomish Co. rejected only bid received Apr. 14 surface grading and paving 3 mi. Bond Project No. 30, 16 ft. wide, 5 and 7 in. concrete. About $60,000. Work will be done by day labor under supervision of F. G. Tegtmeier, co. engr.

★**Wash., Kent**—City let contract curbing 1 mi. and paving 4 mi. 1st, 2nd, 3rd, 4th, 5th, Jason, State and Clark Aves., Gowe, Harrison, Shimn, Meeker, Temprance and Clark Sts., and Scenic Way, 20 ft. wide, concrete on 6½ in. concrete base, to Puget Sound Eng. Co., 611-612 Mutual Life Bldg., Seattle, $99,930. Noted Apr. 3.

★**Wash., Olympia**—Comrs. Thurston Co. let contract clearing, grading and draining 8200 ft. Pacific Highway from Lewis Co. line to Grand Mound, to Allred, James & Henricks, Centralia, $10,488.

Wash., Seattle—City received bids Apr. 18, grading 48th Ave., S. W. et al, involving 24,000 cu.yd. earth excav., 105,000 ft. B. M. lumber, wooden curbs, etc., from E J. MacQuaid, 6556 3rd St. N. W., $25,803; B. E. Kupoff, L. C. Smith Bldg., $26,134.

★**Ore., Eugene**—Lane Co. will grub, clear and grade 6 mi. Cottage-Grove-Lorane Rd. Work will be done by day labor.

★**California**—State Highway Comn., Forum Bldg., Sacramento, will grade 15.2 mi. and pave 11.4 mi. road between Tecate Divide and east boundary of San Diego Co. About $233,000. Work involves 66,000 cu.yd. unclassified excav., 11,140 cu.yd. Class "A" concrete paving, etc. Work will be done by day labor. Former contract rescinded. Noted Mar. 6.

★**Cal., Los Angeles**—City let contract grading, paving, curbing, guttering and building storm drains, sanitary sewers, pedestrain subways, etc. on Huntington Drive, Rose Hill and Pyrites Sts., to G. H. Oswald, O. T. Johnson Bldg., $115,828. Noted Apr. 17.

★**Cal., Los Angeles**—See "Railways."

Cal., Palo Alto—City received bids for improving 1 mi. road, (a) paving, (b) grading, (c) curbing, from Federal Constr. Co., Call Bldg., San Francisco, (a) $0.174 per sq.ft., (b) $0.99 cu.yd., (c) $0.35 lin.ft.; A Teichert & Son., Ochsner Bldg., Sacramento, (a) $0.182, (b) $0.90, (c) $0.50; Clark & Henry Constr. Co., 38 South Sutter St., Stockton, (a) $0.182, (b) $0.95, (c) $0.48.

★**Cal., Santa Cruz**—City let contract grading, curbing with cement and paving with concrete and asphalt on Riverside Ave., to Blanchard, Crocker & Howell, 58 2nd St., San Francisco, $18,840.

★**Que., Valleyfield**—City will gravel 2 mi. road. About $20,000. Work will be done by day labor.

★**Ont., Strathroy**—Town let contract paving portions of Frank, Front and Caradoc Sts., bitulithic on concrete base, to Warren Bituminous Co., McKinnon Bldg., Toronto. About $57,085. Work involves 13,052 sq.yd. bitulithic on 5 and 6 in. concrete base and 5957 lin. ft. concrete curbing and guttering. Noted Apr. 10.

★**Ont., Welland**—Welland Co. will repair various roads. Cost between $80,000 and $100,000. Work will be done by day labor under supervision of W. W. Brookfield, engr.

★**Ont., Woodbridge**—City let contract paving 2 mi. main streets with waterbound macadam, to E. Dagg, Woodbridge. About $16,000.

Railways

PROPOSED WORK

New York—See "Miscellaneous" under Syracuse.

Missouri—Company being formed to be known as Southeastern & Sikeston R.R., c/o C. F. Bruton, Sikeston, to build railroads into rural districts of southeast Missouri. About $40,000 available for project.

Missouri—Manufacturers Ry., 2925 South Bway., St. Louis, having plans prepared changing switching system from steam to electric. Work involves installing poles, trolleys, transformers and 24 mi. tranmission line.

California — Inter-California R.R., 65 Market St., San Francisco, plans to replace 62-lb. rails with 80-lb. rails on line from Calexico, Cal., to Yuma, Ariz. About $700,000. W. Hood, ch. engr.

Quebec—Montreal Tramways Co., 78 West Craig St., Montreal, having plans prepared for double tracking 10 mi. line on Lawrence St. to Gouvin Blvd. and through village of Bordeaux to Park Ave. J. E. Hutcheson, genl. mgr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**California**—Pacific Electric Ry., Pacific Electric Bldg., Los Angeles, will rebuild 1 mi. old track on Echo Park Ave. and pave same. J. B. Pillsbury, ch. engr. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

Ariz., Phoenix—Canal—Salt River Valley Water Users Assn. plans to spend $30,000 to build Arizona canal cutoff, $35,000 for installation of needle valves, $6000 for salt canal feeder, $20,000 for equipment and $49,000 for land and buildings. F. M. Wilkinson, pres.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—Dredging—L. Nixon, supt. pub. wks., Capitol, Albany, received only bid dredging barge canal terminals at Piers 5 and 6, East River, at Greenpoint and Long Island City, Contr. No. 77, from New Jersey Ship Bldg. & Dredging Co., foot of 28th St., Bayonne, N. J., $42,895. Noted Apr. 3.

★**Ark., Osceola**—Dredging—D. D. No. 17, Mississippi Co., let contract building 4 mi. ditch, 75 ft. bottom, 1 mi. ditch, 40 ft. bottom, 12 mi. levee, 8 ft. crown, three 1 side slopes from 8-11 ft. high, involving 1,588,000 yd. floating dredgework, to H. J. Sternberg, St. Louis, Mo., $266,000. Noted Feb. 27.

★**Ore., Bay City**—Dredging—Port of Bay City let contract dredging channel from main channel, mouth of Tillamook Bay to Cummings-Moberly sawmill above Garibaldi, thence north to Coates Lumber Co. sawmill, Hobsonville, via Bay City Channel, to Tacoma Dredging Co., Natl. Bank Tacoma Bldg., Tacoma, Wash.

★**Cal., Holtville** — Drainage — Imperial Water Co. No. 5 will deepen 7 mi. Pine Lateral to give drainage to Alamo River. J. S. Nickerson, pres. Work will be done by day labor.

Cal., Los Angeles—Drain—See "Streets and Roads."

Industrial Works

PROPOSED WORK

R. I., Providence—H. Fulford receives bids in June building 1 story, 130 x 150 ft. brick and rein.-con. garage, rein.-con. flooring, concrete foundation, on Summer St. About $60,000. W. R. Walker & Son, 17 Custom House, archts.

Industrial Works (Continued)

Conn., Bridgeport—W. Schmidt, archt., 1188 Main St., preparing plans for 1 story, 50 x 114 ft. brick and concrete garage, rein.-con flooring, concrete foundation, on North Main St. About $25,000. Owner's name withheld.

Conn., Waterbury—F. A. Webster, archt., 193 Homer St., receives bids about May 10, building 2 story 100 x 120 ft. brick garage, rein.-con. flooring, concrete foundation, on North Main and North Willow Sts., for M. A. Doolittle, Watertown Ave. About $60,000.

N. Y., Antwerp—Antwerp Light & Power Co., had plans prepared developing water power on Indian River, to include rein.-con. dam, flume and power house, transmission line and installation of generator units. Address J. A. Baumert, Antwerp.

N. Y., Brooklyn—Mollers & Schuman, Marcy Ave., soon let contract building 2 story brick and steel factory, rein.-con. flooring, concrete foundation, on Gerry and Wallabout Sts. About $80,000. H. Holder, 242 Franklin Ave., archt. Noted Jan. 23.

N. Y., Brooklyn—Pathe Freres, Grand Ave., having plans prepared by R. G. Corey, archt. and engr., 39 Cortlandt St., New York City, building 7 story, 90 x 100 ft., brick, steel and rein.-con. addition to factory, rein.-con. flooring, concrete foundation.

N. Y., Buffalo—Armour Grain Co., Abbott Rd., having plans prepared building brick addition to plant. About $25,000.

N. Y., Long Island City—Sawyer Biscuit Co., 404 East 32nd St., New York City, plans to build 8 story, brick and steel factory, rein.-con. flooring, concrete foundation, on Degnon tract here. Ballinger & Perrott, 1328 Bway., New York City, archts.

N. Y., Syracuse—H. H. Franklin Mfg. Co., 302 South Geddes St., soon lets contract building 2 story, 70 x 150 ft. rein.-con. addition to plant. R. J. Reidpath & Son, Builders Exch. Bldg., Buffalo, archts. Noted Mar. 6.

N. Y., Syracuse—Ward Bros. Co., Inc., purchased site on Taylor, Burt, South, State and Grape Sts. and plan to build baking plant. About $250,000. Address E. J. Moore, local mgr.

W. Va., Huntington—Voegele & Dinny Co., 603-5 4th Ave., having plans prepared by R. T. Day, archt., 1st Natl. Bank Bldg., for rein.-con. warehouse. About $80,000.

O., Cleveland—Lockwood Greene & Co., archts., 38 South Dearborn St., Chicago, soon lets contract building 2 story, brick and timber factory, concrete foundation, covering 50,000 sq.ft. floor space, for Beckman Co., Fulton Rd. About $175,000. Noted Feb. 20.

O., Kent—Mason Cotton Fabrics Co. soon receives bids building 3-story mill. Cost, including equipment, $700,000. Lockwood, Greene & Co., 60 Federal St., Boston, Mass., archts.

Mich., Detroit—C. B. Bohn Fdry. Co., Hart Ave., having plans prepared by C. W. Brandt, archt., Kresge Bldg., building 1 story, 80 x 100 ft. rein.-con., brick and steel power plant, concrete foundation, on Hart Ave. About $25,000.

Mich., Detroit—General Motors Corp., Boyer-Campbell Bldg., plans to build manufacturing plant for Cadillac Motor Car Co. Division, on Clark and Scotten Aves. About $750,000.

Mich., Flint—D. L. Seymour & Co., Penobscot Bldg., Detroit, having plans prepared for 7 story, 70 x 200 ft. rein.-con. and brick warehouse, rein.-con. flooring, concrete foundation, on 2nd and Ann Arbor Sts., here. About $225,000.

Ill., Brooklyn—Terminal Railroad Assn., Union Sta., St. Louis, Mo., plans to build 50 x 150 ft. brick and concrete boiler shop here to replace one recently destroyed by fire. About $35,000. W. Bawden, 411 Union Sta., St. Louis, Mo., supt. and engr.

Ill., Chicago—J. A. Armstrong, archt., 11 South La Salle St., soon receives bids building 7 story, 167 x 287 ft. mill construction warehouse, concrete foundation, on Ogden Ave. and Rockwell St., for A. I. Jordan c/o archt. About $300,000.

Ill., Chicago—Foley & Co., 2835 Sheffield Ave., soon receives bids building 2 story, 40 x 125 ft. addition to present plant, new 5 story, 40 x 125 ft. building and 1 and 2 story, 125 x 125 ft. warehouse, all mill construction on concrete foundation. About $200,000. E. R. Krause, Majestic Theatre Bldg., archt.

Wis., Sheboygan — Raab-Thieman Co., 816 Niagara Ave., having plans prepared by W. C. Weeks, archt., Ontario Ave., building 2 story, 60 x 150 ft., brick garage, brick foundation. About $55,000. Noted Apr. 24.

Wis., Sheboygan—Sheboygan Publishing Co., 820 Center St., soon lets contract rebuilding printing plant. About $25,000.

N. D., Williston—Standard Oil Co. plans to build 100 x 140 ft. warehouse, autofilling station and oil tank, on 1st Ave. and 1st St.

Mo., St. Louis—Funsten Bros. & Co., 2nd and Elm Sts., plan to build 8 story dyeing and dressing plant on river front. About $50,000. P. Fouke, c/o owner, engr.

Ark., Little Rock—G. I. Dill Tractor Mfg. Co., Harrisburg, has acquired 10 acre site here and plans to build large rein.-con. fireproof factory. G. I. Dill, pres.

Ark., Searcy—See "Miscellaneous."

Ariz., Phoenix—Phoenix Wholesale Meat & Produce Co., 15th Ave. and River St., Tribolet Packing Co., Thomas Rd. and Toyrea Packing Co., Bisbee, organizing company and plan to build packing plant here to include refrigeration and ice manufacturing plant. About $500,000.

Cal., Covina—Covina Citrus Assn. plans to build concrete and timber packing precooling plant, 80 car daily capacity. About $125,000. W. W. Bennett, mgr.

Cal., El Centro—Imperial Valley Milk Producers Assn. purchased site and plans to build 150 x 300 ft. plant on Main St. About $150,000.

Que., Montreal—Republic Motor Truck Co., 482 Lafayette Bldg., Detroit, Mich., plans to build automobile plant on Notre Dame St. E., here. About $250,000. Samson & Davison, 165 Bway., New York City, archts.

Que., St. Raphael East—Montmagny Electric Co., Montmagny, plans to build 2000 hp. power development on River du Lud, here. About $300,000. Gauvin & Co., 147 Mountain Hill, Quebec, archts.

Que., Sherbrooke—Dominion Carriage Co. Ltd., having plans prepared for factory. J. W. Gregoire, 191 a Wellington St., archt. About $75,000.

Ont., Hamilton—See "Buildings."

Ont., London—B. Jones, representative Republican Motor Truck Co., 76 Church St., Toronto, receives bids in about 2 weeks building brick factory. About $500,000.

Ont., Sarnia—Romeo Fdry. Co., Port Huron, Mich., purchased site on Exmouth St. here, and having plans prepared for foundry. About $50,000.

BIDS DESIRED

N. Y., Brooklyn—Until May 24, by M. A. Cantor, archt., 373 Fulton St., building 1 story, 200 x 300 x 400 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Rockaway and Church Aves., for Hudson Bag Co., Inc., 77 Washington Ave. About $150,000.

Fla., Key West—Norberg-Thompson receiving bids for cold storage and distilling plant. About $60,000.

Minn., Minneapolis—A. D. Walker, 807 Hennepin Ave. and Pence Automobile Co., 800 Henepin Ave., receiving bids for 12 story, granite and brick garage and office on 8th St. and Hennepin Ave. About $1,000,000. Long, Lamareaux & Long, Andrus Bldg., archts.

Mo., Joplin—Until May 10, by Christmas Dry Goods Co., 5th and Main Sts., building 3 story, 104 x 120 ft., rein.-con. and brick warehouse, rein.-con. flooring, concrete foundation, on 4th St. and Virginia Ave. About $50,000. C. Ludhoelter, 209 West 9th St., archt. Former bids rejected. Noted Apr. 3.

P. E. I., North Wiltshire—Until May 13, by Dept. Pub. Wks., Ottawa, Ont., building 2 story, 47 x 61 ft. concrete and timber power house ad laundry, rein.-con. flooring, rock foundation, at Dalton Sanitorium here. About $70,000. R. C. Wright, c/o dept. pub wks., archt.

Que., Montreal—Until June 15, by A. Chausse, archt., 72 Notre Dame St., E., building 10 story, 83 x 180 ft. rein.-con. and brick cold storage plant, concrete foundation, on Berri St., for Place Viger Terminal Co. About $600,000.

Ont., Guelph—Until May 21, by James, Loudon & Hertzberg, archts., Excelsior Life Bldg., Toronto, building 4 story, 80 x 200 ft. rein.-con. and brick factory on Metcalf St., for Northern Rubber Co. (formerly Premier Rubber Co.) Alternate bids will be received on beam and girder and flat slab construction. About $135,000. Noted Mar. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Springfield — Chaplin Realty Trucking Co., 296 Belmont Ave., will build 1 story, 48 x 112 ft. brick and concrete garage, rein.-con. flooring, concrete foundation. About $25,000. Work will be done by day labor.

★Mass., Worcester—W. H. Sawyer Lumber Co., 66 Lincoln St., let contract building 1 story brick lumber yard to include 40 x 60 ft. office, 20 x 255 ft. shed, and 20 x 50 ft. and 90 x 125 ft. kilns, to J. Miles & Sons Co., 392 Main St. About $50,000. Noted Feb. 20.

★R. I., Providence—G. Lafidian, 261 Plain St., will build 1 story, 47 x 80 ft. brick garage, rein.-con. flooring, concrete foundation, on Plain St. About $25,000. Work will be done by day labor. Noted Feb. 20.

★R. I., Woonsocket—Montrose Woolen Co., 292 East School St., let contract building 3 story 55 x 170 ft. factory, 2 story, 32 x 48 ft. office and 1 story, 34 x 43 ft. garage all brick and timber, concrete foundation, on East School St., to W. Aubin, 1103 Diamond Hill Rd. Cost between $70,000 and $80,000.

★Conn., Bridgeport—R. Poladian, 172 Wade St., let contract building 2 story, 60 x 80 ft. brick and timber factory, concrete foundation, to Marsh Bros. Co., 50 Buckingham St. About $25,000. Noted Apr. 17.

★Conn., New Haven—H. W. Walker, 421 Housatonic Ave., Bridgeport, let contract building 1 story, 72 x 113 ft. brick and concrete warehouse, rein.-con. flooring, concrete foundation, on James and River Sts., here, to Sullivan & McKeon, 843 Dixwell Ave. About $30,000.

★Conn., South Manchester—Cheney Bros., Hartford Rd., let contract building 3 story, 50 x 80 ft. rein.-con. storehouse, rein.-con. flooring, concrete foundation, on Elm Terrace, to Aberthaw Constr. Co., 27 School St., Boston, Mass. About $40,000.

★Conn., Waterbury—International Silver Co., 93 Silver St., let contract building 1 story, 45 x 80 ft. brick, concrete and steel addition to power house, rein.-con. flooring, concrete foundation, to L. A. Miller, 22 Church St., Meriden. About $25,000.

★N. Y., Brooklyn—W. Bauer, c/o Shampan & Shampan, archts., 50 Court St., will build 3 story, 60 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Vanderbilt and De Kalb Aves. About $50,000. Work will be done by day labor. Noted May 1.

★N. Y., Brooklyn—Elm St. Impvt. Co., 626 Essex St., will build 1 story, 80 x 105 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Rockaway Rd. and Fulton St. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—L. Hirsh & Sons, c/o B. W. Dorfman, archt., 26 Court St., will build 4 story, 110 x 150 ft., brick, steel and concrete factory, rein.-con. flooring, brick foundation, on Thames and Porter Sts. and Flushing Ave. About $150,000. Work will be done by day labor.

★N. Y., Brooklyn—L. & A. S. Bldg. Corp., 44 Court St., will build 1 story, 75 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on De Kalb and Reid Aves. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—T. S. Martin, 16 Court St., will build 1 story, 130 x 235 ft., brick and steel garage, rein.-con. flooring, brick foundation, on St. Johns Pl. and Classon Ave. About $75,000. Work will be done by day labor.

★N. Y., Brooklyn—Pecker Iron Wks., 551 Rockaway Ave., will build 1 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, brick foundation, on 6th Ave. and 62nd St. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Realty Constr. Co., 44 Court St., will build 1 story, 92 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Snyder and Flatbush Aves. About $50,000. Work will be done by day labor.

★N. Y., Brooklyn—Rechnitz Bros., 44 Court St., will build 1 story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Coney Island Ave. between Aves. H and I. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—A. Rockmore, 50 Court St., will build 1-story, 100 x 140 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on 48th St., east of 2nd Ave. About $35,000. Work will be done by day labor.

Industrial Works (Continued)

★N. Y., Brooklyn—Stone Ave. Realty Co., 50 Court St., will build 1-story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Fulton and Hendrix Sts. About $125,000. Work will be done by day labor.

★N. Y., Buffalo—Standard Oil Co., 26 Bway., New York City, let contract building 1 story garage and 2 story stable, brick and rein.-con., rein-con. flooring, brick foundation, to H. D. Best, 949 Bway., New York City. About $40,000. Cost plus percentage basis.

★N. Y., Jamaica—L. Gold, 44 Court St., will build 1 story, 105 x 195 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Jamaica Ave., east of Freedom Ave. About $45,000. Work will be done by day labor.

★N. Y., Jamaica—H. & J. Merkel, 450 Fulton St., Brooklyn, let contract building 2 story, 75 x 100 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Chichester Ave., to F. Berlenbach, 36 Sydam St., Brooklyn. About $125,000.

★N. Y., Long Island City—Liquid Carbonic Co., 624 1st Ave., New York City, let contract building 1 story, 65 x 155 ft. brick and steel factory and warehouse, rein.-con. flooring, concrete foundation, on Maspeth Ave. between Metropolitan and Grand Aves., to G. A. Just Eng. Co., 239 Vernon Ave., Brooklyn. About $35,000. Cost plus percentage basis.

★N. Y., New York—G. W. Brown and S. K. W. Sellar, 636-646 West 42nd St., will build 1 story, 95 x 117 ft. brick and steel garage, rein.-con. flooring, concrete foundation. About $30,000. Work will be done by day labor.

★N. Y., New York—A. Gaffney, 533 West 148th St., will build 5 story, 50 x 95 ft brick and steel garage, rein.-con. flooring, concrete foundation, at 613 West 147th St. About $50,000. Work will be done by day labor.

★N. Y., Niagara Falls—United States Light & Heat Corp., 3215 Highland Ave., let contract building 1 and 2 story, brick and steel industrial plant, concrete foundation, on Highland Ave., to J. W. Cowper Co., Fidelity Bldg., Buffalo. Noted Apr. 24.

★N. J., Jersey City—R. H. H. Steel Laundry, 138 Oakland Ave., let contract building 4-story, 75 x 75 ft., rein.-con. plant, to Salmond Bros. Co., Elm St., Arlington, $63,000.

★Pa., Franklin—Chicago Pneumatic Tool Co., 343 South Dearborn St., Chicago, Ill., let contract to Westinghouse, Church & Kerr, 37 Wall St., New York City, for 100 x 175 ft. machine shop, 90 x 425 ft. erecting shop, 40 x 200 ft. store house, 40 x 60 ft. heating house and 40 x 75 ft. blacksmith shop, here, all 1 story, steel and brick, rein.-con. flooring, concrete foundation. Cost plus percentage basis.

★Md., Baltimore—Hess Steel Corp., Biddle St. and Loneys Lane, let contract constructing 1 story, 60 x 160 ft. shipping building and 1 story, 60 x 200 ft. annealing plant, concrete, steel and brick, concrete foundation on Biddle St. and Loneys Lane, to Dietrich Bros., Pleasant and Davies St. About $150,000. Noted Jan. 16.

Md., Baltimore—H. S. Wampole Co., 761 Columbia Ave., received bids building 4 story, 25 x 30 ft. concrete, steel and brick factory, brick and concrete foundation, on Barre and St. Peter Sts., from B. F. Bennett Bldg. Co., 123 South Howard St.; G. W. Tovell, Eutaw and McCulloh Sts.; Rhodes & Billops, 61 Haywood St. About $35,000.

★Ill., Chicago—Hydrox Co., 3543 Normal Ave., let masonry contracts building 3 story, rein.-con. ice and ice cream factory, rein.-con. flooring, concrete foundation, on Lake Park Ave. and 24th St., to Midland Eng. & Constr. Co., 332 South Michigan Ave.; carpentry, to R. Goldie Co., 19 South La Salle St. About $225,000. Noted May 1.

★Wis., Sheboygan—Northern Furniture Co., Maryland Ave., let contract building 4 story, 66 x 150 ft., mill construction factory, brick foundation, on Maryland Ave. and Water St., to F. Geib, 1439 South 9th St. About $65,000. Noted Mar. 20.

★Minn., Duluth—Consolidated Elevator Co., 518 Lyceum Bldg., let contract building rein.-con. grain elevator, rein.-con. flooring, concrete and rock foundation, 1,250,000 bu. capacity, on Fairfield Ave. and water front, to Barnett & Record Co., 415 Lyceum Bldg. About $250,000.

★Minn., Le Sueur—Minnesota Valley Canning Co. let contract building canning factory, to J. B. Nelson & Co., 503 Belgrade Ave., Mankato. About $25,000.

★Minn., Minneapolis—Robertson Shoe Co., 315 1st Ave., N., let contract building 2 story, 83 x 130 ft., concrete and brick factory, on East Hennepin Ave. and 17th St., to C. W. Lunquist & Co., 715 15th Ave., N. E., $41,000. Noted Apr. 3.

★Mo., St. Louis—Ely & Walker Dry Goods Co., 16th and Washington Sts., will build 8 story, 100 x 125 ft., rein.-con., steel and brick factory, concrete foundation, on Locust St. between 15th and 16th Sts. About $500,000. Work will be done by day labor.

★Mo., St. Louis—McElroy Sloan Shoe Co., 1511 Washignton Ave., let contract building 5 story, 75 x 136 ft., rein.-con., steel and brick factory, rein.-con. flooring, concrete foundation, on 21st St. and Washington Ave., to Murch Bros. Constr. Co., Ry. Exch. Bldg., $200,000.

★Cal., Aroma—See "Fresno."

★Cal., Calexico—E. W. Newkirk, New York City, let contract building 1-story, 100 x 140 ft., rein.-con. garage and machine shop, on 3rd and Hefferman Sts., to Jasper Travers, Calexico. About $25,000. Motor Service Co., lessee. Noted Apr. 17 under C. R. Rockwood.

★Cal., Camarillo—Camarillo Canning Co. let contract building 1 story, 60 x 200 ft., timber cannery, rein.-con. flooring, concrete foundation, to C. F. Locke, Alhambra. About $50,000. Noted Mar. 20.

★Cal., Clovis—See "Fresno."

★Cal., Culver City—H. Lehrman Studios let contract building timber film manufacturing plant, concrete foundation, on 10 acre site, to Milwaukee Bldg. Co., 316 Wright & Callender Bldg., Los Angeles. About $75,000.

★Cal., Del Rey—See "Fresno."

★Cal., Dinuba—See "Fresno."

★Cal., Fowler—See "Fresno."

★Cal., Fresno—California Associated Raisin Co., Holland Bldg., let contract for new plants and alterations to existing ones to Trewhitt-Shields Co., Powell Bldg., cost plus percentage basis. Plans include building 3 story, 80 x 80 ft. to 140 x 320 ft. rein.-con. and brick warehouses at Selma, Parlier, Kingsburg, Del Rey, Monmouth and Fowler; stemming plant here and additions to packing plants at Hanford, Aroma, Dinuba, Reedley, Sanger and Clovis. Noted Mar. 20.

★Cal., Hanford—See "Fresno."

★Cal., Kingsburg—See "Fresno."

★Cal., Monmouth—See "Fresno."

★Cal., Parlier—See "Fresno."

★Cal., Reedley—See "Fresno."

★Cal., San Diego—Spreckles Securities Co., Union Bldg., let contract building 1 story, 75 x 150 ft., concrete and brick garage and shop, at 507 West Bway., to B. M. Brooker, 4034 Ibis St. About $25,000.

★Cal., Sanger—See "Fresno."

★Cal., Selma—See "Fresno."

★Ont., Sydenham—Dept. Pub. Wks., Ottawa, let contract for power house, heating system, etc., at Sydenham Military Hospital here, to W. H. Harvey, Kingston. About $65,000. Noted Mar. 13.

★B. C., Victoria—Harbor & Marine Co. let contract building shipbuilding plant to S. Cameron, Victoria. Plans include plate, shop, furnace shop, frame bending shop, saw mill, offices, ways, etc.

Buildings

PROPOSED WORK

Mass., Brookline (Boston P. O.)—Theatre—Druker Rudnick Co., Harvard St., having plans prepared by Blackall, Clapp & Whittemore, archts., 20 Beacon St., Boston, for 2 story, 80 x 120 ft. brick and concrete, on Harvard St. About $250,000.

Mass., Greenfield—Home and Clubhouse—I. O. O. F., Pocumptuck Lodge, plans to build home and clubhouse on Federal St. Cost will exceed $50,000.

Mass., Holyoke—Church—Second Congregational Church Society receives bids about June building 80 x 120 x 175 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Appleton and Maple Sts., to replace one recently destroyed by fire. About $500,000. G. P. B. Alderman & Bro., 437 High St., archts. Noted Apr. 3.

Mass., Lowell—Auditorium—City plans to issue $1,000,000 bonds to build memorial auditorium for soldiers and sailors. P. D. Thompson, mayor. Noted Jan. 16.

Mass., Pittsfield—Hall—Comrs. Berkshire Co. plan to build 2-story 50 x 80 ft. brick and concrete, hall of records, rein.-con. flooring, concrete foundation. About $100,000. J. M. Vance, Main St., archt.

Mass., Pittsfield—Police Station—City plans to build police station. About $50,000

Mass., Williamstown—Library—Williams College had plans prepared by Cram & Ferguson, archts., 20 Beacon St., Boston, for 2 story brick, on campus. About $150,000.

R. I., Thornton—School—Johnston Twp. School Bd. having plans prepared by Hoppin & Field, archts., 32 Westminster St., Providence, building 2-story, 80 x 150 ft. fireproof, rein.-con. flooring, concrete foundation, here. About $120,000. S. K. Luther, Thornton, clk. Noted May 1.

R. I., Wakefield—Theatre—Plans are out for figures for 2-story, 52 x 75 ft. concrete, rein.-con. flooring, concrete foundation, for Misses Miller, c/o H. A. Lewis, archt., 75 Westminster St., Providence. About $50,000.

R. I., Woonsocket—Theatre—W. F. Fontaine, archt., 285 Main St., receives bids about May 15, building 2 story, 60 x 100 ft. brick, concrete foundation, on Cumberland St., for Social Amusement Co., 11 Cumberland St. About $60,000. Noted Mar. 13.

Conn., Bridgeport—Business and Theatre—D. Feuer, Water St., plans to build fireproof theatre and 5 story business building at 260-270 State St. About $600,000.

Conn., Bridgeport — Hospital — Galen Corp., 810 Myrtle Ave., plans to build addition to hospital. About $50,000.

Conn., Hartford—Bath House—City having plans prepared by E. T. Wiley, archt., 75 Pratt St., for bath house on Front St. Address P. A. Mason, supt. pub. bldgs. com. Noted Apr. 10.

Conn., Thomaston—Business and Theatre—A. J. Donovan, Main St., plans to construct theatre and business building on Main St. About $50,000.

N. Y., Astoria—Theatre—Glynne & Ward Alhambra Theatre, Knickerbocker Ave. and Halsey St., Brooklyn, having plans prepared by T. Lamb, archt., 644 8th Ave., New York City, building 2 story brick and steel, brick foundation, on Grand and Steinway Aves., here. About $400,000.

N. Y., Brooklyn—Hospital—Beth Moses Hospital, Hart St. and Stuyvesant Ave., soon receives bids building 5 story, 90 x 100 ft. brick and steel, brick foundation. About $350,000. H. J. Murick, 957 Bway., archt. Noted Mar. 20.

N. Y., Brooklyn—Hospital—Maternity Hospital Society, 1666 Pitkin Ave., having revised plans prepared by Cohn Bros., archts., 361 Stone Ave., building 3 story, 50 x 80 ft. brick and steel, brick foundation, on Howard and Dumont Aves. About $75,000.

N. Y., Brooklyn—Theatre—I. Birnbaum, 303 Oakland Ave., having plans prepared by G. Erda, archt., 826 Manhattan Ave., building 1 story, 25 x 200 ft. brick and steel, brick foundation, on Manhattan and Norman Aves. About $65,000.

N. Y., Brooklyn—Theatre—Miller-Weiss Co., c/o Shampan & Shampan, archts., 50 Court St., soon lets contract building 1 story, 75 x 100 ft. brick and steel, concrete foundation, on Manhattan Ave. and Eagle St. About $80,000. Noted Mar. 27.

N. Y., Hornell—Hospital—Bethesda Hospital, North Hornell, plans to build Roosevelt Memorial Hospital here. About $200,000. Address L. S. Alger, Hornell.

N. Y., Mt. Vernon—Church—Mt. Vernon Baptist congregation plans to build 1-story church. About $150,000. W. F. Tilton, chn. bldg. com. H. W. Jones, 739 Metropolitan Bank Bldg., Minneapolis, Minn., archt.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., had plans prepared by McKenzie, Voorhees & Gmelin, archts., 1123 Bway., building 4 story, 103 x 115 ft. brick and steel, concrete foundation, on 167th St. and Grand View Pl. About $391,000.

N. Y., New York—Hotel—Beadleston Realty Co., c/o Wallis & Goodwilbie, archts., 56 West 45th St., soon lets contract building 7 story brick and steel, on East 58th St. and 5th Ave. About $75,000.

N. Y., New York—Hotel—Park Realty Co., 151 West 42nd St., having plans prepared by G. E. Blum, archt., 505 5th Ave., building 14 story, 25 x 100 ft. brick and steel, brick foundation, on 5th Ave. and 78th St. About $250,000.

Buildings **(Continued)**

N. Y., New York—Institute—League for Political Educ., 15 West 44th St., having plans prepared by McKimm, Mead & White, archts., 101 Park Ave., building 5 story, 100 x 125 ft. brick and steel, concrete foundation, on 43rd St. and Bway. About $150,000.

N. Y., New York—Office—D. L. Elliman & Co., 15-17 East 49th St., having preliminary plans prepared by Cross & Cross, archts., 681 5th Ave., building 10 story, 34 x 100 ft. brick and steel, brick foundation, on 49th St. between 5th and Madison Aves. About $150,000.

N. Y., New York—Synagogue—J. M. Felson, archt., 1133 Bway., receives bids about May 15, building 3 story, 50 x 100 ft. brick and steel, brick foundation, on 177th St. and Bway., for Temple Gate of Hope, 130 Wadsworth Ave. About $50,000. Noted Apr. 10.

N. Y., New York—Theatre—B. S. Moss, 729 7th Ave., had plans prepared by De Rosa & Pereira, archts., 110 West 40th St., building 2-story, 125 x 150 ft. brick and steel, brick foundation, on Prospect Ave. and 161st St. About $600,000.

N. Y., Pelham—High School—Bd. Educ. having preliminary sketches prepared by Tooker & Marsh, archts., 101 Park Ave., New York City, building 2 story, 168 x 171 ft brick and steel, brick foundation. About $115,000. T. J. James, pres.

N. Y., Wende (Millgrove P. O.)—Penitentiary—Erie Co. (Buffalo) having preliminary plans prepared by C. E. Speich and J. Walker, archts., 575 Ellicott Sq., Buffalo, building 2½ story, 224 x 550 ft. fireproof penitentiary rein.-con. flooring, concrete foundation, on Alden Co. Farm site. Plans include almshouse, dormitories, chapel and administration building. About $800,000.

N. J., Bayonne—Club—Knights of Columbus, 669 Ave. C, plan to build 3 story brick clubhouse. About $200,000.

N. J., Bayonne—School—Bd. Educ. plans to build school to replace P. S. No. 4. About $250,000.

N. J., East Orange—School—Bd. Educ. is receiving competitive sketches for building school. About $150,000.

N. J., Jersey City—Schools—City receives bids in June building schools Nos. 6, 23 and 37 in Greenville Sect. About $2,500,000.

N. J., Jersey City—Synagogue—Sons of Israel congregation plans to build synagogue on Grove St. About $70,000.

N. J., Long Branch—Library—Boring & Tilton, archts., 52 Vanderbilt Ave., New York City, receives bids about May 12, building 1-story, 52 x 65 ft., brick and steel, brick foundation, for Long Branch Library. About $70,000.

Pa., Erie—Office—Erie Malleable Iron Co., 12th and Cherry Sts., having plans prepared by Simons, Brittain & English, archts., Oliver Bldg., Pittsburgh, building 4-story, 40 x 63 ft. fireproof, rein.-con. flooring, concrete foundation. About $60,000. Address architect.

Del., Wilmington—Library—Wilmington Free Institute soon receives bids building 2 story, 90 x 200 ft., steel and brick, brick foundation. About $400,000. Boring & Tilton, 52 Vanderbilt Ave., New York City, archts. Noted Nov. 28.

D. C., Wash.—Bank—Holmes & Winslow, archts., 110 West 40th St., New York City, soon let contract building 1 story, 25 x 139 ft., brick and steel, brick foundation, on 15th and I Sts., for Liberty Savings Bank, 1410 New York Ave., N. W. About $100,000.

Fla., Daytona—Hall—City Comrs. soon receive bids for brick and stone hall. About $50,000. S. H. Cove and J. Espedahl, Daytona, archts.

O., Akron—Restaurant, etc.—E. M. Leatherman, State Bank Bldg., soon receives bids building 3 story, 30 x 165 ft., steel and brick, concrete foundation, on South Main St. About $50,000. Henry & Murphy, 2nd Natl. Bank, archts.

O., Cleveland—Theatre and Commercial—Shaw-Hayden Amusement Co. soon receives bids building 3 story, concrete, steel and brick, on Shaw and Hayden Aves. About $100,000. W. Norris, pres. W. S. Ferguson Co., 1900 Euclid Bldg., archts.

O., Columbus—Business—H. J. Schwartz, North 4th St., plans to build 2 story, 90 x 96 ft., rein.-con. and brick, on East Broad St. About $100,000. Richards, McCarty & Bulford, Hartman Bldg., archts.

O., Dayton—Salesroom—F. B. Heathman Co., 220 West 3rd St., plans to build 2 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, on West 2nd St. About $100,000.

O., Kent—Hotel—Kent Hotel Co. plans to build hotel. About $150,000. B. M. Mason, pres.

Mich., Detroit—Church—North Woodward Methodist Episcopal congregation, c/o W. E. N. Hunter, archt., 1306 Chamber Commerce, having plans prepared building 2-story, 180 x 250 ft. brick, steel and stone, concrete foundation, on Woodward Ave. About $500,000.

Mich., Pontiac—School—City election May 12, to vote on $1,000,000 bonds to build two 16 room and one 24 room schools, also 2 additions to present high school.

Ill., East St. Louis—Bank—Illinois State Bank, Missouri Ave., plans to build 25 x 120 ft. addition. Cost to exceed $50,000.

Wis., Kenosha—School—White, White & White, archts., Pub. Serv. Bldg., soon receives bids building 2-story, 56 x 68 ft. fireproof, rein.-con. flooring, concrete foundation, on Division St., for St. Casimir's congregation. About $80,000.

Ia., Ames—Library and Armory—State College soon receives bids building 4 story library on campus, cost, $300,000; 3 story armory, $200,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

Ia., Jefferson—School—Bd. Educ. rejected bids received Apr. 9, building school. Noted Mar. 27.

Minn., Buhl—High School—Bd. Educ. St. Louis Co. Dist No. 35, having plans prepared by A. W. Kerr, archt., 5 Amer. Exch. Bldg., Virginia, building 3-story rein.-con. and brick, rein.-con. flooring, concrete foundation on Chestnut St. About $250,000.

Minn., Fergus Falls—Dormitory—State Bd. Control, St. Paul, having plans prepared by C. H. Johnson, archt., 715 Capital Bank Bldg., St. Paul, building rein.-con. and brick, here. About $50,000.

Minn., Hastings—Dormitory—State Bd. Control, St. Paul, soon receives bids building 50 x 120 ft., rein.-con. and brick. About $60,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Minneapolis—Club—Minneapolis Steel & Mchy Co., Minnehaha Ave. and 29th St., plans to build 2-story 70 x 100 ft., brick, on 27th Ave., S. About $70,000.

Minn., Minneapolis—School—Bd. Educ. soon receives bids building 61 x 92 ft. rein.-con. and brick addition to George Bancroft School on 14th Ave., S., and 38th St. About $85,000. Bureau Bldgs., Div., Design & Inspection of Business Supt's Depts., Bd. Educ., archts.

Minn., Minneapolis—School—Bd. Educ. soon receives bids building 63 x 116 ft. rein.-con. and brick addition to Francis E. Willard School on Queen and 16th Ave., N. About $90,000. Bureau Bldgs., Div. Design & Inspection of Business Supt's. Dept., Bd. Educ., archts.

Minn., St. Hilaire—School—Bd. Educ. plans to build 2-story, 57 x 90 ft. About $50,000. Dund & Dunham, 512 Essex Bldg., Minneapolis, archts.

Minn., St. Peter—Dormitory—State Bd. Control, St. Paul, soon receives bids building 2 story, 45 x 140 ft., rein.-con. and brick, here. About $50,000. C. H. Johnson, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Wanamingo—School—City having plans prepared by Magney & Tusler, archts., Builders' Exch., Minneapolis, building 2 story, 58 x 93 ft., brick. About $50,000. A. O. Berg, clk.

S. D., Rapid City—Church—J. R. Sharp, secy. Methodist Episcopal Church, receives bids about May 12, building 1 story, 50 x 100 ft. brick and rein.-con. About $55,000. Edwins & Edwins, 911 North West Band Bldg., archts.

N. D., Dickinson—Armory—City election May 13, to vote on $50,000 bonds to build armory.

N. D., Dunseith—Refrectory—State Legislature, Bismarck, appropriated $100,000 bonds to build refrectory at Tubercular Sanitarium here. W. F. Kurke, Fargo, archt.

N. D., Grafton—Dormitory—State Legislature, Bismarck, appropriated $100,000 bonds to build dormitory at School of Feeble Minded, here. W. F. Kurke, Fargo, archt.

N. D., Jamestown—Hospital—State Legislature, Bismarck, appropriated $150,000 bonds to build 150 x 150 ft. addition to State Hospital for Insane, here. W. M. Hotchkiss, supt. W. F. Kurke, Fargo, archt.

N. D., Valley City—Temple—Masonic Society having plans prepared for temple. About $75,000.

N. D., Williston — Theatre — Orpheum Theater Co. plans to build 37 x 140 ft. About $50,000.

Mont., Lewistown—Bakery—J. A. Robbins plans to build 1 story on Bway. and Dawes Sts. About $30,000.

Mo., Ozark—Court House—Christain Co. soon lets contract building 3 story, 91 x 91 ft., concrete and brick. About $100,000. H. H. Hohenschild, Oddfellows Bldg., St. Louis, archt.

Mo., St. Louis—Hotel—E. A. Ganss, 9 North 7th St., plans to build 6 story, 100 x 125 ft., on DeBaliviere and Waterman Sts. Cost to exceed $50,000.

Mo., St. Louis—Mercantile—G. Wuest, archt., wainwright Bldg., soon lets contract building 2 story, 28 x 128 ft., rein.-con., steel and brick, concrete foundation, at 208 North 7th St., for J. E. Kaime & Bros. Realty Co., De Menil Bldg. About $50,000.

Mo., St. Louis—Office—Essex Investment Co., Century Bldg., plans to build 80 x 100 ft., on 12th and Locust Sts. About $500,000.

Tex., San Antonio — Church — Trinity Methodist congregation, 1142 West Magnolia St., plans to build church on Huisatche and Grant Sts. About $50,000. H. C. Leonard, pastor.

Tex., San Antonio—Temple—Labor Organizations, 114½ South Alamo St., plans to build labor temple. Cost between $50,000 and $100,000. Bonds will be sold for project.

Ariz., Mesa—High School—High School Trustees plan election May 10, to vote on $100,000 bonds to build additions to high school. H. E. Matthews, principal.

Cal., Anaheim—Schools—School Trustees having plans prepared by T. C. Kistner, archt., Amer. Natl. Bank Bldg., San Diego, building 2 schools, 1 on Central School site other on site to be purchased on east side of town. Bonds will be voted for project.

Cal., Covina—Schools—School Trustees having plans prepared by J. C. Austin, archt., 1120 Baker-Detwiler Bldg., Los Angeles, for 2 schools, 1 to consist of 4 classrooms and auditorium, other 18 classrooms and manual training building. Bonds for $150,000 voted for project.

Cal., El Centro—Courthouse—Bd. Supervs. Imperial Co. plan to build courthouse. About $250,000.

Cal., Imperial—Schools—City election May 9 to vote on $90,000 bonds to build school. D. C. Gale, school trustee.

Cal., Norwalk—Hospital—State Bd. Control, Sacramento, appropriated $150,000 bonds to construct new building at hospital here. W. F. McClure, state engr.

Cal., Santa Monica—Schools—Bd. Educ. plans election soon to vote on $30,000 bonds to build concrete amphi-theater on high school grounds and $75,000 for brick addition to Washington and John Adams Schools. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts.

Cal., Tulare—Auditorium and City Hall—City voted $60,000 bonds to build auditorium and city hall. F. W. Eldridge, clk. Noted Mar. 6.

Cal., Tulare—Schools—City voted $90,000 bonds to build 2 schools. F. W. Eldridge, clk. Noted Mar. 6.

Cal., Ventura—School—State Bd. Control, Sacramento, appropriated $90,000 bonds to construct building at girls' reform school here. W. F. McClure, state engr.

Cal., Whittier—School—State Bd. Control, Sacramento, appropriated $64,000 bonds to construct building at boy's reform school here. W. F. McClure, state engr.

Que., Montreal—College—Jesuit Fathers of Loyola Sherbrooke St. W., plans to build college. W. J. Hingston, pastor. About $300,000.

Que., Montreal—Hippodrome—R. Wolston Syndicate, 603 McGill Bldg., had plans prepared for hippodrome, on La Salle and Letourneaut Sts., Maisonneuve. About $500,000.

Buildings (Continued)

Que., Quebec—Hotel—A. J. Peeland, Peeland Hotel, preparing plans for 7 story, steel and brick, concrete foundation, on John St. About $100,000.

Ont., Hamilton — Arena — Hamilton Hockey Club, plans to build 1 story, brick hockey and skating arena with artificial ice plant. About $200,000.

Ont., Kingston—Memorial Hall—Queens University plans to build concrete memorial hall, concrete foundation. About $100,000.

Ont., Ottawa — Restaurant — Bowles' Lunch, Ltd., 149 Yonge St., Toronto, plans to build restaurant, billard and pool rooms, on Rideau St., here. About $150,000.

Ont., Ridgeway — School — School Bd. plans to build brick and rein.-con. school, About $60,000. J. W. Marshall, inspector.

Ont., St. Catharines—School—A. E. Nicholson, archt., 46 Queen St., receives bids about May 18 building 2 story, brick, for School Bd. About $65,000.

Ont., Sudbury—School—Separate School Bd., having plans prepared by P. J. O' Gorman, archt., Sudbury, building 2 story, brick, on Notre Dame Ave. About $65,000.

Alta., Drumheller — Bank — Merchants Bank, St. James St., Montreal, Que., plans to build 50 x 60 ft., steel and brick, concrete foundation, on Main St., here. About $62,000.

BIDS DESIRED

Mass., Springfield—School—Until May 22, by city, building 3 story, brick, steel and concrete addition to Forrest Park School. About $180,000. B. H. Seabury, 21 Besse Pl., archt. Noted Feb. 20.

Conn., Waterbury—Church—Until May 15, by J. A. Jackson, archt., 1123 Bway., New York City, building 70 x 200 ft. limestone, terra cotta and granite, brick foundation, on East Main St., for Immaculate Conception congregation, 97 East Main St, About $100,000. Noted Mar. 6.

Pa., Chambersburg—Library—Until May 12, by Boring & Tilton, archts., 52 Vanderbilt Ave., New York City, building 1 story, 35 x 75 ft., brick and steel, for Croyle Free Library. About $65,000.

Ala., Birmingham—High School—Until May 17, by Bd. Educ., Jefferson Co., building 1 story, brick and stone, for Shades-Cahaba High School. About $50,000. D. O. Whilldin, Title Bldg., archt.

O., Franklin—School—Until May 15, by Bd. Educ. building 2 story, fireproof, rein.-con. flooring, concrete foundation. About $150,000. E. J. Mountstephen, 802 Union Bank Bldg., Dayton, archt. Noted Mar. 6.

Minn., Anoka — Administration — Until June 15, by State Bd. Control. St. Paul, constructing 2 story, 45 x 140 ft., rein.-con. and brick administration building at state asylum here. About $80,000 C. H. Johnson, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Faribault—Dormitory—Until May 13, by State Bd. Control, St. Paul, building 2 story, 45 x 132 ft. rein.-con. and brick here. About $75,000. C. H. Johnson, 715 Capital Bank Bldg., St. Paul, archt. Noted Apr. 24.

Minn., Fergus Falls — Hospital — Until May 10, by State Bd. Control, St. Paul, building 2 story, 45 x 120 ft., rein.-con. and brick. About $50,000. C. H. Johnson, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Minneapolis—Office—See "Industrial Works."

Minn., Rochester—Hospital—Until June 1, by State Bd. Control, St. Paul, building 2 story, 45 x 140 ft., rein.-con and brick here. About $50,000. C. H. Johnson, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Round Lake—School—Until May 16, by B. C. Benkman, clk. bd. educ., building brick and tile, concrete foundation. About $54,000. G. Pass & Son, Mankato, archts. Noted Mar. 6.

Minn., St. Cloud—Until June 1, by Granite City Investment Co. building 5 story, 120 x 120 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Main St. About $300,000. Holstead & Sullivan, Palladie Bldg., Duluth, archts.

Cal., Los Angeles—Until May 21, by Bd. Educ., 730 Security Bldg., building brick school on Nevin Ave., to include 3 buildings, rein.-con. flooring and concrete foundation. About $115,000. J. C. Austin, 1125 Baker-Detwiler Bldg., archt. Noted Feb. 27.

Que., Montreal—Office—Until May 15, by Great West Life Assurance Co., 160 St. James St., building 5 story, rein.-con. and brick, concrete foundation, on MacGill St. About $350,000. D. J. Spence, 246 Beaver Hall Hill, archt.

Que., Montreal—Synagogue—Until June 1, by B. Goldberg, 83 Craig St. W., building 91 x 97 ft. synagogue for Beth Nai Jacob congregation, on Esplanade St. About $260,000. C. Duforth, 195 St. Catherine St., E., archt. Noted Aug. 8.

Que., Montreal—Theatre—Until June 1, by Gaiety Theatre Co., St. Urbain St., building concrete and steel, on St. Catherine St. E. About $60,000.

Ont., Guelph—Dormitory—Until May 17, by H. F. McNaughton, secy. dept. pub. wks., Toronto, building 3 story boys' dormitory, brick, for Ontario Agricultural College, College Heights. About $150,000. F. R. Heakes, c/o Dept. Pub. Wks., Parliament Bldg., Toronto, archt. Noted Apr. 10.

Ont., Toronto—High School—Until May 30, by C. J. Reade, archt., 137-138 Confederation Life Bldg., building 2 story, brick addition to school on Jarvis St., for Separate School Bd., 67 Bond St. About $80,000.

B. C., Trail—Bank—Until May 12, by Bank of Montreal, St. James St., Montreal, building 2 story, 40 x 60 ft. on Main St., here. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Bridgeport—Business and Loft—P. W. Wren, 634 Water St., let contract building 4 story, brick and steel, on Water St., to W. Martin & Son, 164 State St. About $50,000. Noted Nov. 14.

★Conn., New Haven—Business—Beecher & Bennett, Inc., 280 Elm St., let contract building 2 story, 70 x 100 ft. brick and timber, rein.-con. flooring, concrete foundation, on Bway and Howe St., to Larkin-Carey Co., 166 Brewery St. About $60,000. Noted May 1.

★Conn., West Hartford (Hartford P. O.)—Hotel—Sleeper & Parisi, c/o Marchetti & D'Avino, archts., 756 Main St., Hartford, will build 4 story, 78 x 136 ft. brick, concrete and steel, concrete foundation, on Farmington Ave. here. About $130,000. Work will be done by day labor.

★N. Y., New York—Bank—Dry Dock Savings Bank, 341 Bowery, let contract building 1 story, 30 x 75 ft. brick and steel extension to bank, brick foundation, to Hoggson Bros., 485 5th Ave. About $70,000. Cost plus percentage basis.

★N. Y., New York—Bank—Natl. City Bank, 55 Wall St., will alter exterior and interior of bank, brick and steel. About $55,000. Work will be done by day labor.

★N. Y., New York—Office—Atlantic & Pacific Steamship Co., 7 Hanover Sq., let contract building 4 story, 100 x 125 ft. brick and steel, brick foundation, at 8-10-17 Hanover Sq., to Whitney Co., 101 Park Ave.

★N. Y., New York—Office, etc.—Natl. Assn. Bldg. Corp., 25 West 44th St., let contract building 20 story, 142 x 200 ft., brick and steel office building, brick foundation, at 27 West 43rd St. through to 26-28 West 44th St., to F. T. Ley, 19 West 44th St. About $800,000. Cost plus percentage basis. Noted Apr. 24.

N. Y., Rome—School—Bd. Educ. received bids Apr. 22, building 2 story, 100 x 125, ft. brick, on Linden St., from E. H. Owens, 114 Front St., $145,593; T. H. McHale & Son, $168,932; A. E. Brase Constr. Co., $177,528. Noted Mar. 27.

★N. J. Jersey City—Hospital—City let contracts building addition, improving and installing new equipment in city hospital as follows: W. H. & T. W. Cane, Baldwin Ave., masonry, carpentry and iron work, $963,145; W. W. Fairier, Montgomery St., plumbing work, $136,603; J. H. Cooney, 210 North 4th St., heating and ventilating, $199,287; Hoffman & Elias, 549 Columbus Ave., New York City, $82,400. Noted May 1.

★Pa., Pittsburgh—Office—H. G. Morgan, Wabash, Bldg., will build 6 story, 25 x 100 ft., brick and steel office building, concrete foundation, on Forbes St. About $50,000. Work will be done by day labor.

★Md., Annapolis — Bank — Annapolis Banking & Trust Co., let contract remodeling 2 story, 45 x 110 ft., rein.-con., steel and brick, on Church, Circle and Main Sts., to J. J. Stehle, 170 West St., Annapolis. Cost plus percentage basis.

★Md., Baltimore—School—Blessed Sacrament congregation, York Rd. and Springdale Ave., let general contract, excepting stone work, for 2 story, 60 x 100 ft., rein.-con. and brick, concrete foundation, on York Rd. and Springdale Ave., to J. J. Moylan, 538 North Calvert St.; stone work, to R. N. McCulloh & Co., 120 East Lexington St. About $75,000. Noted Apr. 17.

★Md., Baltimore—Store—H. S. Block, 1014 Morton St., let contract building 3 story, 45 x 100 ft., brick and stone, brick and concrete foundation, on Cathedral and Eager Sts., to Consolidated Eng. Co., 243 Calvert Bldg. About $50,000.

Md., Texas—Almhouse—Comrs. Baltimore Co., Towson, received lowest 3 bids building 2½ story, 44 x 90 ft. stone and brick, rein.-con. flooring, from B. F. Bennett Bldg. Co., 123 South Howard St.; Hicks, Tase & Norris, 106 West Madison St., Consolidated Eng. Co., 243 Calvert Bldg., contractors, all of Baltimore. About $85,000. Noted Feb. 27.

★O., Akron—Theatre and Business—T Krumeich, 1168 East Market St., let contract building 3 story, 50 x 53 x 94 ft., steel and brick, rein.-con. flooring, concrete foundation, at 1169 East Market St., to Clemmer-Johnson Co., 19 I. O. O. F. Bldg About $150,000.

★O., West Unity—School—Bd. Educ. let contract building 2 story, 110 x 135 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to Winters & Wilkson, Dublin. About $107,000. Noted Feb. 27.

★Mich., Detroit—Theatre, etc.—Woodward Theatres Co., 306 Breitmeyer Bldg., let contract building 2-story, 70 x 160 ft. rein.-con., brick and steel, rein.-con. flooring, concrete foundation, at 158-164 Gratiot Ave., to F. Farrington Co., 202 Scherer Bldg. About $75,000. Noted Mar. 20.

★Ill., Austin (Chicago P. O.)—Church—Kloeckner Memorial Evangelical congregation, c/o W. C. Jones, archt., 30 North La Salle St., Chicago, let contract building 1-story, 66 x 106 ft. brick and timber, concrete foundation, at 120 North Central Ave., here, to W. Goetzinger, 3822 Lowe Ave., Chicago. About $75,000. Noted Apr. 10.

★Wis., Port Washington—Bank—Port Washington State Bank will remodel 2 buildings into bank, brick and Bedford stone. About $60,000. Work will be done by day labor. Noted Apr. 24.

★Wis., Sheboygan — Church — Catholic congregation, c/o N. Lorenz, Sheboygan, let contract building 1-story, 90 x 180 ft. on Main St., to Raybeck & Putz, Sheboygan.

★Minn., Austin—Theatre—Cozy Theatre Co. will build 60 x 135 ft., concrete and brick. About $55,000. Work will be done by day labor. Noted Apr. 10.

★Mo., St. Louis—Hotel—University Investment Co., La Salle Bldg., will build 5-story, 110 x 130 ft. concrete, steel and brick, concrete foundation, at 4471 Olive St. About $160,000. Work will be done by day labor.

★Mo., St. Louis—Loft—Kennett Estate. 4th and Locust Sts., let contract converting 10 story, 100 x 150 ft., concrete, steel and brick office building at 501-11 Locust St., into loft building, to Hall & Mackay, Chemical Bldg. About $50,000.

★Tex., Alpine—School—State Normal School Bd. let contract building 2-story, 60 x 265 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to J. Wattinger, 214 Archway St., Austin, $130,000.

Cal., Los Angeles — Gymnasium — Bd. Educ., Security Bldg., received bids building 2-story, 103 x 113 ft., brick, concrete foundation, at Polytechnic High School, from J. B. Harris, 218 South Gramercy Pl., $61,000; J. V. McNeil, H. W. Hellman Bldg., $64,400; K. R. Bradley, 1824 East 15th St., $64,910. Noted Feb. 27.

★Que., Montreal—School—School Comn. St. Bernadin de Montreal, let contract building 3 story, 60 x 125 ft. stone and brick, to Filion & Freres, 2419 St. Denis St. About $78,500.

★Ont., Kingston—Educational Block—Dept. Pub. Wks., Ottawa, let contract building educational block at Royal Military College, here, to Pigott and Healy Constr. Co., 36 James St. S., Hamilton. About $323,000. Noted Mar. 6.

★Ont., Ottawa—Store—H. J. Daly Co., Ltd., Connaught Pl., let contract building 4 story, 66 x 198 ft., rein.-con. and brick, to G. Graves, Booth Bldg. About $350,000. Noted Apr. 17.

★B. C., Victoria—Office—See "Industrial Works."

Federal Government Work

PROPOSED WORK

Mass., Chatham—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3884. About $10,000.

N. Y., New York—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Marginal Parkway; Spec. 3888. About $15,000.

N. J., Cape May—Roads and Walks—more, superv. archt., treas. dept., Wash., D. C., plans to build at Section Base, here; Spec. 3881. About $40,000.

Pa., Phila.—Repairing Roof—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to repair roof of bldg. No. 7 here; Spec. 3885. About $4500.

D. C., Wash.—Fuel Oil—Emergency Fleet Corp., Wash., will receive bids for furnishing maximum of 5,400,000 bbls. or minimum of 3,600,000 bbls. bunker fuel oil, to be delivered at Boston, Phila., Galveston, Cristobal and Balboa.

Va., Hampton Roads—Air and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install high pressure air and water systems, here; Spec. 3883. About $43,000.

Va., Hampton Roads—Revolving Platform—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Naval Air Sta., here; Spec. 3880. About $7500.

La., New Orleans—Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install mechanical and electrical equipment at power plant, here; Spec. 3882.

Tex., El Paso—Irrigation, etc.—U. S. Recl. Serv. making preliminary surveys in Big Bend Dist., Rio Grande Valley, for irrigation system to irrigate approximately 3,000,000 acres and for 3 dams, one in Colorado Canyon, one near Boquillas mine in Mexico, and other at Mariscal Pass. V. E. Lieb, El Paso, engr.

Tex., Galveston—Track—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build spur track here; Spec. 3887. About $12,800.

Tex., Gilmer—Post Office—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., rejected bids received Apr. 23, building here. Noted May 1.

BIDS DESIRED

Conn., New London—Dredging—Until May 28, by U. S. Engr. Office, New London, dredging in Greenwich Harbor. Advertised in this issue.

Pa., Phila.—Steam Distributing System—Until May 26, by Local Navy Yard, building steam distributing system here. Spec. 3878. About $225,000; $20 deposit required for plans and spec. Noted May 1.

Pa., Phila.—Tunnel—Until May 26, by Local Navy Yard, building tunnel for pipe, here; Spec. 3879. About $110,000; $20 deposit required for plans and spec. Noted May 1.

D. C. Wash.—Bridge—Until May 26, by C. Sells, comr. Indian Affairs, Dept. Interior, Wash., building bridge over Santa Clara River, Shivwits Indian Reservation, Utah.

D. C., Wash.—Grading—Until May 15, by Dist. Comrs., Dist. Bldg., grading 4500 cu. yd. streets.

D. C., Wash.—Paving Material—Until May 21, by Dist. Comrs., Dist. Bldg., furnishing asphalt paving blocks, repressed, vitr. sewer invert bricks, castings, asphalt paving cement, Portland cement, road oils, tars and bituminous patching material, fuel oil, paving pitch and terra cotta sewer pipe during fiscal year beginning July 1, 1919 and ending June 30, 1920.

D. C., Wash.—Paving—Until May 21, by Dist. Comrs., Dist. Bldg., paving various streets and avenues with sheet asphalt. Advertised in this issue.

Va., Hampton Roads—Medical Storage Building—Until May 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3462. About $40,000; $10 deposit required for plans and spec. Noted Apr. 3.

Va., Hampton Roads—Motor Generator Sets and Switchboard—Until May 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing at Submarine Base, here; Spec. 3872. About $60,000; $10 deposit required on plans and spec. Noted Apr. 24.

W. Va., South Charleston—Cranes—Until May 19 (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 2 electric traveling cranes, here; Spec. 3670. About $1,805,000; $10 deposit required for plans and spec. Noted May 1.

Ind., Elkhart—Post Office—Until May 28, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., altering post office here.

Mont., Kalispell—Road Work—Until May 15, by Bur. Pub. Rds., Missoula, building 29.8 mi. North Fork of Flathead Forest Rd., 10 ft. wide, involving 101 acres clearing, 104,000 cu.yd. earth and 2860 cu.yd. rock excav., four 30-ft. span, one 60-ft., one 70-ft. and fourteen 10-24-ft. span bridges. C. H. Purcell, 628 Post Office Bldg., Portland, Ore., engr.

Tex., Galveston—Air Station—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., developing Naval Air Sta., here; Spec. 3864. About $758,000; $100 deposit required for plans and spec. Noted Apr. 17.

Idaho, Grangeville—Road Work—Until May 22, by Bureau Pub. Rds., Missoula, Mont., grading 23 mi. Kooskia-Lowell National Forest Rd., 12 ft. wide, involving 60 acres clearing, 89,000 cu.yd. earth, 25,000 cu.yd. rock excav., and twenty 8-20 ft. span bridges. Noted Mar. 27.

Idaho, Hailey—Road Work—Until May 15, by B. J. Finch, dist. engr., Bur. Pb. Rds., U. S. Dept. of Agriculture, 406 Colonial Hudson Bldg., Ogden, Utah, building and improving 10 mi. National Forest Rd., Sawtooth National Forest, involving 4100 cu.yd. rock excav., 38,000 cu.yd. excav., etc.

Cal., Ft. Bidwell—School—Until May 27, by C. Sells, comr. Indian Affairs, Dept. Interior, Wash., D. C., building school here.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★Mass., Boston — Electric Traveling cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing 10-ton cranes for Bldg. No. 42B, to Pawling & Harneschfeger Co., 38th and National Ave., Milwaukee, Wis. $8780 (100 days); one 50-ton crane for bldg. No. 42B and one 20-ton crane for bldg. No. C., to Whiting Fdry. & Equipment Co., Harvey, Ill., $61,885. Noted Mar. 27.

N. Y., Brooklyn—Building—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., received bids Apr. 30, altering public building; (1) work complete; (2) payment for old material not used, from R. H. Brown, 350 Fulton St., Brooklyn, (1) $21,306; (2) $2800; B. Knopp, 431 West 41st St., New York City, (1) $24,685; B. Diamond, 12 Bergen St., Brooklyn, (1) $25,728; (2) $275.

★Pa., Erie—Post Office—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., let contract for alterations to post office, here, to E. B. Lee, 8400 East 9th St., $12,715. Noted Apr. 24.

Va., Hampton Roads—Additional Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 5, building at Naval Air Sta., Naval Operating Base, here; (1) work complete, from Post & McCord, 101 Park Ave., New York City, (1) $519,500, (230 days); (2) deduct $10,000; (3) add $27, deduct $20; (4) add $1, deduct $.50.

M. H. McCloskey, Jr., 1620 Thompson St., Phila., Pa., (1) $553,444, (230 days); (2) deduct $15,000; (3) add $26, deduct $10; (4) add $1, deduct $.02.

Consolidated Eng. Co., No. 243 Calvert Bldg., Baltimore, Md., (1) $561,000; (2) deduct $19,000; (3) add $13; deduct $12; (4) add $.45, deduct $.05. Noted Apr. 24.

★Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 6-story rein.-con. storehouse, at Naval Operating Base, here, to G. E. Wynne, 82 Home Life Bldg., Wash., D. C., (1) and (14), $710,500, (210 days). Noted May 1.

★Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 3-story, steel frame aircraft storehouse, at Naval Operating Base, here, to H. F. Friestedt, 327 La Salle St., Chicago, Ill., (1) and (12), $1,085,678. (210 days). Noted May 1.

★Va., Hampton Roads—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building 1-story, rein.-con. storehouse, here, to H. F. Friestedt, 327 South La Salle St., Chicago, Ill., $287,043 (230 days). Noted May 1.

★Va., Norfolk—Galvanizing Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building galvanizing plant, here, to W. Linker Co., 831 Cherry St., Phila., Pa., $119,000 (179 days). Noted Apr. 24.

Va., Quantico—Officers Quarters and Administration Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 5, building here, (1) work complete, from J. K. Turton Corp., 101 Park Ave., New York City, (1) $268,699, (100 days); (2) add $857.19; (3) add $1,039.

Hyde & Baxter, 711 13th St., N. W., Wash., D. C., (1) $284,460, (100 days); (2) $2,000.

E. G. Heflin, Law Bldg., Fredericksburg, Va., (1) $307,613, (100 days); (2) add $4200; (3) deduct $3,375. Noted May 1.

★Ga., Brunswick — Hangars — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract completing 3 seaplane hangars and building 2 additional steel hangars, to Charleston Eng. & Contg. Co., 58 Broad St., Charleston, S. C., $69,702 (90 days). Noted Apr. 17.

★Fla., Pensacola—Concrete Road—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract completing concrete road, to J. Gerkins, 800 North Hayes St., $19,433 (69 days).

Fla., Pensacola—Sewer Discharge Pipe—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building at Naval Air Sta., here, (work complete), from Carroll Elec. Co., 714 12th St., N. W., Wash., D. C., $11,490 (120 days); Newport Contg. & Engs. Co., Silsby Bldg., Newport News, Va., $13,000; H. E. Fox Constr. Co., 81 East 125th St., New York City; $13,480 (90 days). Noted Apr. 17.

★Mich., Saginaw—Lookout Gallery—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., let contract building lookout gallery in post office, here, to T. W. Gissell, 63 Rhode Island Ave., N. W., Wash., D. C., $1300. Noted Apr. 10.

★Wis., Rhinelander—Post Office—J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., let contract building post office, here, to W. D. Lovell, 1415 8th St., S. E., Minneapolis, Minn., $152,000. Noted Apr. 24.

★Ia., Des Moines—Conduit and Wiring System—J. A. Wetmore, superv. arch., Treas. Dept., Wash., D. C., let contract, to H. Andrea Electric Co., 135 Sycamore St., Milwaukee, Wis., $3000.

Miscellaneous

PROPOSED WORK

Docks, etc.—Milford, Conn.—Town plans to build dock and wharves.

Transmission Line—Antwerp, N. Y.—See "Waterworks."

Heating and Ventilating Systems — Geneseo, N. Y.—L. F. Pilcher, state archt., Capitol, Albany, soon receives bids for remodeling and building additions to heating and ventilating systems at Geneseo Normal School. About $60,000 available. Address J. V. Sturges, principal.

Transmission, etc.—Syracuse, N. Y.—New York State Rys. plans to expend $200,000 for transmission and trolley line changes, track repairs and street paving, here.

Bins—Warsaw, N. Y.—See "Bridges."

Tarvia, Screenings, etc.—Ebensburg, Pa.—Cambria Co. soon lets contract furnishing 1500 gal. Tarvia B, 1915 tons screenings and 1520 tons ballast.

Pier—Newport, Pa.—See "Streets and Roads."

Retaining Wall — Newport, Pa. — See "Streets and Roads."

Oil Tanks—Williston, N. D.—"See Industrial Works."

Transmission Lines—St. Louis, Mo.—See "Railways."

Dam, etc.—Searcy, Ark.—Arkansas Hydro-Electric Co., Heber Springs, had plans prepared by Dickinson & Watkins, engrs., Boyle Bldg., Little Rock, building 40 ft. concrete dam and spillway near here. Plans include power house and transmission lines. About $262,500.

Levee—Forney, Tex.—State Recl. Dept. Austin, plans to build levee and improve east fork Trinity River Project to be known as Levee Impvt. Dist. No. 6. Bonds for $60,000 voted for work. F. R. Lewis, Forney, engr.

Canal Equipment—Phoenix, Ariz.—See "Excavation and Dredging."

Crushed Rock — Portland, Ore. — Bd. Comrs. Multnomah Co., soon lets contract furnishing crushed rock in bunkers at Taylors Ferry Quarry, any classification required by Rd. Dept. of county. Bidders to pay for powder and labor, county to furnish engineer and keep machinery in running order, furnishing oil and grease. R. W. Hoyt, chn.

Miscellaneous (Continued)

Pier—Redondo Beach, Cal.—City plans to repair rein.-con. pleasure pier. Election will be held to vote on $40,000 bonds for project. Leeds & Barnard, Central Bldg., Los Angeles, engrs.

Pier—Santa Monica (Ocean Park P. O.), **Cal.**—C. J. Lick plans to extend Great Western pleasure pier 1500 ft. into ocean, rein.-con.

Harbor Improvements—Hamilton, Ont.—City plans to improve harbor and build bridge on Burlington Canal. About $20,000. C. W. Kirkpatrick, Hamilton, engr.

BIDS DESIRED

Masons' Materials—Jersey City, N. J.—Until May 13, by city, furnishing and delivering 6 months' supply of masons' materials to include cement, mortar, sand, etc.

Motor Truck, etc.—Millville, N. J.—City receiving bids furnishing 1 combination 2 in 1 chemical fire and hose gasoline motor truck, also 1 gasoline motor driven hook and ladder truck with nickel plated chemical tank. S. D. Bennett, dir. pub. safety; advertised in this issue.

Road Machinery—Harrisburg, Pa.—Until May 21, by State Highway Comn., Harrisburg, furnishing road machinery and equipment for maintenance work to include 12 jaw crushers from 9 x 15 in. to 9 x 18 in., mounted on 4 wheel truck, including 12-25 ton capacity wooden bin complete; twelve 18-20 hp. steam traction engine, with locomotive boiler; 48 standard 4 to 6 horse road machines from 2400-3000 lb. weight complete; thirty 3 wheel, 10-ton standard steam road rollers, double cylinder engine, locomotive boiler complete; 20 street sprinklers 400 gal. capacity, steel tank complete; 6 gasoline pumps 4 x 4 x 3 in. bore, 1½ in. suction and discharge; six 2 horse steel frame street sweepers; six 1¼ yd. capacity, 2 horse chip spreaders complete. L. S. Sadler, comr.

Crushed Slag, Paving Brick, etc.—Newcomer, Pa.—Until May 20, by H. Kisinger, controller Fayette Co., (Uniontown) furnishing and delivering 2950 tons crushed slag, 586,000 vitr. paving brick, 2200 tons sand and 3200 bbls. portland cement.

Road Rollers—Baltimore, Md.—Harvey Co., 113 South St., receiving bids furnishing 2 road rollers, 3 wheels, Buffalo-Pitts preferred.

Ore Stripping—Americus, Ga.—Aluminum Co. of America, 2400 Oliver Bldg., Pittsburgh, Pa., receiving bids for ore stripping, involving from 500,000 to 1,500,000 yd. material, 30 to 70 ft. thick. E. S. Nickes, ch. engr.; advertised in this issue.

Coal Handling Equipment—Toledo, O.—Until June 3, by D. H. Goodwillie, serv. dir., constructing and installing coal handling equipment at Bway Pumping Sta., consisting of 1 track hopper, coal crusher and elevating and conveying machinery; 1 suspended steel coal bunker with supports and 1 traveling weigh hopper. H. A. McClure, city engr.

Fill and Bulkhead—Astoria, Ore.—Until May 29, by Sanitary and Recl. Comn., building bulkhead, fill and rock work in Recl. and Impvt. Dist. No. 3. Work involves 779 brace piles and pile shoes, 2350 straight lumber piles, 35-40 ft. long, 697,620 ft. Wakefield sheeting, 53,325 ft. platform decking, 187,669 ft. lagging, 76,582 ft. walling, 24,147 ft. miscellaneous hardware, 1348 lb. 1 x 22 in., 18,750 lb. 1 x 24 in., 2746 lb. ¾ x 24 in., 3462 lb. ¾ x 30 in. bolts, 166 lb. 8 in. boat spikes, 80 lb. 8 in. galvanized spikes, 3636 cu.yd. rock rip rap, quarry refuse and screenings, 4901 cu.yd. one man rock, 1,285,201 cu.yd. fill. About $400,000. Former bids rejected. Noted Mar. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tank—Sanford, Me.—Goodall Worsted Co., let contract building 600,000 gal. rein.-con. fuel oil tank, to T. I. Ellis, 171 Westminister St., Providence, **R. I.**

★Pipe—Fall River, Mass.—City let contract furnishing 6-20 in. c.i. pipe for 1 year, to Borden & Remington Co., 115 Ann St., 67.5% and 68.5% off list price. Noted Apr. 17.

★Tank—Auburn, R. I.—Budlong Rose Co. let contract building 100,000 gal. circular concrete fuel oil tank, to T. I. Ellis, 171 Westminister St., Providence.

SEWAGE TREATMENT WORKS—CHICAGO, ILL.

Bids were received by J. McGillen, clk. sanitary dist., Apr. 24, building Des Plaines River sewage treatment works, Div. "A," from Leyden-Ortseifen Co., 53 West Jackson Blvd.; (B) James O. Heyworth, 606 South Michigan Ave.; (C) John W. Page, 189 West Madison St.; (D) Paschen Bros., 111 West Washington St., $414,959; (E) C. E. Carson Co., 155 North Clark St., $431,562; (F) Warner Constr. Co., 189 West Madison St., $446,419; (G) Hoeffer & Co., 133 West Washington St., $450,818; (H) Nash Bros., 10 South La Salle St., $539,358; (I) T. J. Forschner Contg. Co., 125th St. and Michigan Ave., $550,523. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
35,000 cu.yd. earth excavation	$2.20	$2.00	$2.49
1 cu.yd. rock excavation	3.00	3.00	3.00
5,000 sq.yd. macadam pavement	2.85	2.00	1.78
500 sq.yd. stone walks	2.00	1.25	.70
1,200 cu.yd. concrete, class "A"	16.00	17.00	18.00
5,800 cu.yd. concrete, class "B"	16.00	15.15	17.75
200 cu.yd. concrete, class "C"	15.00	13.00	14.10
600,000 lb. reinforcing steel	.04¾	.06	.06
15,000 lb. miscellaneous steel	.12	.12	.10
35,000 lb. iron castings	.09	.12	.10
2,300 lin.ft. 6-in. water pipe	2.84	2.75	2.50
80,000 lb. cast iron pipe	.11½	.05	.05½
650 lin.ft. tile pipe, 8-in	2.88	1.00	1.40
1,200 lin.ft. tile pipe, 12-in	2.95	1.50	2.00
275 lin.ft. tile pipe, 30-in	7.47	6.00	4.40
2,000 lin.ft. tile underdrains	.80	.90	.60
Pump and blower house substructure (lump sum)	9,200.00	15,000.00	20,460.00
Tank equipment (lump sum)	34,000.00	40,000.00	36,757.00
Air piping (lump sum)	37,500.00	38,000.00	31,865.00
Supply, effluent and drain piping (lump sum)	30,700.00	32,000.00	24,599.00
Erection of equipment (lump sum)	4,000.00	7,500.00	7,000.00
3M. ft.b.m. sheeting	30.00	30.00	30.00
250 cu.yd. sand fill	3.00	3.00	3.50
25 inlet basins	50.00	70.00	25.00
43,000 lb. galvanizing cast-iron pipe	.03	.04	.04
Extended totals for Div. A	$384,281	$386,533	$404,834
Division C—structural steel (120,000 lb.)			$0.4396
Division N—traveling crane (lump sum)			3,500
Division O—pumping machinery (lump sum)			10,000
Division P—electrical equipment (lump sum)			22,500
Division R—blowers (lump sum)			22,795
Division V—sluice gates (lump sum)			6,700
Division W—Venturi meters (lump sum)			13,440
Extended totals, all divisions			$489,044

•J. W. Page only bidder on all sections.

Dam, etc, Scituate (North Scituate P. O.) **R. I.**—Water Supply Bd., City Hall, Providence, received bids Apr. 23, building (a) portions of main dam of Scituate Reservoir, Contr. 11, (b) 3.5 mi. earth road, 10 mi. westerly of Providence, Contr. 10, from Sperry Eng. & Contg. Co., 82 Church St., New Haven, Conn., (a) $164,577; (b) $53,925; Langthorn Co. Inc., New York City, (a) $181,430; Powers Bros., North Montello St., Brockton, Mass., (a) $183,341; Lundberg & Street, Brookline, Mass., (b) $53,450; L. D. Carcaia, Boston, Mass., (b) $57,425. Noted Apr. 17.

Frieght Shed—New York, N. Y.—L. Nixon, supt. pub. wks., Capitol, Albany, received lowest 3 bids building barge canal terminal freight shed on Pier 93, West 53rd St., North River, Contr. 218, from Donnell-Zane Co. Inc., 309 Bway., $44,799; A. E. Norton Inc., 105 West 40th St., $47,343; Harris Structural Steel Co., Inc., 1480 Bway., $47,646. Noted Apr. 3.

★Shed and Pier—New York, N. Y.—New York Dock Co., 44 Whitehall St., let contract building 1 story, 150 x 650 ft. brick, steel and rein.-con. shed and pier on East 23rd St., to Robins & Ripley Co., 50 Church St. About $450,000.

Road Material—Jersey City, N. J.—Hudson Co. Blvd. Comn., Court House, received bids furnishing crushed stone, (a) 50 yd. 1½ in., (b) 150 yd. ¾ in., (c) 1000 yd. ⅝ in., (d) 1000 yd. screenings, from C. Kavanagh, Inc., 32nd St., Bayonne, (a) $2.95 per yd., (b) $3.05, (c) $3.15, (d) $2.95; Belmont Gurnee Stone Co., Gronton St., North Bergen, (a) $3.25, (b) $3.30, (c) $3.40, (d) $3.25; J Brady Sons, 551 Ave. A., Bayonne (a) $3.30, (b) $3.38, (c) $3.47, (d) $3.25; Standard Oil Co., Claremont Ave., 100,000 gal. asphaltic or other road oil in barrels at plant, $0.876 per gal., barrels per gallon, $0.650; U. S. Asphalt Refining Co., 90 West St., 100,000 gal. road binder in barrels, car lots, $0.096 gal., tank cars $0.74, 40,000 gal. cold patch road binder in barrels (car lots) $0.149; Texas Co., McAdoo Ave., 100,000 gal. in barrels at plant, $0.00825, in bulk at plant, $0.00425; Hedley Good Road Co., 26 South 15th St., Phila., 40,000 gal. cold patch binder in barrels at plant, $0.159, in tanks at plant, $0.1145, No. 1 Emulsion in barrels at plant, $0.186, in tanks at plant, $0.145; Barrett Co., 17 Battery Pl., New York City, 100,000 gal. Tama in bulk at plant, $0.10, 40,000 gal. Tama K. P., $0.12. Noted Apr. 24.

★Steel—Phila., Pa.—Dept. City Transit let contract furnishing and erecting in place 1500 tons steel for Frankford Elevated Ry., to Phoenix Bridge Co., Phoenixville. About $166,399. Noted May 1.

★Road Oil—Baltimore, Md.—Bd. Awards let contract furnishing 120,000 gal. asphalt road oil, to U. S. Refining Co., East Brooklyn. About $10,000. Noted Apr. 17.

Piers—Cleveland, O.—City received bids building two 250 ft. rein.-con. piers, from W. S. Newhall Co., Citizens Bldg., $34,618; Kelley-Demarest Co., 416 Amer. Trust Bldg., $47,607; Great Lakes Dock Co., Williamson Bldg., $48,140. Noted Mar. 20.

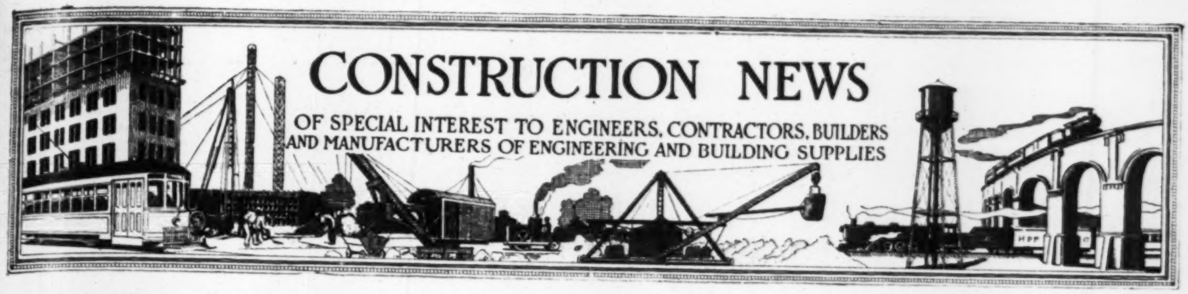
Road Material—Detroit, Mich.—Dept. Purchases & Supplies received bids furnishing (a) 3000 tons more or less petroleum asphalt, (1) in barrels, (2) tank cars; (b) 1500 tons refined natural lake asphalt, (1) Trinidad in barrels, (2) Bermudez in Barrels, (3) Saxite in barrels, (4) Burmudez in tanks, (c) 700 tons fluxing oil (petroleum residium) from G. W. Lamson, Chicago, (a1) $23.60, (a2) $18.60, (c) $.0654 per gal.; Sun Co., Brooklyn Ave. and Michigan Central R.R., (a1) $23.90, (a2) $21.90, (c) $17.20; Standard Oil Co., 1025 Scottem Ave., (a1) $26.30, (a2) $19.80, (c) $.0775 per gal.; Texas Co., 17 Battery Pl., New York City, (a1) $26.80, (a2) $17.75, (c) $18.23; U. S. Asphalt Refining Co., 90 West St., New York City, (a1) $27.54, (a2) $22.71; Saxite Co., (b1) $35., (b4) $30., (b3) $31.; Barber Asphalt Co., Dime Bank Bldg., (b1) $31.08, (b2) $40.98; Craig Oil Co., (c) $23.40; Sinclair Refining Co., 2261 East Grand Blvd., (c) $.0781 per gal.; Indian Refining Co., 1004 Hammond Bldg., (c) $.0832 per gal.

★Dam—Downieville, Cal.—Brandy City Mines will build dam 80 ft. high, 140 ft. long, at Bullard's Bar, to store water for hydraulic mining and generating electric power. Work will be done by day labor.

Subway—Los Angeles, Cal.—See "Streets and Roads."

★Vault Doors, etc.—Toronto, Ont.—Dept. Pub. Wks., Ottawa, let contract installing vault lining, doors and lockers, for Assistant Receivers General's office, to J. and J. Taylor, 145 Front St. E. About $25,687.

★Subway, Foundation, etc.—St. Boniface, Man.—Provencher Bridge Com. let contract building steel superstructure for Water St. subway, to Dominion Bridge Co., Ltd., Canada Bldg., Winnipeg, $11,965; substructure, to P. C. Petersen, Winnipeg, $5062. Noted Apr. 3.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
May 22	Anaheim, Cal.	May 15
May 26	Coatesville, Pa.	May 15
	Adv. May 15.	
May 27	Niles, Mich.	May 1
May 27	Niles, Mich.	May 15
May 28	Florence, Ariz.	May 15
May 28	Jersey City, N. J.	May 15
	Adv. May 15.	
May 29	Tamaqua, Pa.	Apr. 24
	Adv. Apr. 24.	
June 2	Mankato, Minn.	May 1
	Adv. May 1.	
June 2	Newark, N. Y.	May 15
	Adv. May 15.	
June 2	North Mankota, Minn.	May 15

SEWERS

Bids Close		See Eng. News-Record
May 19	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 19	Fresno, Cal.	May 8
May 19	Detroit, Mich.	May 15
May 19	Camden, N. J.	May 15
May 20	Erie, Pa.	Apr. 24
	Adv. Apr. 24.	
May 20	Lynn, Mass.	May 15
May 20	Johnstown, Pa.	May 15
May 21	Brooklyn, N. Y.	May 15
May 21	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 22	Milwaukee, Wis.	May 8
May 23	Conneaut, O.	May 15
May 26	Coatesville, Pa.	May 15
	Adv. May 15.	
May 27	Niles, Mich.	May 1
May 27	Meadville, Pa.	May 15
	Adv. May 15.	
May 27	Nashville, Tenn.	May 15
June 2	Bishop, Cal.	May 15
June 4	Garner, Ia.	May 15
June 9	Stratford, Conn.	May 15
	Adv. May 15.	

BRIDGES

Bids Close		See Eng. News-Record
May 17	Brome, Que.	May 15
May 19	Cottonwood, Ariz.	Apr. 24
May 19	Jerome, Ariz.	May 1
May 19	Bowling Green, O.	May 1
May 19	Marysville, Wash.	May 8
May 19	La Fayette, Ga.	May 8
May 20	Macon, Ga.	May 1
May 20	Arthur, Ont.	May 15
May 27	Harrisburg, Ark.	May 8
	Adv. May 8.	
May 27	Arthur, Ont.	May 15
May 28	Statesboro, Ga.	May 15
May 29	West Union, W. Va.	May 15
May 30	Madison, W. Va.	May 15
May 30	Danville, W. Va.	May 15
June 4	Charleston, W. Va.	May 15
June 4	Swainsboro, Ga.	May 15
June 5	Stratford, Conn.	May 8
June 6	Monroe, Ga.	May 8
June 9	Montgomery, Ala.	May 8
	Adv. May 8.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
May 15	Chateau Richer, Que.	May 15
May 17	St. Bernard, O.	May 15
May 18	Duluth, Minn.	May 15
May 19	Merced, Cal.	Apr. 10
May 19	Tulsa, Okla.	Apr. 17
	Adv. Apr. 17 and 24.	
May 19	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 19	Minneapolis, Minn.	May 1
May 19	Plainfield, N. J.	May 8
May 19	California	May 8
May 19	Washington	May 8
May 19	Grafton, W. Va.	May 8
May 19	Brampton, Ont.	May 8
May 19	Indianapolis, Ind.	May 15
May 19	Albany, N. Y.	May 15
May 20	Massachusetts	May 15
May 20	Grosse Point, Minn.	May 15
May 20	Windom, Minn.	Apr. 24
May 20	Brockton, Mass.	May 8
	Adv. May 8.	
May 20	Seguin, Tex.	May 15
May 20	Nutley, N. J.	May 8
May 20	Columbus, O.	May 8
May 20	Albemarle, N. C.	May 8
May 20	Virginia	May 15
May 20	Toledo, O.	May 15
May 20	Beverly, N. J	May 15
May 20	Detroit, Mich.	May 15
May 20	Michigan	May 15
May 21	Westwood, N. J.	May 15
	Adv. May 15.	
May 21	Hillsdale, N. J.	May 15
	Adv. May 15.	
May 21	Quebec, Que.	May 15
May 21	Brooklyn, N. Y.	May 15
May 21	St. George, S. I., N. Y.	May 15
May 21	Akron, O.	Apr. 24
	Adv. Apr. 24.	
May 21	Preston, Minn.	May 8
May 21	Illinois	May 8
May 21	Ebensburg, Pa.	May 8
May 21	Reinbeck, Ia.	May 15
May 22	Portland, Ore.	May 15
May 22	Benson, Minn.	May 1
May 22	Clay Center, Neb.	May 8
	Adv. May 8.	
May 22	Pittsburgh, Pa.	May 8
May 22	Benson, Minn.	May 15
May 23	Lawrence Kan.	May 1
May 23	Spencer, W. Va.	May 15
May 23	Youngstown, O.	May 15
May 23	Heflin, Ala.	May 15
May 24	Mt. Lebanon, Pa.	May 15
May 26	Pennsylvania	May 8
	Adv. May 8.	
May 26	Stillwater, Minn.	May 15
May 26	Minneapolis, Minn.	May 15
May 26	Madison, Neb.	May 15
	Adv. May 15.	
May 26	Ohio	May 15
May 27	Seattle, Wash.	May 15
May 27	Maryland	May 15
	Adv. May 15.	
May 27	Preston, Minn.	May 1
May 27	Henderson, Minn.	May 8
May 27	Mahnomey, Minn.	May 8
May 27	Harrisburg, Ark.	May 8
	Adv. May 8.	
Mav 27	St. Louis, Mo.	May 8
Mav 27	Toronto, Ont.	May 15
May 27	Chaska, Minn.	May 15
May 27	Signourney, Minn.	May 15
May 27	Hedrick, Ia.	May 15
May 28	Willmar, Minn.	May 8
May 28	Wisconsin	May 15
May 28	Illinois	May 15
May 28	New Jersey	May 15
May 28	Nashville, Tenn.	May 1
	Adv. May 1.	
May 28	Milan, Mich.	May 15
May 28	Terra Haut, Ind.	May 15
May 29	Pittsburg, Pa.	May 15
May 29	Michigan	May 8
May 29	Maryland	May 15
May 29	West Union, W. Va.	May 15
May 29	Cambridge, Minn.	May 15
May 30	Evansville, Pa.	May 15
May 30	Dallas, Tex.	Apr. 17
	Adv. Apr. 17 and 24.	
June 1	Michigan	May 8
June 1	Perce, Que.	May 15
June 2	St. Severe, Que.	Apr. 24
June 2	Elkins, W. Va.	May 8
	Adv. May 8.	
June 2	Kingwood, W. Va.	May 15
June 2	Wayne, W. Va.	May 15
June 2	Indianapolis, Ind.	May 15
June 2	Lincoln, Neb.	May 15
June 2	Bury, Que.	May 15
June 3	Minot, N. B.	May 15
June 3	Griffin, Ga.	May 8
June 3	New York, N. Y.	May 8
	Adv. May 8.	
June 3	Blair, Neb.	May 15
June 4	New Rockford, N. D.	May 15
June 4	Albion, Neb.	May 15
June 4	Bradford, O.	May 15
June 5	Metter, Ga.	May 15
June 5	Glenwood, Minn.	May 15
June 6	Centersburg, O.	May 15
June 10	Clarksville, Pa.	Apr. 3
July 1	Marshall, Ark.	May 15

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
May 20	Hartford City, Ind.	May 15
May 22	Sarnia, Ont.	May 15
	Adv. May 15.	
June 2	Beaufort, N. C.	Apr. 24
	Adv. Apr. 24.	
June 3	Henderson, Minn.	May 15
July 1	Edwardsville, Ill.	May 15

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
May 21	Guelph, Ont.	May 8
May 24	Brooklyn, N. Y.	May 8
May 28	Tebbetts, Mo.	May 15
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
May 19	Harrisburg, Pa.	May 15
May 19	Waterbury, Conn.	May 15
May 19	New York, N. Y.	May 19
May 19	Charleston, S. C.	May 1
May 20	Cathay, N. D.	May 1
	Adv. May 1.	
May 20	St. Peter, Minn.	May 15
May 21	Cohoes, N. Y.	May 1
May 21	Los Angeles, Cal.	May 8
May 22	Springfield, Mass.	May 8
May 23	Cambridge, Minn.	May 15
May 26	Gallipolis, O.	May 1
May 27	Howard, R. I.	May 15
May 27	Pembina, N. D.	May 15
May 27	Brooklyn, N. Y.	May 15
June 1	Montreal, Que.	May 8
June 1	St. Cloud, Minn.	May 8
June 1	Rochester, Minn.	May 8
June 1	Faribault, Minn.	May 15
June 1	Willmar, Minn.	May 15
June 1	Chicago, Ill.	May 15
June 4	Central Islip, N. Y.	May 15
June 10	Bessemer, Ala.	May 15
June 15	Anoka, Minn.	May 8
Aug. 1	Kenosha, Wis.	May 15

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
May 19	Dry Dock—Spec. 3858—Charleston, S. C.	Apr. 24
May 19	Elevators and Shaft—Spec. 3851—Philadelphia, Pa.	May 1
May 19	Crane—Spec. 3869—Pensacola, Fla.	May 1
May 19	Cranes—Spec. 3670—South Charleston, Va.	May 8
May 19	Elevator and Shaft—Spec. 3851—Washington, D. C.	May 15
May 20	Dredging — New London, Conn.	May 1
	Adv. May 1.	
May 20	Conduit, Wiring and Lighting Fixtures—Elgin, Ill.	May 1
	Adv. May 1.	
May 20	Post Office—Honey Grove, Tex.	May 15
May 21	Dredging—Duluth, Minn.	Apr. 24
	Adv. Apr. 24.	
May 21	Derricks—Florence, Ala.	Apr. 24
	Adv. Apr. 24.	
May 21	Paving—Washington, D. C.	May 8
	Adv. May 8.	
May 21	Paving Material—Washington, D. C.	May [illegible]
May 22	Rip Rap—Duluth, Minn.	May 1

Bids Close		See Eng. News-Record
May 22	Road Work — Grangeville, Idaho	May 8
May 26	Laboratory—Fairport, Ia.	May 1
May 26	Superstructure — Chicago, Ill. Adv. May 1.	May 1
May 26	Bridge—Washington, D. C.	May 8
May 26	Tunnel—Spec. 3879—Philadelphia, Pa.	May 8
May 26	Medical Storage Building—Spec. 3462 — Hampton Roads, Va.	May 8
May 26	Steam Distributing System —Spec. 3876—Philadelphia, Pa.	May 8
May 26	Motor Generator Sets and Switchboard—Spec. 3872—Hampton Roads, Va.	May 8
May 26	Rip Rap—Philadelphia, Pa.	May 1
May 26	Storehouse — Spec. 3842 — Charleston, S. C.	May 15
May 26	Air and Water System—Spec. 3883—Hampton Roads, Va.	May 15
May 26	Roof Decks—Spec. 3839—Charleston, W. Va.	May 15
May 26	Steel Water Tank and Tower—Spec. 3868—Hampton Roads, Va.	May 15
May 27	School—Ft. Bidwell, Cal.	May 8
May 27	Dredging—Wilmington, Del. Adv. May 1.	May 1
May 28	Jetty and Revetment—Jacksonville, Fla. Adv. May 1.	May 1
May 28	Lock and Abutment—Cincinnati, O. Adv. May 1.	May 1
May 28	Post Office—Elkhart, Ind.	May 8
May 28	Dredging — New London, Conn. Adv. May 8.	May 8
May 28	Power Plant Equipment — Spec. 3871—Cavite, P. I.	May 15
May 28	Elevator—Ketchikan, Alaska	May 15
June 2	Dam and Bridge—Sacaton, Ariz. Adv. May 1.	May 1
June 4	Air Station—Spec. 3864—Galveston, Tex.	May 8
June 4	Bath House—Spec. 3786—Newport, R. I.	May 15
June 4	Revolving Platform—Spec. 3880—Hampton Roads, Va.	May 15
June 4	Storage Tanks—Spec. 3721 Cape May, N. J.	May 15
June 4	Fence — Spec. 3848 — Ft. Mifflin, Pa.	May 15
June 4	Roads — Spec. 3884 — Chatam, Mass.	May 15
June 4	Heating and Humidifying Apparatus—Spec. 3854—Philadelphia, Pa.	May 15
June 5	Post Office—Denton, Tex. Adv. May 15.	May 15
June 6	Post Office—Bellefourche, S. D. Adv. May 1.	May 1

MISCELLANEOUS

May 19	Paving Material—Camden, N. J.	May 15
May 19	Cast Iron Pipe—Lewiston, Mont.	May 15
May 19	Street Encrouchments, etc. —New York, N. Y.	May 15
May 20	Manholes, etc.—New York, N. Y.	May 15
May 20	Retaining Wall—Bridgeville, Pa.	May 15
May 20	Boiler Breeching, Ogdensburg, N. Y. Adv. May 15.	May 15
May 20	Platforms — Philadelphia, Pa.	May 15
May 20	Laundry Machinery — Ward's Island, N. Y. Adv. May 15.	May 15
May 21	Road Machinery—Harrisburg,, Pa.	May 8
May 21	Piles, Timber, etc. — St. George, S. I., N. Y.	May 15
May 24	Paving Blocks—Kalamazoo, Mich. Adv. May 15.	May 15
May 27	Ferry Dock—Seattle, Wash.	May 15
May 29	Fill and Bulkhead—Astoria, Ore.	May 8
June 3	Capstans and Hoists—Albany, N. Y.	May 15
June 3	Coal Handling Equipment——Toledo, O.	May 8
June 3	Paving Bricks — Saranac Lake, N. Y. Adv. May 8.	May 8

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Athens—Town having plans prepared by M. Vrooman, engr., Gloversville, building water system, filters, pumping station, sewerage system and complete sewage disposal plant.

Ga., La Grange—See "Sewers."

Ga., Milledgeville—City election June 11 to vote on $145,000 bonds to build water and sewerage systems, grammar school and barracks.

O., Martins Ferry—City election Aug. 12, to vote on $450,000 bonds to build waterworks system and electric light plant. C. Lash, city engr.

Minn., Wells—See "Industrial Works."

Mo., Kansas City—City rejected bids building 1,000,000 gal., rein.-con. stand pipe in North Terrace Park. Noted Apr. 3.

Okla., Tulsa—City plans election to vote on $5,000,000 bonds to build water supply system from Spavinaw Creek to here. H. A. Pressey, city consult. engr.

Cal., Anderson—H. S. Riddell, engr., Anderson, recommended that Anderson-Cottonwood Irrigation Dist. strengthen headwork at intake on Sacramento River and build laterals, drains, drops and turnouts. Bonds for $145,000 will probably be voted for work.

Cal., Los Angeles—Bd. Pub. Serv. Comn. plans to build 23 mi. water pipe to supply aqueduct water to Hansen Heights Dist., recently annexed to city. Property owners will probably organize improvement district to build distributing system. J. P. Vroman, secy. W. Mulholland, 645 South Olive St., ch. engr.

Ont., Watford—See "Miscellaneous."

Bids Desired

N. Y., Newark—Until June 2, by city, building earthen dam and dikes across Case Creek and adjoining valley about 2½ mi. southeast of Clifton Springs, involving 3000 yd. concrete and 30,000 yd. earth embankment; furnishing all material and building rein.-con. and brick mechanical filtration plant, with 1,000,000 gal. capacity; haul and lay 38,000 ft. 14-in. c.i. pipe and furnish 1700 ton 14-in. c.i. pipe. Separate bids to be received on each division of above work. J. P. Wells, Cutler Bldg., Rochester, consult. engr.; advertised in this issue. Noted Apr. 3.

N. J., Jersey City—Until May 28, by city, laying 72-in. steel water pipe between Boonton Reservoir and here, Sect. 1, to duplicate existing syphons between Boonton Reservoir and Passaic River at Lyndhurst, Sect. 2, to duplicate existing syphons between Passaic River at Lyndhurst and Summit Ave. reservoir, here. F. A. Dolan, clk.; advertised in this issue. Noted Apr. 17.

Pa., Coatesville—Until May 26, by city furnishing and laying 1400 ft. 12 in. c.i. water mains. C. A. Niles, city engr.; advertised in this issue.

Mich., Niles—Until May 27, by Bd. Pub. Wks., installing water mains in various streets, involving 13,599 ft. 4-12 in. pipe.

Minn., North Mankato (Mankato P. O.) —Until June 2, by F. W. Bates, village recdr., building extension to waterworks. About $12,000. N. Moe, Mankato, engr.

Ariz., Florence—Until May 28, by S. M. Bailey, clk., building waterworks and electric light plant. About $80,000. Burns & McDonnel, Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contracts, to T. Burke, Dorchester, building water mains in Tremont St. et al, involving 4800 ft. 6-12 in. c.i. pipe, 450 cu.yd. earth and 25 cu.yd. rock excav., $8470; to A. Cefalo, Roslindale, involving 3400 ft. 6-12 in. c.i. pipe, 330 cu.yd. earth excav., $4715.

★N. J., Bayonne—City let contract building two 30-in. water mains under Hackensack River, to Snare & Triest Co., 8 West 40th St., New York City, $373,640. Noted May 1.

★Pa., Bakerton (Elmora P. O.)—Bakerton Water Co., let contract building complete storage water reservoir with all accessories, including 30 ft. rein.-con. dam, gatehouse, filters and 1½ mi. c.i. pipe to city, to Ambursen Constr. Co., 61 Bway, New York City; commission basis. Noted Mar. 27.

★S. D., Mitchell—City let contracts, constructing water works, (2 sections) (a) Sect. 1, pump station buildings and well houses, (b) Sect. 3, laying, 12,702 ft. 4, 6 and 8 in. c.i. watermains, installing 13 fire hydrants, ten 4, 6 and 8 in. gate valves, 7300 lbs. special castings, 7 manholes, to Brown & Kings, Mitchell, cost $15,182, $2400, and $11,757 respectively; Sect. 2, machinery, Sect. 7, stack, to Merkle Mchy. Co., 508 Interstate Bldg., Kansas City, Mo., $38,000 and $2200 respectively; Sect. 5, air lift, to Harris Air Pump Co., 421 West South St., Indianapolis, Ind., (a) $13,339, (b) $10,877; Sect. 6, deep wells, to R. W. Jamison, Mitchell, $1909; (b) Sect. 2, furnishing 205 tons 6-8 in. and 16 tons, 4 in. c.i. pipes, 12 ft. lengths, 6597 lbs. special castings, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $13,930. Noted Mar. 27.

S. D., Mitchell—City received lowest 3 bids furnishing and laying 12,702 ft. 4-8 in. c.i. pipe, etc., from Badger Constr. Co., 300 Oneida Bldg., $26,226; T. J. Woolley, $26,951; W. D. Lovell, 1415 South East 8th St., $27,984, all of Minneapolis, Minn.; building tower and tank, from Chicago Bridge Co., 105th and Throop Sts., Chicago, Ill., $16,200; Memphis Constr. Co., Memphis, Tenn., $17,000; Omaha Structural Steel Co., 420 Bee Bldg., Omaha, Neb., $17,800. This work in connection with waterworks. Noted Mar. 27.

★Mo., Kansas City—City let contract building rein.-con. stand pipe, 1,000,000 gal. capacity, on 75th and Holmes Sts., to Tifft Constr. Co., Inc., Iroquois Bldg., Buffalo, N. Y. About $52,000. Noted Apr. 3.

Sewers

PROPOSED WORK

N. Y., Athens—See "Waterworks."

N. Y., Utica—City plans to build storm sewers in Mortimer St. from Ballou Gulf to Miller St.; Eagle St. from Dudley Ave. to Miller St.; Leah St. from Brinkerhoff to Dudley Aves., and Seymour Ave. to Neilson St.; Square St. from Seymour Ave. to Neilson St.; St. Vincent St. from Mortimer southerly; Conkling Ave. from Mortimer to Eagle Sts.; Taylor Ave. from Mortimer to Leah Sts.; Brinckerhoff Ave from Mortimer to Leah Sts.; Dudley Ave. from Mortimer to Eagle Sts.; Seymour Ave. from Eagle St. southerly; also sanitary sewer beginning at Eagle and St. Vincent Sts. and extending southerly and easterly to Brookside Park. J. Kemper, city engr.

N. J., Newark—Bd. Freeholders Essex Co. soon receives bids enlarging sewage disposal plant at Overbrook. About $100,000. A. Reimer, co. engr.

N. J., North Bergen—Town plans to build sewer and pave sections of Jefferson, Lincoln and River Sts. About $75,000.

Pa., Allentown—City plans to build sewage disposal plant, with capacity sufficient to care for entire city, on 400 acre farm purchased 3 years ago. Work may be done under supervision of H. T. Bascome, city engr. Cost between $3,000,000 and $4,000,000.

Pa., Coatesville—Until May 26, by city, building sewers, involving 1567 ft. 12, 15, 18 and 24 in. vitr. pipe. W. S. G. Cook, city clk.; advertised in this issue.

Pa., Farrell—See "Streets and Roads."

Md., Crisfield—City soon lets contract building sewerage system, involving 1½ mi. terra cotta and iron pipe. Cost between $15,000 and $20,000. C. F. Richardson, mayor.

Ga., La Grange—City rejected bids received May 1, building 11 mi. sewers, sewage disposal plant, 4 mi. water mains, storage reservoir, 2 mi. transmission line, one 500,000 gal. filter and one 500 gal. per minute horizontal centrifugal pump, etc. New bids will be received in about 90 days. C. L. Smith, clk. Noted Apr. 17.

Mich., Ford (Wyandotte P. O.)—Village having plans prepared by M. L. Brown & Son, engrs., 823 Chamber of Commerce, Detroit, building 250 ft. 30 in. iron pipe sewer outlet, supported on wooden piles with wooden sheet piling and concrete saddles, cinder fill between sheet piling. About **$10,500.**

Sewers (Continued)

Ia., Hull—Town council soon receives bids building 5 mi. vitr. sanitary sewer in practically all streets in town. About $30,000. C. H. Currie, Webster City, engr.

Neb., Alliance—City plans to build 5550 ft. 12-39 in. sewers in business district. Grant & Fulton, Bankers Life Bldg., Lincoln, engrs.

Neb., Loup City—City having plans prepared for sanitary tile sewerage system. J. R. Wolf, city engr. About $30,000.

Wash., Seattle—Bd. Pub. Wks. rejected bids received Apr. 18, building Firland Sanitorium Sewer, involving 10,710 ft. 8 in. clay or concrete pipe. Noted May 8.

Ore., Portland—City soon lets contract building sewers in East 63rd and Halsey Sts., vitr. or cement pipe. About $343,519. Noted Feb. 27.

Cal., Santa Monica—See "Streets and Roads."

Que., Lachine—City voted $82,000 bonds to build 14 mi. sewers in various streets.

Ont., North Bay—Town had plans prepared by H. J. McAuslan, engr., North Bay, laying 1200 ft. 24 in. rein.-con. sewers in Worthington, Sherbrooke and Wylde Sts. Election soon to vote on bonds for project.

Ont., Tillsonburg—Town voted $29,000 bonds to build sewers in various streets. D. McQueen, Mayor.

BIDS DESIRED

Mass., Lynn—Until May 20, by city, building sewers, drains and appurtenances in Union St. W. L. Vennard, city engr. Metcalf & Eddy, 14 Beacon St., Boston, cons. engrs.

Conn., Stratford (Bridgeport P. O.)—Until June 9, by Bd. Sewer Comrs., furnishing material and labor to complete 4 mi. 8-24 in. sewers; also building sewage disposal plant, chlorine treatment house and tidal basin and sludge bed, including piping and grading, etc. F. S. Beardsley, chn.; advertised in this issue.

N. Y., Brooklyn—Until May 21, by E. Riegelmann, boro. pres., furnishing all labor and material building sewers in Ave. U from West 5th St. to point 47 ft. west of West 7th St. and from point 130 ft. west of West 7th St. to West 11th St., involving 1504 lin.ft. 102 in. storm sewer, etc.

N. J., Camden—Until May 19, by Com. Streets & Highways, building sewer in sections of Liberty, 8th, 32nd, 36th and Morgan Sts., Harrison, Lois, Hayes, River, Westfield and Trinity Aves. O. W. Johnson, ch. clk.

Pa., Meadville—Until May 27, by F. C. Kiebort, clk., building 2 mi. sanitary sewers; also sewage pump station, including two 12 hp. motors, two air compressors, one air tank and one 200 gal. ejector. Separate bids to be made on sewers and pump station. J. F. Miller, city engr.; advertised in this issue.

Ia., Garner—Until June 4, by H. V. Reed, clk., building system of sanitary sewers and sewage disposal plant; Sect. A. includes disposal plant, concrete tank, sand filters and sludge bed; Sect. B, outlet main sewer, involving 3750 lin. ft. 18-in. pipe and 6 manholes; Sect. C, lateral sewers, involving 35,289 ft. 8-18-in. pipe, 80 manholes and 24 flushtanks; advertised in this issue. Noted Sept. 19.

Tenn., Nashville—Until May 27, at office of Bd. Comrs., building (1) section Brown's Creek intercepting sewer, (2) section Richland Creek intercepting sewer, (3) group clay pipe sewers in streets and alleys between Hamilton and Jefferson Sts., and between Warren St. and 17th Ave. N. Work involves 975,000 brick and 6750 lin.-ft. clay pipe. J. W. Dashiell, secy.; advertised in this issue.

O., Conneaut—Until May 23, by Dir. Pub. Serv. building storm sewer in Broad St. from 15th St. to Park Ave. and Park Ave. from Broad to Harbor Sts., involving 6200 ft. trenching and backfilling, 6200 ft. 10-27-in. sewer, etc.; Madison St., from Orange to Bartlett Sts., involving 2020 ft. trenching and backfilling, 2020 ft. 10-15-in. sewer, etc.; 16th St., from Chestnut St. to Wright Ave. and Wright Ave. from 16th St. to New York Central R.R. right-of-way, involving 1905 ft. trenching and backfilling, 1905 ft. 10-15-in. sewer, etc. W. C. Dickey, clk.

Mich., Detroit—Until May 19, by Dept. Pub. Wks., City Hall, building Wetherby Ave. Sewer, Sect. 1, in Kirkwood, Chopin, Vernor and Wetherby Aves. from Long's Rd. to Warren Ave., involving 4774 ft. 13 ft. 6 in., 18 ft. plain concrete arch pipe with rein.-con. invert, Sect. 2, in Wetherby, Alaska and Livernois Aves. from Warren to Bonaparte Ave., 5739 ft. 13 ft. 6 in. x 18 ft. plain concrete arch pipe with rein.-con. invert; Lynch Rd. Sewer, Sect. 3, in Mt. Elliott and Charles Aves. from Lynch Rd. to point 1900 ft. west of Mt. Elliott Ave., 4680 ft. 10 ft. cylindrical pipe, Sect. 4, in Charles, Conant and McLean Aves. from point 1900 ft. west of Mt. Elliott Ave. to Monar St., 3924 ft. 9 ft. 6 in. x 9 ft. brick or plain concrete cylindrical pipe; Six Mile Rd. Sewer, Sect. 1, in Six Mile Rd. from Connor's Creek to Station 60, 6000 ft. 10 ft. 6 in. brick or plain concrete cylindrical pipe, Sect. 2, in Six Mile Rd. from Station 60 to Conant Ave., 6709 ft. 10 ft. 6 in. brick or plain concrete cylindrical pipe; Hart Ave. Pub. Sewer in Hart Ave. from Charlevoix to Mock Aves., 2458 ft. 20 in. crock pipe.

Mich., Detroit—Until May 19, by Bd. Pub. Wks., furnishing labor and material (except manhole rings and covers), and building and finishing complete, together with backfilling, 1251.5 ft. Harper Ave. Pub. Sewer in Harper and Gratiot Aves. from point 23 ft. west of west line of Gratiot Ave. to 91 ft. north of north line of Georgia Ave., brick or monolithic concrete cylindrical pipe. About $60,000. C. W. Hubbell, City Hall, engr. Noted Apr. 24.

Mich., Grosse Pointe—See "Streets and Roads."

Cal., Bishop—Until June 2, by A. D. Schiveley, clk., building sanitary sewerage system and sewage treatment tank. Olmsted & Gillelen, 112 Hollingsworth Bldg., Los Angeles, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract building 9000 ft. sewer in Center St., to A. Cefalo, Roslindale, $75,296. Work involves 1500 lin.ft. 3-in. concrete and 7500 ft. 6-20 in. vitr. pipes and 7000 cu.yd. earth trenching.

★Conn., Bridgeport—City let contracts building 1500 ft. sanitary and storm sewer in Spring St., to L. Jacques Constr. Co., 608 Montgomery Ave., Elizabeth, N. J., $24,868; also 5760 lin.ft. in Canfield Ave., to L. Petrossi, 39 Woodbridge Ave., Hartford, $6356; Pierce Mfg. Co., 785 Housatonic Ave., $14,142 and L. Jacques Constr. Co., 608 Montgomery Ave., Elizabeth, N. J., $23,549. Noted May 1.

★Conn., New Haven—City let contract building vitr. storm water and overflow sewer and appurtenances in Munson St. and Beaver Park lands between Canal and Crescent Sts., to Dwyer & Mannix, 333 Shelton Ave., $55,125. Noted Apr. 24.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract building sewers in Remsen and Utica Aves., to L. Kalisher, 1225 Myrtle Ave., $239,088. Noted Apr. 10.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids May 7, building sewer in Rutland Rd., from Fenlack Constr. Co., $242,223; Rosenthal Eng. Co., 228 Jackson St., $242,511; C. Petracca, 800 Kent Ave., $266,399. Noted May 1.

N. J., Newark—Passaic Valley Sewerage Comn., 820 Essex Bldg., received lowest 3 bids building Sect. 20 Rutherford-East Rutherford and Wallington boroughs, from U. S. Drainage & Irrigation Co., 17 Battery Pl., New York City, $119,962; Bruno & Retitti, 18 Tremont St., Boston, Mass., $122,945; North Jersey Contg. Co., Dover, $124,525. Noted Apr. 3.

★N. J., Newark—Passaic Valley Sewerage Comn., 820 Essex Bldg., let contract building Sect. 30 of Newark Branch Sewer, to North Atlantic Constr. Co., 207 Market St., $251,865. Item incorrectly noted in our issue of Apr. 10.

★Md., Baltimore—See "Streets and Roads."

★Ohio, Akron—City let contract building brick sewer in South Main St. from West Thornton St. to south line West Crosier St., to Columbus Asphalt Paving Co., Citizens Bank Bldg., Columbus, $12,337. Noted Apr. 10 under "Streets and Roads."

O., Cleveland—City received bids building sewers in (a) Miles Ave. from East 133rd St. to city limits, involving 1400 ft. No. 4 C brick sewer, 1 junction chamber, 40,000 ft. B. M. plank and timber, 372 ft. 8-12-in. vitr. pipe, etc.; (b) Bellaire Rd. from Jasper Ave. to city limits, 905 ft. No. 3-5 C brick sewer, 500 ft. 12 and 15-in. vitr. pipe, etc., from P. W. Graham, 1274 West 108th St., (a) $20,978; W. McDowell, 10319 Miles Ave., (a) $22,252; Brookside Constr. Co., 3905 West 29th St., (a) $22,322, (b) $9747; N. Iafornaro, 3218 Murray Hill Rd., (b) $10,310; W. P. Gibbons, 240 Leader-News Bldg., $10,921.

Mich., Detroit—City received bids furnishing labor and material (except manhole rings, covers and iron steps) and building complete with backfilling vitr. crock lateral sewers, crocks varying from 12-18 in. together with specials and brick manholes, in (a) alley No. 3062, (b) No. 3116, (c) No. 3117, (d) No. 3118, (e) No. 3119, (f) No. 3120, (g) No. 2122, (h) No. 2123, (i) No. 2125, (j) No. 3126, (k) No. 3127, from R. D. Baker, 1415 Penobscot Bldg., (a) $3666, (b) $10,201, (c) $3693, (d) $3574, (e) $3630, (f) $26,230, (h) $2100, (i) $10,000, (j) $8800, (k) $3450; Western Constr. Co., 1208 Ford Bldg., (a) $4421, (b) $10,437, (c) $3849, (d) $3593, (e) $3467, (h) $2144, (i) $9242, (j) $9643; J. A. Mercier, Hammond Bldg., (a) $4886, (j) $10,650, (k) $4187; Brandon & Hanna Co., 1624 Dime Bank Bldg., (b) $11,000, (f) $22,500, (g) $24,000; Thorburn-Kean Co., Union Trust Bldg., (c) $3924, (d) $3924, (e) $3804, (h) $2219, (k) $4198; Blank & Co., Highland Park, (f) $18,103, (g) $22,000; Walker & Teetaert, Windsor, Ont., Can., (g) $28,550; R. L. Oakley, 486 Burlingame Ave., (i) $12,750. Noted May 1.

Mich., Detroit—Dept. Pub. Wks. received bids building Seven Mile Rd. Public Sewer from Woodward to Yakama Aves., 4781 ft. long, cylindrical section varying in size from 11 ft. 3 in. to 10 ft. in diam., brick or monolithic concrete, from J. Connelly Constr. Co., Dime Bank Bldg., $276,300; J. Porath, 34 McGraw Bldg., $354,800; Janes & Affeld, Ford Bldg., $359,000. Noted Apr. 17.

★Wis., Manitowoc—City let contract excavating and laying 3.7 mi. sewer in 8th St. from Langdon Ave. to city limits, to W. O. Bahr, 10th St., $36,670.

★Wis., Sheboygan—Bd. Pub. Wks. let contract building 2.8 mi. sewer in North 3rd St. from Bluff to Bell Aves., and Geele Ave. from North 3rd St. to North 6th St., involving 3710 lin.ft. 8-10 in. vitr. pipe, to South Side Hardware Co., 1512 South 12th St., $12,577.

Neb., Geneva—City received bids laying 14,000 ft. 8-15 in. rein.-con. and tile sewers and installing Imhoff tank and sprinkling filter, from S. A. Coneglia, Omaha, $30,225; A. A. Dobson Co., 945 D. St., Lincoln, $30,890; G. Vlasnik, 624 North 32nd St., Lincoln, $31,688.

★Mont., Whitefish—City let contract installing septic tank and building 7000 ft. 4, 8 and 12 in. vitr. and drain tile sewers in Lakeside Sewer Dist., to Two Miracle Co., 437 Ford Bldg., Great Falls, $19,400. Noted Mar. 20.

★Mo., Joplin—City let contract building 3 mi. tile sewer, to C. A. Dieter, Independent Bldg., $81,634.

★Tex., Ranger—City let contract building sanitary vitr. sewer system, to James Constr. Co., Guthrie, Okla., $155,000.

Ariz., Flagstaff—City received lowest bid building extension to sanitary sewerage system, from McLean & Walsh, El Segundo, Cal., $84,455 using vitr. clay pipe, $82,396 using cement pipe. Noted Apr. 10.

Cal., Los Angeles—Bd. Pub. Wks. received bids building cement sewers in Long Beach Ave. and 51st St. Sewer Dist., from P. D. Zaich, 2218 Sheridan St., $15,885; B. Deragno, Los Angeles, $19,965; M. Chutuk, 532 South Mathews St., $23,209.

Bridges

PROPOSED WORK

N. Y., Kingston—State Highway Comn., Albany, receives bids about July 1, building highway bridge over Rondout Creek, here. About $300,000. F. S. Green, state highway, comr.

W. Va., Pineville—Comrs. Wyoming Co. having plans prepared building 2 rein.-con. bridges over Barker's Run. About $10,000. A. B. Shannon, Mullens, engr.

Mich., Flint—City soon lets contract building 70 ft. rein.-con. bridge, 26 ft. wide, over Threat Creek on 2nd St. About $23,000. J. Shoecraft, city engr.

Bridges (Continued)

Que., L'Assomption—J. E. Duhamel, secy. municipal council, soon lets contract building concrete and steel bridge, concrete flooring, 340 ft. long, 18 ft. wide, over L'Assomption River. I. E. Vallee, Parliament Bldg., Quebec, engr. Noted May 8.

Que., Montreal—Canadian Pacific Ry., Windsor St. Sta., plans to rebuild Atwood Ave. bridge, also build new rein.-con. bridge on Seigneur St. About $400,000. J. W. Fairbairn, asst. ch. engr.

BIDS DESIRED

W. Va., Charleston—Until June 4, by Comrs. Kanawha and Lincoln Counties, building superstructure of steel highway bridge over Coal River below mouth of Alum Creek, to have one 200-ft. and one 80-ft. span.

W. Va., Danville—Until May 30, by Comrs. Boone Co., building steel highway bridge over Little Coal River, here, two 126 ft. spans, 16 ft. wide. About $15,000. S. E. Bradley, Madison, engr.

W. Va., Madison—Until May 30, by Comrs. Madison Co., building steel highway bridge over Coal River, here, two 103 ft. spans 16 ft. wide, cost $11,000. S. E. Bradley, Madison, engr.

W. Va., West Union—Until May 29, by Comrs. Doddridge Co. building 50-ft. concrete bridge over Clay Lick Run in Central Dist.; 80-ft. concrete arch bridge over McElroy Creek, at mouth of Big Flint Creek, and 60-ft. concrete bridge over Meathouse Fork, near mouth of Brushy Fork Creek, New Milton Dist. H. Hutson, co. clk.

Ga., Statesboro—Until May 28, by Comrs. Bulloch Co., building 7 rein.-con. bridges on Dixie-Overland Highway. About $40,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs.

Ga., Swainsboro—Until June 4, by Comrs. Emanuel Co., building 7 rein.-con bridges varying in size from 46 to 178 ft. in length, on Dixie-Overland Highway. About $61,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs.

Que., Brome—Until May 17, by G. F. Hall, secy. twp. council, building 50 ft. steel and concrete bridge, concrete flooring, 16 ft. wide, over Yamaska River, between here and Sutton. I. E. Vallee, Parliament Bldg., Quebec, engr.

Que., Chateau Richer—See "Streets and Roads."

Ont., Arthur—Until May 27, by Bowman & Connor, engrs., 31 Queen St., Toronto, building two 35-ft. slab, one 38-ft. arch truss, two 18-ft. slab, one 25-ft. arch truss and two 14-ft. slab bridges, all rein.-con., 16 ft. wide, for Twp. About $30,000.

Ont., Arthur—Until May 20, by E. Gainer, clk. Peel Twp., building 115 ft. bridge, 16 ft. wide, with concrete abutments, in Peel Twp. About $20,000. Bowman & Connor, 31 Queen St., W., Toronto, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Holyoke—Bd. Pub. Wks. let contract building deck steel girder bridge over levee canal on Appleton St., (steel work encased with rein.-con.), to Eastern Bridge & Structural Co., 88 Crescent St., Worcester, $28,400. Noted Mar. 13.

★Pa., Wehrum—Town let contract building bridge over Black Lick Creek, to M. Bennett & Sons, Indiana, $18,973.

★Va., Winchester—State Highway Comn., Richmond, let contract building several bridges in Frederick Co., to R. A. Figgatt, Roanoke, $12,811.

★Ia., Council Bluffs—Comrs. Pottawatamie Co. let contract building four 18 x 75 ft. pony truss bridges on piling and 4 concrete box culverts, in various townships, to Wickham Bridge & Pipe Co., 400 Commercial Natl. Bank Bldg., $22,449. Work involves 212 cu.yd. rein.-con., 2800 lin.ft. wood piling, 89 tons structural and 6½ tons reinforcing steel, etc.

★Ia., Fairfield—Comrs. Jefferson Co. let contracts to Cameron & Joyce Co., Keokuk, building 26 concrete box culverts and 26 circular concrete culverts involving 913 cu.yd. rein.-con. and 31 tons reinforcing steel, $19,177; Des Moines Bridge & Iron Co., Tuttle St. between 9th and 11th Sts., Des Moines, one 20 x 20 ft. concrete slab bridge, one 16 x 20 ft. concrete slab bridge and two 18 x 60 ft. pony truss bridges, on concrete abutments, 508 cu.yd. rein.-con., 3296 lin.ft wood piling and 27 tons structural and 18 tons reinforcing steel, $20,000.

★Ia., Leon—Comrs. Decatur Co. let contract building two 24 x 24 ft. concrete slab bridges, one 12 x 12 x 48 ft. skew concrete box culvert, one 16 x 24 ft. I beam bridge, one 18 x 24 ft. I beam on concrete abutments, one 6 x 7 x 46 ft. concrete box culvert and one 18 x 20 ft. I beam bridge, to Koss Constr. Co., 2818 5th St., Des Moines, $22,696. Work involves 1460 cu.yd earth excav., 865 cu.yd. rein.-con., 10 tons structural and 23½ tons reinforcing steel. Noted Apr. 24.

★Ia., Rock Rapids—Comrs. Lyon Co. let contracts, to Federal Bridge Co., 1122 Equitable Bldg., Des Moines, building one 18 x 45-ft. pony truss bridge and 3 I-beam bridges, all on concrete abutments, also one 6 x 6 ft. box culvert, involving 416 cu.yd. concrete, 23 tons structural and 12½ tons reinforcing steel and 2766 lin.ft. wood piling, $13,591; T. J. Cookley, 2 box culverts, $904.

★Ia., Toledo—Comrs. Tama Co. let contract building 31 concrete box culverts, to A. P. Muuson, Marion, $26,648. Work involves 1821 cu.yd. earth excav., 1071 cu.yd. rein.-con. and 36½ tons reinforcing steel.

★Minn., Minneapolis—City will build bridge over Mississippi River on Franklin Ave., 55 ft. wide, 2 side spans 200 ft. long and 2 end spans, 60 ft. long. About $200,000. Work will be done by day labor. Bids will soon be received furnishing material for above work. Noted Feb. 6.

★Wash., Toledo—State Highway Com., Olympia, let contract building steel bridge over Cowlitz River, on Pacific Highway, here, consisting of four 180-ft. spans and approaches, to O. E. Heintz, 636 Vista St., Portland, $128,922. Noted Apr. 17.

★Cal., Los Angeles—Bd. Supervs. Los Angeles Co. let contract building 60 ft. single span Howe truss timber bridge with pile foundation over San Gabriel River on Center St., to Ross Constr. Co., Forum Bldg., Sacramento, $22,962. Noted May 8.

★Ont., Peterboro—City let contract building 11-arch rein.-con. bridge, brick center arch, 1050 ft. long, 44 ft. wide, over Otonbee River, to Russell Townsend Co., Harbor Bldg., Toronto. About $249,000. Cost plus 10% basis. Noted Mar. 13.

Structural Steel

PROPOSED WORK

Cal., Modesto—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ia., Fairfield—See "Bridges."

★Ia., Toledo—See "Bridges."

★Wash., Toledo—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. Y., Buffalo—See "Industrial Works."

Wash., Vancouver—See "Buildings."

Que., Montreal—See "Bridges."

BIDS DESIRED

Pa., Bridgeville—See "Miscellaneous."

Ga., Statesboro—See "Bridges."

Ga., Swainsboro—See "Bridges."

Que., Chateau Richer—See "Streets and Roads."

Ont., Arthur—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—See "Industrial Works."

★Conn., Windsor Locks—See "Industrial Works."

★Pa., Milton—See "Industrial Works."

★Ia., Fairfield—See "Bridges."

★Ia., Leon—See "Bridges."

★Ia., Rock Rapids—See "Bridges."

★Ia., Toledo—See "Bridges."

Mo., Kansas City—See "Waterworks."

★Cal., Fresno—See "Industrial Works."

Cal., San Francisco—See "Buildings."

Streets and Roads

PROPOSED WORK

Connecticut—State Highway Comn., Capitol, Hartford, soon receives bids building concrete road from Norwich to Westerly, R. I. About $200,000. C. J. Bennett, state highway engr.

Connecticut—State Highway Comn., Capitol, Hartford, plans to build road from Hartford to New London. C. J. Bennett, state highway engr.

N. Y., Brooklyn—E. R. Riegelman, boro. pres., rejected bids received Apr. 23, regulating and repaving with permanent asphalt on 6-in. concrete base, Manhattan Ave. from Grand to Cook Sts. Noted Apr. 17.

N. J., Jersey City—City receives bids about May 19, repairing Johnston Ave. Belgian block. Cost to exceed $10,000. Noted Apr. 24.

N. J., Jersey City—City plans to improve Grand St. from Mill Creek to Junction, cost $25,000; Communipaw Ave. from Junction to Morris Canal Bridge, $10,000; Newark Ave. from West Side Ave. to Warren St., $25,000, all granite block.

N. J., North Bergen—See "Sewers."

N. J., North Bergen—City having plans prepared repairing 20th St., granite block. About $30,000.

N. J., Roselle (Elizabeth P. O.)—Bd. Freeholders Union Co. (Elizabeth) plans to pave Chestnut St. from 1st to St. George Aves. About $118,000. A. Bauer, co. engr.

Pa., Farrell—City voted $212,000 bonds to pave and build sewers in various streets Noted Apr. 17.

Pa., Pittsburgh—City passed ordinance to grade, pave and curb Hillcrest St. from North Fairmont to North Rebecca Sts., $35,000; Blackhawk St. from Pocono St. to city line, $13,000; Commercial St. from Blackhawk to Whipple Sts., $15,500; Homestead St. from Nevada to Pocono Sts., $32,500; Pocono St. from Whipple St. to city line, $18,500; Whipple St. from Goodman St. to city line. $45,000. T. M. Reed, City County Bldg., engr.

Pa., Scranton—City plans to grade, pave and curb with sheet asphalt and stone blocks, on concrete base, Pittston Ave. from Breck to Sanders Sts.; Sanders St. from Pittston to Birney Aves., Birney Ave. from Sanders St. to city limits, and Lackawanna Twp. line, in 20th Ward, cost $60,798; Vine St. from Taylor to Arthur Aves., $39,716; Irving Ave. from Mulberry to Pine Sts., 17th and 10th Wards, $29,100 and from Myrtle to Ash Sts., 10th Ward, $10,488. W. A. Schunk, city engr.

Pa., Washington—Washington Co. election June 17 to vote on $1,000,000 bonds for road work.

Virginia—State Highway Comn., Richmond, soon lets contract building 3½ mi. Project No. 32, bituminous, Fairfax Co.; 5¾ mi. Project No. 42, top soil, King George Co.; on last named project State will furnish (not to exceed) 40,000 convict labor hours at 20c. per hour. G. P. Coleman, state highway comr.

W. Va., Marlington—Comrs. Pocahontas Co. having plans prepared surfacing 5 mi. Marlington-Huntersville Rd., 14 ft. wide, involving 19,000 cu.yd. excav. About $20,000. F. Baxter, Marlington, engr.

W. Va., Morgantown—Comrs. Monongalia Co. rejected bids building Chestnut-Ridge Rd., Sabration-Dellslow Rd. Stewartstown Rd. and Charles Ave. L. Cox, Morgantown, engr. Noted May 1.

W. Va., New Cumberland—Hancock Co. election May 24, to vote on $100,000 bonds to build roads. C. E. Grafton, New Cumberland, engr.

W. Va., Parkersburg—Comrs. Wood Co. having plans prepared building 2 mi. Parkersburg-Elizabeth Turnpike, 16 ft. wide, involving 3500 yd. excav. and 18,800 sq.yd. of cement concrete surface, cost $36,000; 3 mi. Northwestern Turnpike, 16 ft. wide, 5000 cu.yd. grading and 28,000 sq.yd. of cement concrete surface, $56,000. Burdette & Woodyard, Parkersburg, engrs.

W. Va., Point Pleasant—Comrs. Mason Co. plan election soon to vote $70,000 bonds to improve all roads in Wagoner Dist.; also $65,000 bonds for roads in Graham Dist. G. F. Childs, Point Pleasant, engr.

W. Va., Princeton—Comrs. Mercer Co. having plans prepared building 6 mi. Princeton-Flattop Rd., 16 ft. wide, involving 28,000 cu.yd. excav. and 54,000 sq.yd. of waterbound macadam. About $80,600. E. C. Barton, Bluefield, engr.

W. Va., Winfield—Comrs. Putnam Co. soon receive bids grading 3 mi. James River and Kanawha Turnpikes, 18 ft. wide. About $26,000. G. H. Davis, Winfield, engr.

Streets and Roads (Continued)

Ga., Camilla—City having plans prepared by J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, paving 2 mi. streets with brick, concrete or asphalt. Noted May 1.

Ga., Douglas—City election May 20 to vote on $20,000 bonds to pave various streets. If election carries $60,000 will be expended. O. H. Lang, Moultrie, engr.

Ga., Thomasville—Thomas Co. voted $700,000 bonds to build roads. S. L. Heald, clk. Noted Apr. 24.

Ga., Valdosta—Lowndes Co. election May 28 to vote on $500,000 bonds to build roads. Federal Government will be asked to appropriate like amount if election carries.

Fla., Bartow—Polk Co. soon receives bids improving roads. Bonds for $40,000 voted for project.

Fla., Miami—City plans to spend $100,000 to improve streets and build storm and sanitary sewers. C. W. Murray, Miami, engr.

Ala., Attalla—City soon receives bids paving 5th Ave. About $60,000. Noted Mar. 20.

Miss., Clarksdale—Bd. Superv. Coahoma Co. rejected bids received Apr. 30 resurfacing 10 mi. roads. Noted Apr. 17.

Ohio—State Highway Comn., Columbus, soon lets contract grading, paving, building bridges and culverts on 4.18 mi., Sect. I, Columbus-Millersburg Rd., waterbound macadam, Knox Co. About $16,057.

Ohio—State Highway Comn., Columbus, plans to build following Federal Aid roads:

Ashland Co., section of Ashland-Wooster Rd., 3.8 mi., grading and paving, $32,000.

Auglaize Co., section of Wapakoneta-St. Mary's Rd., 6.52 mi., grading and paving $104,320.

Section of Wapakoneta-Bellefontaine Rd., 7.8 mi., grading and paving, $45,680.

Erie Co., section of Lima-Sandusky Rd., 3.045 mi., grading and paving, $30,000.

Columbiana Co., section of Lisbon-East Liverpool Rd., grading and paving, $35,000.

Knox Co., section of Columbus-Wooster Rd., grading and paving, 3 mi., $50,000.

Wood Co., section of Findlay-Bowling Green Rd., 6.1 mi., grading and paving, $90,000.

O., Bowling Green—Comrs. Wood Co. having surveys and plans prepared grading, draining and paving 1½ mi. Spangler Stone Rd. J. Gallier, Bowling Green, engr.

O., Fayette—City soon lets contract paving 2325 ft. South Fayette St. from Main St. to south corporation line, 16-24 ft. wide. Work involves 6820 sq.yd. vitr. brick, concrete or bituminous concrete on 6 in. concrete base, 4380 cu.yd. earth excav. and 2865 ft. 12 in. sewer. About $25,196. G. Champe, Nasby Bldg., Toledo, engr.

O., Toledo—City receives bids about June 19, repaving 750 ft. Front St. from Main to Oak Sts., 48 ft. wide, involving 4020 sq.yd. vitr. brick, 300 lin.ft. curbing and 1060 cu.yd.earth excav., cost $13,971; 1625 ft. Bancroft St. from Vermont Ave. to Cherry St., 36 ft. wide, 6550 sq.yd. vitr. brick, 400 lin.ft. curbing and 2200 cu.yd. earth excav., $36,200. H. C. McClure, city engr.

O., Toledo—City plans to grade, drain, pave and curb 248 ft. Martha St. from Berdan to Phillips Aves., 24 ft. wide, involving 1749 cu.yd. earth excav., cost $16,131; 1259 ft. Bricker Ave. from Stickney Ave. to Brigham St., 24 ft. wide, 2175 cu. yd. earth excav., $14,966; 1259 ft. Booth Ave. from Stickney Ave. to Brigham St., 24 ft. wide, 1874 cu.yd. earth excav., $16,591. H. C. McClure, city engr.

O., Toledo—Comrs. Lucas Co. having surveys made and plans prepared grading, draining and paving 7 mi. Sylvania-Metamora Rd. No. 45, from Berkley Rd. No. 45 to paving on Indiana Ave., 16 ft. wide, concrete; 4.5 mi. Brint Rd. No. 8 from Richfield Twp. line to Holland-Sylvania I. C. H. No. 58, 14 ft. wide, waterbound macadam. C. L. Rood, co. engr.

O., Willoughby—City receives bids in June for 48,000 yd. brick paving. C. D. Clark, city engr.

O., Xenia—City election May 20, to vote on $25,000 bonds for 4000 lin.ft. brick paving. K. Riddle, city mgr.

Michigan—State Highway Comn., Lansing, soon lets contract grading, surfacing or paving, shaping road and furnishing necessary drainage structures for 2.033 mi. Assessment Dist. Rd. No. 116, 12 ft. wide, Denver Twp., 4.014 mi. Rd. No. 117, 12 ft. wide, Wise Twp., Isabella Co.; 2.487 mi. Assessment Dist. Rd. No. 59, 16 ft. wide, Orange Twp., Ionia Co.; 3.02 mi. Assessment Dist. No. 46, 14 ft. wide, Ridgeway Twp., Lenawee Co.; all Class B gravel or Class C stone or slag bottom with gravel top; 6.5 mi. Federal Aid Rd. No. 31, between Hartford, Watervliet and Berrien Twps., 16 ft. wide, concrete, Van Buren and Berrien Counties. F. F. Rogers, comr.

Mich., Corunna—Comrs. Shiawassee Co. soon let contract grading and surfacing 33¾ mi. road, 9 ft. wide, Class B gravel, and 2½ mi. road, 16 ft. wide, Class B trunk line gravel.

Mich., Detroit—Bd. Pub. Wks. soon receives bids paving with one course concrete alleys Nos. 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, involving 5462 cu.yd. excav., 14,070 sq.yd. one course concrete and 12,080 lin.ft. 2 x 6 in. retaining plank, etc. C. W. Hubbell, city engr.

Ia., Albia—Bd. Supervs. Monroe Co. soon receives bids grading 8.3 mi. Federal Aid Rd. No. 20, 24 ft. wide, involving 116,444 cu.yd. excav. About $49,877. C. U. Bair, co. engr.

Ia., Manchester—Bd. Supervs. Delaware Co. soon receives bids grading and gravel surfacing 14.7 mi. Federal Aid Project No. 4, 24 ft. wide. About $30,888. Work involves 267 sq.yd. concrete, 33,527 cu.yd. gravel and 53,426 cu.yd. earth excav., etc. H. Klaus, co. engr.

Minn., Hastings—Comrs. Dakato Co. receive bids in June grading and graveling 6 mi. Cedar Ave.-Farmington Highway. About $100,000. C. L. Methven, Hastings, engr.

Minn., Minneapolis—Comrs. Hennepin Co. receive bids in June grading and graveling 10 mi. road from end of Cedar Ave. bridge to Farmington. About $100,000. E. E. Terrell, Co. engr. Noted Apr. 3.

Kan., Burlington—City receives bids about June paving various streets. About $100,000.

Neb., Alliance—City receives bids about June, paving 15½ blocks, 22½-72 ft. wide. About $125,000. Grant & Fulton, Lincoln, engrs.

Neb., Lincoln—T. H. Berg, clk., receives bids about June 7, paving 6360 ft. Starr, Franklin, Park, J., 19th, 25th and 30th Sts., 25 ft. wide. Work involves 16,800 sq.yd. asphaltic concrete on 5 in. concrete base, 13,000 lin.ft. combined curb and gutter. About $55,000. G. B. Bates, city engr.

Neb., Lincoln—Lancaster Co. plans to pave 7 mi. O St., 10.5 mi. Bennett Rd., 10 mi. O. L. D. Highway, 4 mi. South 14th St. and 2.5 mi. road east from University Pl. About $1,500,000. Federal Government will appropriate toward cost. A. H. Edgren, co. engr.

Neb., Lyon—City receives bids in June paving 2½ blocks Main St., 64 ft. wide. About $30,000. Grant & Fulton, Lincoln, engrs.

Mont., Billings -- City rejected bid received Apr. 1, paving 95,000 sq.yd. North 31st St. Noted Apr. 24.

Mont., Bozeman—City plans to pave Koch Ave., from 3rd to 6th Aves. bitulithic. About $10,324. C. C. Widener, city engr.

Mont., Chinook—Blain and Fergus Counties plan to improve 100 mi. of Chinook-Lewistown Rd. Federal Government and state will appropriate toward cost. P. D. Pratt, Helena, state highway engr.

Mont., Hardin—City plans to pave Custer Ave., from North Railway St. to 5th St. and 1 block of 2nd, 3rd, 4th, 5th and North Railway Sts., Dist. No. 14, cost $36,000; Center Ave. from Chicago Burlington and Quincy R.R. to 5th St., Cheyenne Ave. from North Railway St. to 3rd St. and 1 block of 2nd, 3rd, 4th and 5th Sts., Dist. No. 13, $38,000. E. C. Flickinger, city engr.

Mont., Miles City—Custer Co. plans election to vote on $300,000 bonds to build roads. Federal Government will appropriate toward cost. D. Pratt, Helena, state highway engr.

Mont., Missoula—Comrs. Missoula Co. appropriated $27,838 bonds to build and repair roads. F. T. Stoddard, 336 South 5th St., co. surv.

Mont., Virginia City—Madison Co. plans to build roads by day labor. About $44,000 available. C. C. Adams, Twin Bridges, engr.

Mo., Sedalia—Pettis Co. election June 3, to vote on $500,000 bonds to build roads. T. O. Stanley, highway engr.

Ark., Blytheville—Comrs. Mississippi Co. having plans prepared building 16 mi. hard surface road in Blytheville-Barfield Rd. Dist., probably asphaltic concrete. Pride & Fairley, Blytheville, engrs.

Ark., Blytheville—Comrs. Mississippi Co. plan to build 50 mi. hard surfaced road in Osceola Special Act Dist., 16 ft. wide, probably asphaltic concrete. About $1,500,000. Pride & Fairley, Blytheville, engrs.

Tex., Brownwood—Comrs. Brown Co. soon let contract grading 10.98 mi. Highway No. 10, beginning 8½ mi. east of Brownwood and extending through Blanket to Comanche Co. line, 60 ft. wide. Work involves grading entire distance and placing crushed rock or gravel surface on same, also bituminous surface treatment, and placing 700 cu.yd. concrete in drainage structures. R. A. Nichols, engr.

Tex., Haskell—Comrs. Haskell Co. plan to improve 16.797 mi. road known as Highway No. 39, 20 ft. wide. About $33,865. Plans include surfacing with sand clay, clearing, grubbing, building drainage structures and grading 10.1 mi. involving 6982 cu.yd. earth and 30,898 cu.yd. borrow excav. and 9500 lb. steel. O. Leonard, Haskell, engr.

Tex., Pittsburg—Camp Co. plans to improve 9.91 mi. Pittsburg-Leesburg Rd. from near Pittsburg to Newsome and beyond, 9 ft. wide. Plans include paving with rock and gravel, clearing, grubbing, grading, etc. About $65,665. H. S. Wilder, c/o Wilder & O'Neal, 323 Chronicle Bldg., Houston, engr.

Tex., San Augustine—San Augustine Co. had plans prepared improving 17.89 mi. Highway No. 8, 15 ft. wide. Work includes clearing, grubbing, grading, ditching, etc., and paving with sand, etc. H. S. Wilder, c/o Wilder & O'Neal, 323 Chronicle Bldg., Houston, engr.

Tex., Seymour—Baylor Co. plans to improve 4.313 mi. Highway No. 30, 15 ft. wide. Work includes clay surface, necessary drainage structures, concrete culverts, etc. About $18,760. Colvin E. Cock, Seymour, engr.

Tex., Sherman—Grayson Co. plans to gravel surface, grade and drain Van Alstyne-Anna Link of Henry Exall Highway, 14 ft. wide. About $14,308. J. C. Field & Co., Denison, engr.

New Mexico—State Highway Comn., Santa Fe, rejected bids received Apr. 24, for 45 mi. Federal Aid Rd. Projects in Colfax Co., from Raton north to Colorado state line; Santa Fe Co. from Santa Fe south to Pankeys gate; Chaves Co. through Mescalero sands from Roswell to Comanche Springs. Noted Apr. 3.

Idaho, Boise—City passed resolution to build 14,256 lin.ft. concrete sidewalks and 14,377 ft. concrete curbing in Impvt. Dist. No. 36. About $21,019. C. C. Stevenson, city engr.

Wash., Spokane—Spokane Co. plans election to vote on $3,500,000 bonds to build roads. A. R. Scott, co. engr.

Ore., Enterprise—City plans to improve North Main, Greenwood, East 1st, River, West 1st and West 2nd Sts. About $100,000. O. J. Roe, city recdr.

Ore., Marshfield—City soon lets contract hardsurfacing and building concrete walks on Bway. from Market Ave. to Front St., N., and Park Ave. west of Bway. About $40,000. E. K. Burton, Astoria, city engr. Noted Apr. 3.

Ore., McMinnville—Yamhill Co. petitioned to permit election to vote on $360,000 bonds to build roads.

Ore., Tillamook—City plans to expend $14,676 to improve streets and avenues. F. B. Stranahan, city recdr.

Cal., Chula Vista—City receives bids in June paving 3¾ mi. 2nd and 3rd Aves., E, F and 2nd Sts., 3 mi. 3 in. bituminous base with 1½ in. Warrenite surface, ½ mi. 4 in. bituminous base with 1½ in. Warrenite surface and ¾ mi. 5 in. concrete base without surface. E. M. Lynch, Central Bldg., Los Angeles, engr.

Cal., San Diego—City plans to pave 11,950 sq.yd. Grand Ave. and Garnet St., 20 ft. wide, involving 26,451 sq.yd. 4 in. concrete base; 17,191 sq.yd. Moren Blvd., 20 ft. wide, with bitulithic, (Warrenite), wearing surface on concrete base, 38,101 sq.yd. 4 in. concrete base. G. Cromwell, city engr.

Streets and Roads (Continued)

Cal., Santa Monica—City having plans prepared by W. H. Carter, comr. pub. wks. improving 40,000 ft. streets in Palisades Sect. Plans include grading, paving, cement curbs, concrete gutters, culverts, ornamental lighting system, sewers, etc. About $500,000.

Quebec—Provincial Government, Quebec, plans to build 120 mi. gravel road between here and Chambord. About $1,000,000. G. Henry, Parliament Bldg., engr.

Ont., Toronto—City Council recommended following street improvements: concrete sidewalks on Drayton, Silver Birch, Seaforth and Oakcrest Aves.; cost, $24,552; grading Glenlake Ave., $15,431; building 5500 sq.yd. bitulithic pavement on Silver Birch, Willow, Alberta, Symmington, Wellesley and Kennedy Aves., $120,000. R. C. Harris, road comr.

BIDS DESIRED

Massachusetts—Until May 20, by State Highway Comn., Boston, building 4000 ft. town road, 18 ft. wide, Tewksbury Twp., bituminous macadam, penetration method. A. W. Dean, state highway engr.

N. Y., Albany—Until May 19, by Bd. Contr. & Supply, improving Euclid and Lenox Aves., involving 5560 sq.yd. asphalt, 420 cu.yd. excav., 30 lin.ft. concrete curbing, 100 sq.ft. concrete sidewalk, cost $15,600; Homestead Ave. involving 4270 sq.yd. asphalt, 30 cu.yd. concrete, 1300 cu.yd. grading, 3220 lin.ft. concrete curbing, 14,000 sq.ft. concrete sidewalk, $24,000. I. Wacksman, secy. F. R. Langan, city engr.

N. Y., Brooklyn—Until May 21, by E. Riegelmann, boro. pres., regulating and repaving with permanent asphalt on 6 in. concrete foundation a strip 18 ft. wide in center of Bay 22nd St. from 86th St. to Cropsey Ave., Warren St. from 3rd to 5th Aves. and Prospect Pl. from 5th to Flatbush Aves.; 29 ft. wide in center of 65th St. from 5th to New Utrecht Aves.; also with permanent grade 1 granite on 6 in. concrete foundation, River St. from North 3rd St. to Metropolitan Ave.

N. Y., S. I., St. George—Until May 21, by C. D. Van Name, pres. Richmond Boro., building concrete sidewalk on south side Richmond Terrace between Andros and Western Aves., involving 5400 sq.ft. concrete, 262 cu.yd. excav.

New Jersey—Until May 28, by State Highway Comn., Broad St. Bank Bldg., Trenton, building Sect. 1 A State Highway Route No. 10, from Ft. Lee Ferry to Arcadian Way, Bergen Co. About $481,000. A. L. Grover, ch. clk.

N. J., Beverly—Until May 20, by city, laying, grading, paving, repaving and improving cement or concrete sidewalks, curbs and crosswalks, involving 315,000 sq.ft. sidewalks and crosswalks and 70,000 lin.ft. curbing. A. F. Brelsford, clk.; advertised in this issue.

N. J., Hillsdale—Until May 21, by Town Council, building 2500 sq.yd. cement concrete pavement on Railroad Ave. J. E. Thier, superv. of rds.; advertised in this issue.

N. J., Westwood—Until May 21, by Boro. Council, building 10,000 sq.yd. cement concrete pavement on Railroad Ave. J. E. Thier, superv. of rds.; advertised in this issue.

Pa., Ebensburg—Until May 30, by Supervs. Jackson Twp., c/o Cambria Co. Controller, furnishing material and labor required in rebuilding 6387 ft. road from Mundays Corner to boro. line of Nant-Y-Glo, Jackson Twp., 16 ft. roadway, vitr. brick paving block on combination concrete base and curb or 2 course rein.-con.

Pa., Johnstown—Until May 20, by M. L. Masterson, supt. streets and impvts., curbing, grading and paving Buck Ave. and Solomon St. from Bedford St. to city line, involving 9000 sq.yd. brick paving, 947 lin. ft. 12-36 in. storm and 4015 lin.ft. 8-in. sanitary sewers and appurtenances; Ridge Ave. from Horrocks Ave. to end of avenue 1540 sq.yd. brick paving, 732 lin.ft. 8-15 in. storm and 828 lin.ft. 8-in. sanitary sewers; Church Ave. from angle in avenue to end of avenue, 1628 sq.ft. brick paving, 726 lin.ft. 8-in. sanitary sewer and appurtenances; Sect. No. 3 sanitary sewer, main and appurtenances from Hagan St. to 10th Ave., 1657 lin.ft. 63-in., 2336 lin.ft. 60-in. and 4 lin.ft. 54-in. siphon line in Conemaugh River, 2 siphon chambers, emergency outfall chamber, 2 lines 39-in. r.c. pipe, 350 lin.ft. each and Elk Run auxiliary siphon.

Pa., Pittsburgh—Until May 29, by Controller Allegheny Co., building West Run Rd. from 8th Ave. in Homestead Boro., southwardly, 16 ft. wide, involving 5280 ft. vitr. brick and concrete on 6-in. concrete base; also Tarentum & Culmerville Ridge Rd. from East St., in Boro. of Tarentum, northwardly, 16 ft. wide, involving 6000 ft. waterbound macadam. R. V. Warren, Court House, engr.

Maryland—Until May 20 by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 4.68 mi. state highway, Federal Aid Project No. 24, from Cumberland to Brady Lane near Cresaptown, concrete, Alleghany Co., Contr. A-17; 0.93 mi. road, Federal Aid Project No. 27, through Reistertown from end of concrete road to Hitshue's corner, 37 ft. concrete road with combination curb and gutter (40 ft. between curbs), United Rys. & Electric Co. tracks in center, Baltimore Co., Contr. B-34; 2.78 mi. Baltimore-Washington Blvd. from new city limits to Baltimore & Ohio R.R. overhead crossing near Relay, sheet asphalt on existing concrete base, Baltimore Co., Contr. B-W-A; surfacing 1.38 mi. road, Federal Aid Project No. 7, Sect. B, between North East and Elkton, gravel; Cecil Co., Contr. Co.-26; 2.15 mi. road from end of Contr. D-19 near Madison to beginning of Contr. No. 466 at Parsons Creek, concrete, Dorchester Co., Contr. D-19 B. F. H. Zouck, chn.; advertised in this issue.

Maryland—Until May 27, by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 2 mi. Hanover Pike from Hitshue's Corner, Reistertown, to near Woodensburg, Federal Aid Project No. 26, concrete, Contr. B-31, Baltimore Co.; 2.08 mi. highway from end of concrete road near Harrisville to eastern limits of Rising Sun, Federal Aid Project No. 18, concrete, Contr. Ce-28, Cecil Co.; 0.92 mi. highway through Aberdeen from western limits to Baltimore & Ohio R.R. crossing and from Pennsylvania R.R. crossing to eastern limits, concrete, Contr. H-22, Harford Co.; 2.6 mi. highway from Jarretsville to Bethel Church near Cathcart, Federal Project No. 17, concrete, Contr. H-25, Harford Co.; 2.12 mi. highway from Oakland toward Hutton via Crellin, Federal Aid Project No. 4, concrete, Contr. G-13, Garrett Co. F. H. Zouck, chn.; advertised in this issue.

Virginia—Until May 20, by State Highway Comn., Richmond, building 5.3 mi. macadam road from Winchester to Opequon, Frederick Co.; 8 mi. slag road from Longdale Furnace to Wilson Creek, Alleghany Co.

W. Va., Kingwood—Until June 2, by Comrs. Preston Co. building 3.8 mi. Caddell-Rag Tavern Rd., 14 ft. wide, involving 17,000 cu.yd. excav., etc. About $23,000. H. E. Wilhelm, Hening Bldg., Kingwood, engr. Noted May 1.

W. Va., Kingwood—Until June 2, by Comrs. Preston Co., grading and draining 4 mi. road between Caddell and Terra Alta, 22 ft. wide, involving 17,000 cu.yd. excav. About $22,000. H. E. Wilhelm, Hening Bldg., Kingwood, engr. Noted Mar. 13.

W. Va., Spencer—Until May 23, by Comrs. Roane Co. furnishing materials and laying concrete pavement on roads in Walton and Spencer Dists. W. R. Carpenter, clk. Noted May 8.

W. Va., Wayne—Until June 2, by Comrs. Wayne Co. grading and surfacing 2 mi. Wilson Creek-Elmwood Rd., 16 ft. wide, vitr. brick, asphalt concrete or concrete, on concrete base. Noted May 8.

W. Va., Wayne—Until June 2, by Comrs. Wayne Co. building 2 mi. Kenova Class A. Rd., 16 ft. wide, brick, concrete or asphaltic concrete, on concrete base. H. A. Levering, co. engr. Noted May 1.

W. Va., West Union—Until May 29, by Comrs. Doddridge Co. building concrete road, 16 ft. wide, on North Western Virginia Turnpike, beginning at West Union and Grant Dist. line and extending eastward for distance of 3 mi., also one beginning at West Union and Central Dist. line, and extending westward for distance of 3100 ft. H. Hutson, co. clk.

W. Va., West Union—Until May 29, by Comrs. Doddridge Co. grading and hard surfacing 0.58 mi. Greenwood-West Union Rd., 16 ft. wide, concrete. About $20,000. Horner Bros, Clarksburg, engrs. Noted May 8.

Ga., Metter—Until June 5, by Comrs. Candler Co., grading and top soiling 17 mi. Dixie-Overland Highway. About $37,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs.

Ala., Heflin—Until May 23, by Comrs. Cleburn Co., grading, draining and surfacing with chert part of Heflin and Anniston Rd., 3.5 mi. long. Work involves 9.2 acres clearing and grubbing, 33,392 cu.yd. earth and 4000 cu.yd. rock excav., 950 lin.ft. vitr pipe, 31,645 ft. lumber, 74 cu.yd. concrete and 3438 cu.yd. chert surfacing. W. S. Keller, Montgomery, state highway engr. Noted May 23.

Ohio—Until May 26, by State Highway Comn., Columbus, building roads in following counties:

Ashland Co., Sect. "B," Ashland-Wooster Rd., 3.8 mi., grading, constructing bridges and culverts and paving with concrete or monolithic brick, $125,831.

Ashtabula Co., Sect. "H, O & P," Cleveland-Buffalo Rd., 11.92 mi., building gutter and curb, $63,000.

Auglaize Co., Sect. "A-3," Wapakoneta-St. Marys Rd., 2.19 mi., grading, constructing bridges and culverts and paving with brick or concrete, $85,852.

Auglaize Co., Sect. "B-1," Wapakoneta-St. Marys Rd., 2.29 mi., grading, constructing bridges and culverts and paving with brick or concrete, $86,449.

Auglaize Co., Sect. "B-2,' Wapakoneta-St. Marys Rd., 2.05 mi., grading, constructing bridges and culverts and paving with brick or concrete, $76,653.

Columbiana Co., Sect. "E-1," Lisbon-Canton Rd., building bridges, $13,600.

Defiance Co., Sect. "E," Hicksville-Defiance Rd., 3.21 mi., grading, constructing bridges and culverts and paving with reinforced concrete, $84,489.

Jefferson Co., Sect. 'D," Steubenville-Hammondsville Rd., 3.14 mi., grading, $36,819.

Medina Co., Sects. "P & Q," Cleveland-Wooster Rd., 4.75 mi. grading, constructing bridges and culverts and paving with bituminous macadam, $145,813.

Monroe Co., Sect. "E," Barnesville-Woodsfield Rd., 3.148 mi., grading, constructing bridges and culverts and paving with waterbound macadam, sandstone foundation, $56,766.

Monroe Co., Sect. "F," Barnesville-Woodsfield Rd., 4.074 mi., grading, constructing bridges and culverts and paving with waterbound macadam, sandstone foundation, $59,833.

Morrow Co., Sect. "E and F," Mansfield-Mt. Gilead Rd., 4.10 mi., grading, constructing bridges and culverts and paving with plain concrete, $113,032.

Preble Co., Sect. "F," Dayton-Indianapolis Rd., building bridges, $8164.

Richland Co., Sect. "P," Mansfield-Ashland Rd., 3.38 mi., grading, constructing bridges and culverts and paving with plain concrete, bituminous macadam or monolithic brick, $114,149.

Richland Co., Sect. "A," Shelby-Ashland Rd., 1.28 mi., grading, constructing bridges and culverts and paving with bituminous macadam or plain concrete, $55,746.

Richland Co., Sect. "B," Bellville-Lexington Rd., 1.92 mi., grading, constructing bridges and culverts and paving with bituminous macadam or plain concrete, $52,253.

Stark Co., Sect. "A and B," Lincoln Highway, 8.04 mi., grading, constructing bridges and culverts and paving with brick, $390,397.

Van Wert Co., Sects. "F, G and H," Van Wert-Delphos Rd., 10.75 mi., grading, constructing bridges and culverts and paving with bituminous macadam, $279,251.

Williams Co., Sect. "O," Bryan-Wauseon Rd., 2.05 mi., grading, constructing bridges and culverts and paving with bituminous macadam or reinforced concrete, $68,016.

Medina Co., Sect. "A," Cleveland-Wooster Rd., 1 mi., maintenance and repair, $15,076.

O., Bradford—Until June 4, by W. L. Hook, village clk., paving Miami and Main Sts. Work involves 10,500 cu.yd. grading, 21,600 sq.yd. pavement (all permanent types), 13,500 lin.ft. stone or concrete curb and 9800 lin.ft. 6-24 in. sewer. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.; advertised in this issue.

O., Centerburg—Until June 6, by City Council, grading, draining, curbing and paving 2700 ft. Hartford St., 26-42 ft. wide. Work involves 9000 sq.yd. vitr. brick, granite block or asphalt block, 5600 lin.ft. concrete curbing and 3000 cu.yd. earth excav. About $40,000. L. A. Boulay Co., 1250 Nichols Bldg., Toledo, engrs. Noted Apr. 3.

Streets and Roads (Continued)

O., St. Bernard—Until May 17, by Dir. Pub. Serv., lowering grade of Carthage Pike over Miami and Erie Canal and resurfacing with granite. Work involves 1800 sq.yd. granite block on 6 in. concrete base, 400 sq.yd. bituminous, 520 lin.ft. granite curbing (reset) and 4000 sq.yd. 4 in. cement sidewalk. H. A. Nunlist, 309 Traction Bldg., Cincinnati, engr. Noted May 1.

O., Toledo—Until May 20, by Dir. Pub. Serv., paving 1494 ft. Burnham Ave. from Sylvania to Maple Aves., 24 ft. wide, involving 4300 sq.yd. paving on 6 in. concrete base, 3000 lin.ft. curbing and 2345 cu.yd. earth excav., cost $22,815; Upton Ave. from Dorr St. to Avondale Ave., 26 ft. wide, 4262 sq.yd. paving on 6 in. concrete base, 2706 lin.ft. Berea curbing, 2000 sq.ft. stone sidewalk and 2269 cu.yd. earth excav., $24,136; Kingston Ave. from Navarre Ave. to Earl St., 26 ft. wide, 4117 sq.yd. paving on 6 in. concrete base, 3080 lin.ft. stone curbing and 2773 cu.yd. earth excav., $23,304; Vermaas Ave. from Phillips to Cornelia Aves., 22 ft. wide, 5380 sq.yd. paving on 6 in. concrete base, 4050 lin.ft. curbing and 6771 cu.yd. earth excav., $34,560; Berkley Dr. from Sylvania to Berdan Aves., 24 ft. wide, 3365 sq.yd. paving on 6 in. concrete base, 2520 lin.ft. curbing, 5600 sq.ft. cement sidewalk and 1859 cu.yd. earth excav., $20,600. Bids will be received on vitr. brick, wood block, asphalt, asphalt block and rein.-con. H. C. McClure, city engr. Noted Apr. 10 and 17, May 1 and 8.

O., Youngstown—Until May 23, by Dir. Pub. Serv., paving Calvin St. from lot No. 8887 to Victoria St.; Madison Ave. from Griffith to Aredale Sts.; Dennick Ave. from Logan to Ohio Aves.; Ohio Ave from Bonita to Dennick Aves.; Delaware Ave. from Seneca to La Fayette Sts.; Montgomery Ave. from Wilson Ave. to Hickory St.; Council Rock Ave. from Jackson St. to Lincoln Park Dr.; Norman Ave. from Jackson St. to Lincoln Park Dr.; Craiglee Ave. from Jackson St. to Lincoln Park Dr. F. M. Lillie, city engr.

Indiana—By Bd. Co. Comrs. building roads in following counties:

May 19, Laporte Co., Laporte, building certain road in Center Twp. A. H. Kimble, aud.

Lawrence Co., Bedford, building and completing macadam road in Shawswick Twp. W. M. Denniston, aud.

June 2, Rush Co., Rushville, building crushed stone road in Orange Twp. W. H. McMillin, aud.

Ind., Terre Haute—Until May 28, by Bd. Pub. Wks., resurfacing 6000 ft. Wabash Ave., 50 ft. wide, involving 34,000 sq.yd. wood block, and 1224 brick blocks. About $100,000. R. A. Koerner, city engr.

Michigan—Until May 20, by F. F. Rogers, state highway comr., Lansing, grading, shaping, surfacing and draining 7 mi. Dowagiac-Niles Rd., Federal Aid Project No. 30, 16 ft. wide. R. H. Steketee, Kalamazoo, engr. Noted Nov. 7.

Mich., Grosse Pointe—(Detroit P. O.)—Until May 20, by R. H. Erley, village engr., Village Hall, paving with concrete Maryland Ave. from Jefferson to Kercheval Aves., Hampton Ave. between westerly village limits and Maryland Ave. and Wayburn Ave. between Fox Creek bridge and Hampton Ave., also building retaining wall, concrete roadway, curbs and sidewalks on Town Hall lot, ½ mi. long. About $25,000.

Mich., Grosse Pointe—(Detroit P. O.)—Until May 20, by R. H. Erley, village engr., Village Hall, grading and paving with 9 in. concrete creosoted block on 8 in. concrete base or asphaltic concrete on 8 in. concrete base, setting catch basins, inlets and storm sewers on boulevards in village, involving 17,600 sq.yd. pavement, 11,000 lin.ft. concrete curbing, 10,000 cu.yd. excav., 23 inlets, 8000 ft. 12-24 in. vitr. pipe and 2000 ft. 10 in. catch basin connections.

Mich., Grosse Pointe (Detroit P. O.)—Until May 20, by R. H. Erley, village engr., paving, grading, draining and installing sewers in Grosse Pointe Blvd. from Fisher Rd. to Provencal Blvd. Work involves 17,600 sq.yd. pavement, 11,000 lin.ft. concrete curbing, 10,000 cu.yd. pavement, 8000 ft. 12-24-in. vitr. pipe and 2000 ft. 10-in. catch basin connections, etc.; advertised in this issue.

Mich., Milan—Until May 28 (change of date), by J. Button, clk., grading, draining, curbing and paving Wabash St. from bridge over Saline River to South Corporation line, 16 and 18 ft. wide. About $27,695. G Champe, 610 Nasby Bldg., Toledo, O., engr.; advertised in this issue. Noted May 1.

Illinois—Until May 28, by State Highway Comn., Springfield, improving Natl. and Dixie Highways in following counties:

(a) Clark Co., 17,868 ft. Natl. Highway, Sect. D-15d, 16 ft. wide; 29,200 ft. Sect. A, 16-18 ft. wide; 24,242 ft. Sect. B, 16-18 ft. wide; 23,736 ft. Sect. C, 16-18 ft. wide; 26,756 ft. Sect. D, 18 ft. wide;

(b) Cumberland Co., 17,218 ft. Natl. Highway, Sect. F-15d, 24,165 ft. Sect. E; 19,900 ft. Sect. F; 20,900 ft. Sect. G; 28,700 ft. Sect. H, all 16 ft. wide;

(c) Will Co., 24,800 ft. Dixie Highway, Sect. 8; 18,600 ft. Sect. 9; 15,200 ft. Sect. 10; 4453 ft. Sect. H-15d, all 18 ft. wide. Alternate bids will be received for Portland cement concrete, 3 in. and 4 in. monolithic brick, bituminous concrete (Spec. C1, C2, C3 or CT) with or without binder course. C. Older, ch. highway engr.; advertised in this issue.

Illinois—Until May 28, by State Highway Comn., Springfield, improving roads in following counties: (a) Menard Co., 2000 ft. Sect. E, Route 4, 16 ft. wide, involving 3556 sq.yd. concrete, 2709 cu.yd. excav., cost $6380;

Ogle Co., 7254 ft. Sec. F, Route 10 and 11, 10 and 16 ft. wide, 11,798 sq.yd. concrete, 4476 cu.yd. excav., $19,428;

Marion Co., 3240 ft. Sec. G, Route 7, 10 ft. wide, 3600 sq.yd. concrete, 1950 cu.yd. excav., $7630;

Mason Co., 4000 ft. Sec. B, Route 1, 16 ft. wide, 7111 sq.yd. concrete, 1022 cu.yd. excav., $11,804;

Lake Co., 6060 ft. Sect. J, Route 6, 18 ft. wide, 12,120 sq.yd. concrete, 4462 cu.yd. excav., $21,400;

Bureau Co., 3456 ft. Sect. F, Route 4, 15 ft. wide, 5760 sq.yd. concrete, 1850 cu.yd. excav., $10,990; 4000 ft. Sect. G, Route 1, 15 ft. wide, 6667 sq.yd. concrete, 2466 cu.yd. excav., $11,486;

Fulton Co., 4200 ft. Sect. S, Route 4, 16 ft. wide, 7466 sq.yd. concrete, 3592 cu.yd. excav., $15,800;

McHenry Co., 2121 ft. Sect. K, Route 15, 16 ft. wide, 3771 sq.yd. concrete, 1057 cu.yd. excav., $8262; 2336 ft. Sect. L, Route 17, 16 ft. wide, 4153 sq.yd. concrete, 1294 cu.yd. excav., $7828;

Bond Co., 1783 ft. Sect. E, Route 6, 10 ft. wide, brick pavement, $9226;

Coles Co., 3650 ft. Sect. D, Route 8, 10 ft. wide, 4055 sq.yd. brick, 1755 cu.yd. excav., $13,773;

Adams Co., 4459 ft. Sect. E, Route 5, 15 ft. wide, 7432 ft. waterbound macadam, 9653 cu.yd. excav., $12,037;

Edwards Co., 1550 ft. Sect. D, Route 2, 10 ft. wide, 1722 sq.yd. gravel, 1500 cu.yd. excav., $3430;

Jersey Co., 3370 ft. Sect. H, Route 2, oiled earth paving, 15 ft. wide, 3500 cu.yd. excav., $4036;

Randolph Co., 4 bridges, Sect. D, $6790. C. Older, state highway engr.

Wisconsin—Until May 28, at office of Division No. 6 of Wisconsin Highway Comn., Eau Claire, grading and paving Alma-Durand Rd., Federal Aid Project No. 16, involving 3 acres clearing and grubbing, 23,197 cu.yd. earth excav., 239 cu.yd. class A concrete and 20,598 sq.yd. shale and gravel surfacing, Pepin Co.; Phillips-Medford Rd., Federal Aid Project No. 31, 4.9 acres clearing and grubbing, 45,249 cu.yd. earth excav. and 497.6 cu.yd. class A concrete, Taylor Co. A. R. Hirst, state highway engr.

Wis., Sheboygan—Until June 1, by C. A. Boley, city engr., grading paving, curbing, and guttering 2 mi. Georgia Ave., South 16th and 17th Sts., 18 ft. wide. Work involves 25,800 sq.yd. concrete, 1800 lin.ft. concrete curb and 1500 lin.ft. concrete gutter. Cost between $25,000 and $30,000.

Ia., Hedrick—Until May 27, by town, for 15,000 sq.yd. paving, brick, asphalt, bitulithic or concrete, involving 8000 ft. concrete curb and gutter, and 1500 cu.yd. excav. About $50,000. H. R. Green, Cedar Rapids, engr.

Ia., Reinbeck—Until May 21, by R. B. Ferguson, clk., improving streets, involving 38,300 sq.yd. vitr. block, asphaltic concrete, sheet asphalt or bitulithic paving, 20,800 lin.ft. combined curb and gutter. J. G. Thorne, 317 Howes Blk., Clinton, engr.; advertised in this issue. Noted Apr. 17.

Minn., Benson—Until May 22, by D. P. Carney, aud. Swift Co., building 19.6 mi. Federal Aid Project No. 48, State Rd. No. 11, 20 ft. wide, in 3 sections, involving 95,829 cu.yd. excav., 77,860 sq.yd. concrete, asphalt or brick pavement, also building one 40 ft., two 50 ft. and one 56 ft. span bridges. L. R. Johnson, Benson, engr.

Minn., Cambridge—Until May 29, by F. A. Narell, aud. Isanti Co., grading and graveling 5½ mi. Project No. 41, State Rd. No. 1, 20 ft. wide. About $80,000. P. M. Torell, Cambridge, engr. Noted Apr. 10.

Minn., Chaska—Until May 27, by W. Schimelpfenig, aud. Carver Co., building 2½ mi. Job No. 1908, Sects. 3 and 10, in Waconia Twp. About $30,000. W. H. Tischer, Waconia, engr.

Minn., Duluth—Until May 18, by city, grading 8 blocks Winona St., 3100 ft. long, 55 ft. wide, with 18 ft. roadbed, cost, $10,009; paving 3rd alley from 21st to 22nd Aves., W., 400 ft. long, 16 ft. wide, one course concrete, concrete curbs, $2199; building 400 ft. 8 in. sanitary sewer in London Rd. from 20th to 21st Aves., E., $766.

Minn., Glenwood—Until June 5, by O. Irgens, aud. Pope Co., building Federal Aid Project No. 47, State Rd. No. 2. L. Martine, Glenwood, engr. Noted May 1.

Minn., Minneapolis—Until May 26, by Comrs. Hennepin Co., paving 5½ mi. Lyndale Ave. from city limits to Ft. Snelling-Shakopee Rd., 24 ft. wide. About $200,000. E. E. Terrell, co. engr.

Minn., Stillwater—Until May 26, by N. A. Nelson, aud. Washington Co., grading and graveling 5 mi. Project No. 42, State Rd. No. 3, 20 ft. wide. About $45,000. Work involves hauling 11,212 cu.yd. gravel surfacing material, 60,233 cu.yd. earth and 4096 cu.yd. rock excav.

Neb., Albion—Until June 4, by J. H. McClintick, clk. Boone Co., grading and surfacing 21.4 mi. Genoa-Albion Rd., 24 ft. wide, Nance and Boone Counties, involving 136,274 cu.yd. excav., 3196 cu.yd. sand-clay surfacing and 121 cu.yd. concrete, etc. About $55,000.

Neb., Blair—Until June 3, by M. C. Debel, clk. Washington Co., grading 33.3 mi. Blair-Oakland Rd., 24 ft. wide, Washington and Burt Counties, involving 198,250 cu.yd. excav. and 18 yds. concrete, etc. About $100,000.

Neb., Geneva—Until May 29, by C. Underwood, clk., paving 10½ blocks involving 31,835 sq.yd. vitr. brick, asphalt or concrete on 5 in. concrete base, 475 lin.ft. curbing, 8650 lin.ft. guttering and 2160 cu.yd. excav. About $130,000. Grant & Fulton, 505 Bankers Life Bldg., Lincoln, engr.

Neb., Lincoln—Until June 2, by W. L. Minor, clk. Lancaster Co., grading 37 mi. Lincoln Beatrice Rd., 24 ft. wide, Lancaster and Gage Counties, involving 234,750 cu.yd. excav. and 165 cu.yd. concrete, etc. About $100,000.

Nebr., Lincoln—Until May 24, by T. H. Berg, clk., paving 2230 ft. Ryons Ave. and "T" St., 25 ft. wide. Work involves 4300 sq.yd. asphalt, 1800 sq.yd. asphaltic concrete, 4560 lin.ft. combined curb. and gutter, 900 cu.yd. earth excav. and 6100 sq.yd. on 5-in. concrete base. About $19,700. G. W. Bates, city engr.

Neb., Madison—Until May 26, by Clk., paving Madison, Pearl and 3rd Sts., 24-56 ft. wide, involving 29,296 sq.yd. vertical fibre brick on 5 in. concrete base, 14,504 lin.ft. concrete curbing and 6190 cu.yd. earth excav. About $130,709. W. D. J. Steckelberg, city engr. Noted Apr. 17.

Neb., Tryon—Until May 19, by McPherson and Logan Counties, improving Stapleton-Ringold Rd., 24 ft. wide, involving 11,690 cu.yd. sand clay surfacing and 62,564 cu.yd. earth excav. G. E. Johnson, Lincoln, state highway engr.

N. D., Minot—Until June 3, by Comrs. Ward Co. building 5.04 mi. Federal Aid Project No. 25, gravel. W. H. Robinson, Bismarck, state highway engr.

N. D., New Rockford—Until June 4, by Comrs. Eddy Co. building 5.5 mi. Federal Aid Project, No. 6, gravel. W. H. Robinson, Bismarck, state highway engr.

Ark., Marshall—Until July 1, by Winn Eng. Co., engrs., 207 Riegler Bldg., Little Rock, building 12 mi. gravel road, 18 ft. wide, in Rose Impvt. Dist. No. 1, cost $50,000; 63 mi. macadam road, 18 ft. wide, Witt Springs Highway Impvt. Dist., $450,000, for Searcy Co.

Tex., Seguin—Until May 20, by Guadalupe Co. paving and draining 3.256 mi. Texas Post Rd. from Comal line south to Baxar Co. line, 15 ft. wide, base and top course of gravel with bituminous surface treatment, etc. T. E. Hess c/o Hess & Skinner, South Western Life Bldg., Dallas, engr.

Streets and Roads (Continued)

Wash., Seattle—Until May 27, by Comrs. King Co., grading and paving 4.5 mi. Pacific Highway from Kent to Auburn, 20 ft. wide. Work involves 51,769 sq.yd. (a) concrete or (b) brick and 5000 cu.yd. grading. Cost (a) $126,000, (b) $170,000. S. J. Humes, co. engr.

Ore., Portland—Until May 22, by Comrs. Multnomah Co. grading and placing concrete culverts on County Rd. No. 932, from Willamette Blvd. to Russell St. R. W. Hoyt, chn.

Quebec—Provincial Government, Quebec, receiving bids building waterbound macadam roads as follows: 90 mi. St. Therese Highway, 90 mi. Sherbrooke-Beauce Highway, 60 mi. Montreal-Laurentian Highway, 90 mi. Three Rivers-Richmond Highway, 76 mi. Fraserville-Edmundston Highway, 100 mi. Montreal Sherbrooke Highway, 20 mi. Three Rivers-Grand Mere Highway, 123 mi. Levis-Fraserville Highway.

Que., Bury—Until June 2, by G. A. Atkins, secy.-treas., building 7.5 mi. Beauceville-Sherbrooke Rd.

Que., Chateau Richer—Until May 16, by N. Taillon, secy., twp. council, graveling 4 mi. roads and building concrete bridge. G. Henry, Parliament Bldg., Quebec, engr.

Que., Perce—Until June 1, by P. Lebouthillier, secy. twp. council, graveling 6 mi. road from here to Anse au Beaufils. G. Henry, Parliament Bldg., Quebec, engr.

Que., Quebec—Until May 21, by W. D. Baillarge, city engr., paving with sheet and stone filled sheet asphalt and other material Charlesbourg and Beauport Rds. About $50,000. Noted Mar. 6.

Ont., Toronto—Until May 27, by T. L. Church, chn. bd. control, paving with asphalt and building concrete curbs and sidewalks on Arundel, Bartlett and Sourauren Aves., and Runnymede Rd. About $100,000. R. C. Harris, City Hall, engr.

Man., Pipestone—Until May 19, by G. F. Birney, secy.-treas., grading 12½ mi. roads.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston——City let contract to Gore Constr. Co., Inc., Boston, paving Burlington St., involving 2000 ft. granite block, 700 lin.ft. stone curbing, 575 sq.yd. sidewalks, 700 cu.yd. earth excav., $7049; Shirley St., 2225 sq.yd. granite block, 845 lin.ft. stone curbing, $3910.

★N. Y., Long Island City—M. E. Connolley, pres. Queens Boro., let contracts regulating and repaving 4th St., to Scott & Kurth, West Brighton, S. I., $5631; East Ave. and 13th St., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $13,038 and $45,255 repectively; Hamilton St. and Jackson Ave., to Borough Asphalt Paving Co., 1301 Metropolitan Ave., Brooklyn, $40,678 and $41,820 repectively; 1st Ave., to Hastings Paving Co., 25 Broad St., New York City, $16,853; Jackson Ave., to Cleveland Trinidad Paving Co., Flushing, $121,625; Jackson Ave. Bridge Plaza, to P. J. Kelly, $49,936. Noted May 1.

★N. Y., New York—H. Bruckner, Pres. Bronx Boro., let contracts, to Spadera Contg. Co., 277 East 217th St., regulating, grading, etc., Corlear Ave., $29,769; Leonard Paving Co., 233 Bway., Morris Park Ave., $140,744; to Uvalde Asphalt Paving Co., 1 Bway., Bathgate Ave., $11,280; East 178th St., $8472; to Asphalt Constr. Co., 2197 Madison Ave., Intervale Ave., $15,083; Clay Ave., $10,464; Walton Ave., $26,925; to Davney Asphalt Co., 1170 Bway., East 163rd St., $9915; Wistor St., $7019; to Union Paving Co., Bway and 112th St. East 177th St., $62,593. Noted May 1.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contracts regulating and repaving, with sheet asphalt on concrete foundation, 10th Ave. and 43rd St., to Davey Asphalt Co., foot of Quinby Ave., $19,072 and $8019 respectively; with granite blocks, 7th Ave., to W. J. Fitzgerald, 547 West 45th St., $129,594; Greenwich St., to J. J. B. La Marsh, 57 Cooper Sq., $105,588; 4th Ave., to Burnside Contg. Co., 270 Burnside Ave., $13,121. Noted May 1.

N. Y., Rome—Bd. Pub. Wks. received only low bid from Warren Bros. Co., Rome, paving North George St. from Linden to Sycamore Sts., $22,063; Embargo St. from Roberts to James Sts., $5245; Jay St. from Embargo to Elm Sts., $23,980. Noted May 1.

★N. Y., S. I., St. George—C. D. Van-Name, pres. Richmond Boro., let contract regulating and repaving, Forest Hill Rd., to J. Johnson Sons, West New Brighton, $18,332. Noted May 8.

N. Y., Utica—City received only bid from H. Roberts Co., 610 Lansing St., paving with (a) sheet asphalt, (b) bitulithic, (c) asphaltic concrete, Eagle St. from Conkling to Seymour Aves., (a) $15,971, (b) $16,229, (c) $15,325; resurfacing Brinkerhoff Ave. from Mortimer to Square Sts., (a) $14,760, (b) $15,112, (c) $13,880; Neilson St. from Mortimer to Eagle Sts., (a) $5861, (b) $5983, (c) $5557.

★N. Y., Watertown—City will pave 58,000 sq.ft. concrete sidewalks and 16,000 sq.yd. macadam roads. Work will be done by day labor.

New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, received bids May 7, (a) grading and paving with concrete 3.575 mi. Rio Grande-Wildwood Junction Rd., involving 37,734 sq.yd. concrete pavement and 6609 cu.yd. earth excav.; (b) 2.025 mi. Wildwood Junction-Cape May Court House Rd., both 18 ft. wide with two 3-ft. gravel shoulders, 21,386 sq.yd. concrete pavement and 3789 cu.yd. earth excav., from E. R. Minner, Goshen, (a) $114,687, (b) $71,646; W. P. McDonald Constr. Co., 1110 Penn Sq. Bldg., Phila., (a) $117,284, (b) $68,085; Cassedy & Homan, Cape May City, (a) $118,624, (b) $69,275.

★Pennsylvania—State Highway Comn., Harrisburg, let contracts building roads in counties as follows:

Blair Co., 5443 ft. rein.con., to L. Brua, Holidaysburg, $29,987;

Cambria Co., 16,177 ft. vitr. brick, R. R. Myers, Lewistown, $166,318;

Centre Co., 32,100 ft. bituminous surface on concrete foundation and Hillside vitr. brick, Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $249,332;

Chester Co., 21,626 ft. rein.-con., McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $150,314; 2334 ft. rein.-con., Manwaring & Cummins, 24-32 East Church Lane, Germantown, $20,981;

Clarion Co., 1842 ft. vitr. brick, L. H. Hileman Constr. Co., 1st Natl. Bank Bldg., New Kensington, $25,812;

Luzerne Co., 22,452 ft. bituminous surface on concrete foundation, Eastern Paving Co., Colonial Trust Bldg., Phila., $160,854; 10,560 ft. rein.-con., T. W. Reilly & Co., Lancaster, $102,426.

Tioga Co., 26,310 ft. rein.-con., Warren Moore & Co., 13th and Market Sts., Phila., $217,563;

Warren Co., 10,717 ft. rein.-con., J. McCormick & Bro., Erie, $69,540;

Juniata Co., 8414 ft. rein.-con. and Hillside vitr. brick, J. B. Trexler, Reading, $54,530. Noted May 8.

★Pa., Ardmore—Comrs. Lower Merion Twp. let contract surface treating 94,000 sq.yd. road to M. Gibbons, Lansdowne. Noted Apr. 17.

Pa., Ebensburg — Supervs. Summerhill Twp., c/o Controller Cambria Co. received 3 lowest bids building 1.06 mi. brick road on concrete base, leading from Beaverdale to Wilmore, in Summerhill Twp., from J. E. Neapolitana, Johnstown, $43,114; F. L. James, Uniontown, $53,613; Portage Concrete Constr. Co., Portage, $58,604. Noted May 1.

Pa., Ebensburg—Supervs. Lower Yoder Twp., c/o Controller Cambria Co. received 3 lowest bids building 1.82 mi. brick road on concrete base leading from Johnstown city line to Lower Yoder Twp. line, from Ressler & Griffith, Johnstown, $97,420; Bell-Bockel Co., Inc., Central Trust Bldg., Altoona, $99,877; E. A. James, Johnstown, $111,899. Noted May 1.

★Pa., Export—Boro let contract grading, curbing and paving Westmoreland St. to L. F. Edwards & Bro., Greensburg, $14,494. Noted Apr. 24.

★Pa., Pittsburgh—Allegheny Co. let contract building 5300 ft. Renton Rd. from Renton to New Texas, Plum Twp., 18 ft. wide, Telford macadam, to L. H. Hileman, 1st Nat'l Bank Bldg., New Kensington, $64,968. Noted Apr. 24.

★Pa., Pittsburgh—City let contracts, to T Cronin, 17th and Muriel Sts., grading, paving and curbing Hampshire Ave. from Bway. to Napoleon St., cost $18,991, Warrington Ave. from Montooth St. to West Liberty Ave., $132,921, Realty Ave. from Crosby St. to Bway., $22,452, Creedmore Ave. from Brookline Blvd. to Freedom St., $25,720; to Booth & Flynn, 1942 Forbes St., Oakridge Ave. from Chelton to Creedmore Aves., $4296, Stevenson St. from Bluff St. to end of pavement, $9013; to Pittsburgh Paving Co., Bakewell Bldg., Tonapah Ave. from Belasco St. to Bway., $11,061. Noted Apr. 17.

★Pa., Scranton—Lackawanna Co. let contract repairing road running from Luzerne Co. line to Susquehanna Co. line, to Gaynor Contg. Co., Love Rd. and Carbon St. About $20,000. Noted Apr. 17.

★Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract paving 0.23 mi. road over Allen Mill Dam, 15 ft. wide, concrete, Contr. No. 094-A, Wicomico and Somerset Counties, to Aetna Constr. Co., 1107 Amer. Bldg., Baltimore. About $10,000. Noted May 1.

★Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract paving 1.18 mi. Monroe St. from Eagle to Mosher Sts., 39 ft. wide, sheet asphalt on 6 in. concrete base, Baltimore City Contr. BC-29A, to Union Paving Co., 119 Lafayette St., Schenectady, N. Y., $100,622; 2.5 mi. State Highway from Grove to Bureau, 15 ft. wide, concrete, Contr. CO-18, Caroline Co., to Peninsula Constr. Co., Berlin, Md., $79,456; 1.76 mi. State Highway through Rockville, 15 ft. wide, concrete, Contr. M-17, Montgomery Co., to Fisher & Carrozza, 802 Calvert Bldg., Baltimore, $67,463. Noted Apr. 24.

★Md., Baltimore—Morgan Park Co., Lauraville (suburb), let contract building roads in Morgan College and Community Development, 15 ft. wide, macadam and crushed stone, involving 10,000 cu.yd. excav., to H. O. Firor, 1707 Pratt St., Baltimore, $10,235; also building terra cotta and iron pipe sewers, in Morgan College Development, to A. F. Fedli Co., 403 Vickers Bldg. About $8000.

W. Va., Beckley—Raleigh Co. received only bid May 6, building 4 mi. Besoco-Odd Rd., from G. T. Franklin, Charleston. Project involves 16.5 acres clearing, $85 per acre; 35,600 cu.yd. excav., $.87; 50.5 cu.yd. 1:2:4 concrete, $22; 6683 lb. steel, $.12; Harper Rd. from Sta. O to Sta. 125, invovling 12,500 sq.yd. pavement and 8330 broken stone shoulders, Surveyor Marshes Rd., 20,750 sq.yd. pavement and 6917 sq.yd. stone shoulders; Guyandote Rd., from Sta. 38 to Sta. 163, 20,750 sq.yd. pavement, and 8330 sq.yd. stone shoulders, from Henning Hagedorn, Inc., Charleston, concrete, 16 ft. wide, $2.08; 9 ft. wide, $2.10; bituminous macadam (oil asphalt), 16 ft. wide, $1.74; 9 ft. wide, $1.76; bituminous macadam (coal tar product) 16 ft. wide, $1.62; 9 ft. wide, $1.64; bituminous macadam (natural asphalt) 16 ft. wide, $1.86; 9 ft. wide, $1.88; broken stone shoulders, 2½ ft. wide on each side of 9 ft. pavement, with concrete, $.75, with macadam $.60. Noted May 1.

★W. Va., Clarksburg—Comrs. Harrison Co. let contract building 1 mi. Mt. Clare Ave., to Allen & Hornor, Clarksburg, $48,982; 1.5 mi. Wolt Summit Rd., to Salem Constr. Co., Salem, $68,039; 1.5 mi. Johnson's Run Rd., to A. Fiora, Clarksburg, $56,065; 2 mi. Clarksburg and Fairmont Rd., to Ferguson & Holbert, Shinnston, $95,856. Noted Apr. 17.

★W. Va., Weston—Comrs. Lewis Co. will grade and pave 1¼ mi. Buckhannon Turnpike, 16 ft. wide, involving concrete curbing and 10,000 sq.yd. vitr. brick, on 4 in. concrete base. Work will be done by day labor. Excavation let, to D. Fuccy, Weston. Total cost, $50,000. Noted Apr. 17.

★Ga., Atlanta—City let contracts, to McDougald Constr. Co., paving Whitehall St., granite, cost $27,427, Pryor St., granite and asphaltic concrete, $24,943, Simpson St., asphalt on granite blocks, $15,757; to Meador Constr. Co., Healy Bldg., Juniper St., concrete, $60,205; Pittman Constr. Co., Rhodes Bldg., Marietta St., granite blocks and asphaltic concrete, $116,892. Noted Mar. 20.

★Ga., Augusta—City let contract for 55,000 sq.yd. concrete pavement on Walton way from 15th St. to Monte Sano Ave., to Lawrence Constr. Co., 127 Eighth St., and A. B. Crump Constr. Co., Macon, $162,892. Noted Apr. 17.

★Ala., Sheffield—City let contract paving streets with bitulithic, to Crinkley Constr. Co., Harriman, Tenn. About $200,000.

★Miss., Clarksdale—Bd. Supervs. Coahoma Co. let contract grading and graveling 22 mi. concrete roads, 14 ft. wide, to McTighe-Hughey Co., Memphis, Tenn. Noted Feb. 13.

Streets and Roads (Continued)

Louisiana—State Highway Dept., New Orleans, received lowest bid building 15 mi. Orleans-Chef Menteur Highway, from Blakemore Constr. Co., New Orleans, $90,005. Noted Apr. 10.

★Ohio—State Highway Comn., Columbus, let contracts building roads as follows:

Holmes Co., Sect. "H-1," Millersburg-Canal Dover Rd., 2.5 mi., grading, constructing bridges and culverts to L. B. Wilson, Newark, $21,306.

Knox Co., Sect. "A-2," Mt. Vernon-Newark Rd., 3.79 mi. grading, constructing bridges and culverts and paving with monolithic brick, Dorsey Contr. Co., Findlay, $162,759.

Marion Co., Sect. "F," Marion-Kenton Rd., 5.36 mi. grading, constructing bridges and culverts and paving with bituminous macadam, Brady & O'Connell, Marion, $134,767.

Tuscarawas Co., Sect. "O-1," Millersburg-Canal Dover Rd., 1.5 mi. grading, constructing bridges and culverts and paving with concrete, Springer & Rogers, New Philadelphia, $41,686.

Vinton Co., Sect. "G-2," McArthur-Athens Rd., 1.06 mi. grading, constructing bridges and culverts and paving with concrete, E. N. Turner, Logan, $26,820.

Washington Co., Sect. "J-1," Marietta-Caldwell Rd., 3.027 mi. grading, constructing bridges and culverts and paving with plain concrete. Appenzeller, Stokley & Frieman, Greenville, $94,413. Noted May 8.

★O., Akron—City let contract repaving South Main St. from West Thornton St. to south line West Crosier Sts., 5 in. granite (cement) block, to Columbus Asphalt Paving Co., Citizens Bank Bldg., Columbus, $66,355. Noted Apr. 10.

★O., Edgerton—City let contract paving 2800 ft. Michgan Ave. from Hull to Sargent Sts., 16-66 ft. wide, 7½ in. rein-con., to Clemers & Johnson, Hicksville, $52,518. Noted Apr. 24.

★Ind., Portland—Comrs. Jay Co. let contract building 2 1/5 mi. road from Meridian St. west on Votaw St. to Wayne-Green Twp. line, to L. E. Beard, Portland, $56,185.

★Michigan—State Highway Comn., Lansing, let contracts, to Berrien Constr. Co., Benton Harbor, grading 5.435 mi. Sect. A, Federal Aid Project No. 24, 16 ft. wide, Berrien Co., cost $27,241, paving 1.469 mi. Sect. C, waterbound macadam, 16 ft. wide, $30,271; Federal Asphalt Paving Co., 316 Rentschler Bldg., Hamilton, paving 1.03 mi. Sect. B, bituminous concrete, 18 and 41 ft. wide, Berrien Co., $64,412; G. F. Scharl, Battle Creek, 5.253 mi. Federal Aid Project No. 28, 16 ft. wide, Branch Co., $125,910; Butler Constr. Co., Milwaukee, Wis., 1.816 mi. Federal Aid Project No. 36, bituminous concrete, 16 ft. wide, Ingham Co., $60,595; H. A. and M. C. Nichols, Hastings, 16.916 mi. Sect. 1 Assessment Dist. Rd. No. 62, 16 ft. wide, Class "B" gravel, Ionia and Kent Counties, $54,518; Banhagel Constr. Co., Ionia, 5452 sq.yd. Sect. 2, $11,040. Noted Mar. 13 and 27.

★Mich., Detroit—City let contract, to Detroit Asphalt Paving Co., 20 McGraw Bldg., paving with asphaltic concrete on concrete base, Berea or Amherst curbstone, Celeron St. from Junction to Cavalry Aves., $14,922; Greeley Ave. from Wellington to Holbrook Aves., $19,827; Marquette Ave. from Wabash to Lawton Aves., $36,337; Springwells Ave. from Ferndale to Dix Aves., $27,326; Cleveland Trinidad Paving Co., 2940 Woodward Ave., Goodwin Ave. from Caniff Ave. to northerly city limits, $17,817 and from Holbrook to Owen Aves., $8845; Woodland Ave. from Oakland Ave. to Detroit, Grand Haven and Milwaukee Ry., $24,060; W. B. Brady Constr. Co., 1972 Grand River Ave., Longfellow Ave. from Linwood to Lawton Ave., $17,275; J. Porath, 34 McGraw Bldg., Colby Ave. from Russell St. to Detroit and Bay City R. R., brick on 6 in. concrete foundation, $5105; all 26 ft. wide; R. Porath, 1131 McKinley Ave., Gould St. from Grossley to Anderson Sts., 20 ft. wide, brick on 6 in. concrete foundation, $2731. Noted May 8.

Mich., Detroit—Dept. Pub. Wks. received bids paving (a) Distel Ave. from Fort to Olivet Sts., 26 ft. wide, (b) Gartner Ave. from Beard St. to Lawndale Ave., 26 ft. wide, (c) Senator Ave. from Beard St. to Lawndale Ave., 26 ft. wide, all asphaltic concrete, Amherst curbstone, (d) Alley No. 985, T alley between Lawton, Linwood, Lathrop and Northwestern Aves., 18 ft. wide, (e) Alley No. 986, E and W alley between La Salle Blvd., 14th St., West Grand Blvd. and Lathrop Ave., 20 ft. wide, (f) Alley No. 987, E and W alley between Elmwood, Moran and Medbury Aves. and East Grand Blvd., 20 ft. wide, (g) Alley No. 988, N and S alley in block between Maxwell, Seminole, Canfield and Forest Aves., 20 ft. wide, (h) Alley No. 989, south of and parallel to Michigan Ave. between 24th and 25th Sts., 20 ft. wide, (i) Alley No. 990, N and S, in block between Field, Sheridan, Gratiot and Forest Aves., 20 ft. wide, all one course concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $8995, (b) $54,052, (c) $52,817; Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $9168, (b) $54,589, (c) $53,342; W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $9025, (b) $54,983, (c) $53,469; R. J. Powelson & Co., 1577 Iroquois Ave., (d) $4784, (e) $4331, (f) $4472, (g) $3987, (i) $4607; Talbot Co., Penobscot Bldg., (d) $4798, (e) $4372, (h) $1793; E. Meredith & Co., 145 Harper Ave., (d) $4635, (e) $4199, (f) $4257, (i) $4612; Corrick Bros., 507 Owen Bldg., (f) $4396, (g) $3697, (i) $4205; T. E. Currie, 20 McGraw Bldg., (g) $4057; Otis Cement Constr. Co., 806 Hammond Bldg., (h) $1995; R. Porath, 1131 McKinley Ave., (h) $1803. Noted May 1.

★Mich., Grand Rapids—Comrs. Kent Co. let contracts to W. H. Clark, Grand Haven, paving 3 mi. Assessment Dist. Rd. No. 13, east from Dutton, $58,212; H. A. Hoxie, Grand Rapids, 3½ mi. Assessment Dist. Rd. No. 18, on Knapp Ave., $72,809, both 16 ft. wide, concrete. Noted Mar. 6.

★Mich., Hart—Comrs. Oceana Co. let contract grading and building drainage structures on 6 mi. Federal Aid Rd. No. 1, Sect. B, 24 ft. wide, in Grant Twp., to I. Butzer, Hart, $15,000.

Illinois—State Highway Comn., Springfield, received bids May 1, paving roads in following counties: (a) Clark Co., 2000 ft. Sect. E, Route 7, 10 ft. wide; (b1) Green Co., 5200 ft. Sect. F, Route 5, 24 ft. wide; (b2) 3173 ft. Sect. H, Route 3, 24 ft. wide;

(c1) De Witt Co., 16,698 ft. Sect. F, Route 11, 24 ft. wide; (c2) 9000 ft. Sect. G, Route 10, 24 ft. wide;

(d) Knox Co., 9300 ft. Sect. J, Route 6, 24 ft. wide;

(e1) Clay Co., 4100 ft. Sect. F, Route 6, 24 ft. wide; (e2) 2705 ft. Sect. G, Route 6, 24 ft. wide;

(f1) Cook Co., 5413 ft. Sect. 57, Route 1, 18 ft. wide; (f2) 20,276 ft. Sect. 58, Route 11C and 6B, 18 ft. wide;

(g1) Cass Co., 1063 ft. Sect. I, Route 2, 10 ft. wide; (g2) 2806 ft. Sect. J, Route 7, 10 ft. wide;

(h1) Champaign Co., 3440 ft. Sect. K, Route 2, 10 ft. wide; (h2) 5532 ft. Sect. L, Route 5, 10 ft. wide, from

J. W. Eechinson, Casey, (a) $7736.

A. C. Loomis, Mattoon, (a) $8068.

White & Braley, Litchfield, (b1) $44283; (b2) $8492; (c1) $8796; (c2) $2495; (e2) $2912.

J. Brogen, Eldred, (b1) $4227; (b2) $8464.

Cameron, Joyce & Co., Keokuk, Ia., (c1) $8956; (c2) $2632.

W. C. Meneely, Frankford, Ind., (c1) $9117; (c2) $2471.

E. A. Lord, Monmouth, (d) $4286.

H. J. Kunkle and J. E. Foster, Wataga, (d) $6710.

L. V. Chesrom, Olney, (e1) $2139.

Central Paving Co., 179 West Washington St., Chicago, (f1) $17,907.

M. Foley Co., Evanston, (f1) $17,697.

Eclipse Constr. Co., Winnetka, (f2) $65,242.

E. C. Trowbridge, Chandlerville, (g1) $1900; (g2) $6190.

Stipes & Pilcher, Champaign, (h1) $13,486; (h2) $20,501. Noted Apr. 24.

Illinois—State Highway Comn., Springfield, received bids Apr. 30, paving roads in following counties: (a1) Schuyler Co., 2571 ft. Sect. F, Route 1, 10 ft. wide; (2) 2192 ft. Sect. G, Route 2, 10 ft. wide;

(b) Warren Co., 3741 ft. Sect. G, Route 11, 16 ft. wide;

(c) Lake Co., 6060 ft. Sect. J, Route 6, 18 ft. wide;

(d) Carroll Co., 2825 ft. Sect. D, Route 8;

(e) Will Co., 10,001 ft. Sect. G, Route 13, 18 ft. wide;

(f) Bond Co., 1783 ft. Sect. E, Route 6, 10 ft. wide;

(g) Stephenson Co., 5300 ft. Sect. F, Route 1, 10 ft. wide;

(h) Cumberland Co., 11,300 ft. Sect. E, Route 1, 10 ft. wide;

(i) Adams Co., 4459 ft. Sect. E, Route 5, 15 ft. wide;

(j1) Christian Co., 9500 ft. Sect. I, Route 9, 15 ft. wide; (j2) 1800 ft. Sect. J, Route 15, 15 ft. wide; (j3) 4500 ft. Sect. K, Route 23, 15 ft. wide; (j4) 7073 ft. Sect. L, Route 20, 15 ft. wide; (j5) 10,400 ft. Sect. M, Route 3, 15 ft. wide;

(k1) Hancock Co., 13,000 ft. Sect I, Route 1, 24 ft. wide; (k2) 12,600 ft. Sect. J, Route 13, 24 ft. wide;

(l) Marshall Co., 22,810 ft. Sect. F, Route 9, 24 ft. wide;

(m) Pope Co., 9 concrete bridges, Sect. D, Route 1 and 3;

(n) Hamilton Co., 1 concrete bridge, Sect. C, Route 6;

(o) Scott Co., 1 concrete bridge, Sect. H, Route 1A;

(p) Massac Co., 5 concrete bridges, Sect. G, Route 3, from H. C. Holmes, Macomb, (a1) $5074; (a2) $5576.

Beardstown Concrete Constr. Co., Beardstown, (a1) $6127; (a2) $6558.

E. A. Lord, Monmouth, (b) $13,805; (d) $9725; (k1) $6986; (k2) $8452.

C. P. Moran, Waukegan, (c) $26,717.

Powers-Thompson Constr. Co., 221 South Chicago St., Joliet, (e) $29,067.

R. H. Newkirk, Joliet, (e) $43,623.

J. Hinden & Son, Pana, (f) $10,217.

Gund-Graham Co., Freeport, (g) $23,182.

E. Harris, Neoga, (h) $18,359.

A. C. Lomis, Mattoon, (h) $17,945.

Meyer & Peters, 313 Delaware St., Quincy, (i) $13,846.

A. O. McCoy, Versailles, (j1) $4580; (j2) $5154; (j3) $4760; (j4) $5135; (j5) $5014; (k1) $7068; (k2) $8368.

Cameron-Joyce Co., Keokuk, Ia., (k1) $7256; (k2) $8613.

Meckenson Bros., Hamilton, (k2) $8314.

B. M. Dean, Sparland, (1) $17,579.

J. Brogen, Eldred, (1) $17,548.

B. F. Clark & Son, 5052 Gates Ave., St. Louis, Mo., (m) $2300; (p) $4100.

Parnham Constr. Co., 3029 Waverly Pl., East St. Louis, (n) $4997; (o) $2947.

W. C. Johnson, Belleville, (n) $4750 on alteration design; (n) $5200 on state design.

T. Whitlock, Exeter, (o) $2400.

J. R. Sleeter, (p) $3900. Noted Apr. 24.

Ill., Chicago—Cook Co. received bids May 5, building (a) 22,729 lin.ft. Chicago-Waukegan-Milwaukee Rd. extending north from Dempster St., Morton Grove Village, 18 ft. roadway, 6 ft. earth shoulders, involving 56,891 sq.yd. 6 in. concrete pavement, 14,452 cu.yd. excav., 334 cu.yd. concrete in bridges, 14,633 lb. reinforced steel, etc.; (b) 10,241 lin.ft. Chicago-Waukegan-Milwaukee Rd. extending north from Milwaukee Ave., Niles Village, 18 ft. roadway, 6 ft. earth shoulders, 20,626 sq.yd. 6 in concrete, 4635 cu.yd. excav., 154 cu.yd. concrete in bridges, 5266 lb. reinforcing steel, etc.; (c) on 4 blocks Irving Park Blvd. from 60th to 64th Aves., 11 ft. roadway, 3334 sq.yd. concrete pavement, 782 cu.yd. excav., 38,096 lb. reinforcing steel, etc.; (1) Portland cement concrete, (2) asphaltic concrete, from Eclipse Constr. Co., Winnetka, (a1) $131,442; J. A. Rose & Co., 4651 Armitage Ave., (a1) $133,399; (b1) $48,658; (c1) $12,719; R. F. Conway Co., 133 West Washington St., (a1) $139,025; (a2) $177,473; (b1) $52,221; (b2) $65,834; Blase & Gerken, Chicago, (b1) $47,949; (c1) $11,723; E. W. Johnson, Chicago, (b1) $12,691; Reppert Constr. Co., Melrose Park, (c1) $13,085. Former bids rejected. Noted Apr. 24.

★Wis., Port Washington—City let contract grading, paving and installing 5 concrete culverts on Port Washington-Sankville-Sheboygan Rd., 16 ft. wide, 2 course rein.-con., to J. R. Griffith, St. Clair Ave., Racine, $38,000. Work involves 20,590 sq.yd. concrete.

Wis., Sheboygan Falls—City received bids paving, curbing and guttering 21 blocks Main St. and Bway., 18-20 ft. wide, involving 20,000 sq.yd. concrete, from Braun Constr. Co., North 14th St., Sheboygan, $36,815; Murphy Constr. Co., 8th St., Manitowoc, $37,510; Larson Constr. Co., 104 Main St., Oshkosh, $38,793.

★Ia., Fairfield—Comrs. Jefferson Co. let contract grading 18 mi. Blue Grass Rd., Federal Aid Project No. 3, 24 ft. wide, to Cameron & Joyce, Keokuk, $70,339. Noted Apr. 17.

★Ia., Forest City—Comrs. Winnebago Co. let contract grading 8½ mi. road from Buffalo Center to Thompson Rd., Sect. A to I inclusive, 24 ft. wide, to Wisely Bros., Forest City, $24,909. Work involves 71,197 cu.yd. earth excav.

Streets and Roads (Continued)

★Minn., Anoka—Anoka Co. let contract paving 23 blocks Federal Aid Project No. 16, State Rd. No. 1, to W. C. Harris, 2449 Pillsbury Ave., Minneapolis, $105,214. Work involves 9 acres clearing and grubbing, 86,298 cu.yd. excav., loading and hauling 22,135 cu.yd. sand clay surfacing material and 70,228 sq.yd. pavement.

★Minn., Elbow Lake—Comrs. Grant Co. let contract grading 5.09 mi. Job No. 1902, State Rd. No. 5, to Clear & Co., Herman, $12,917, concrete for above work, to T. T. Stuverud, Elbow Lake, $1010. Work involves 45,010 cu.yd. overhaul, 4474 cu.yd. side excav. and 26,982 cu.yd. earth excav., etc.

★Minn., Minneapolis—Comrs. Hennepin Co. let contract grading and graveling 5.78 mi. State Rd. No. 10, from Rd. No. 63 southwest to Co. Rd. No. 59, 18 ft. wide, to J. J. and M. S. Mergens, 401 Kasota Bldg., $30,000.

★Minn., Pipestone—Comrs. Pipestone Co. let contract curbing 42 mi. road, 24 ft. wide, to A. Zetherlung, Pipestone, $7724; paving, to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $79,763, also for 6687 cu.yd. grading, $0.88, 33,095 sq.yd. paving, $2.19. Noted May 1.

★Minn., St. James—City let contract paving 30 blocks to Hanon & Okes, 338 Lumber Exch., Minneapolis. About $140,000. Noted Apr. 17.

★Neb., Harrington—Cedar and Wayne Counties let contract grading and building culverts on 38 mi. Cedar-Wayne Rd., 24 ft. wide, to E. Peterson Co., 705-7 W. O. W. Bldg., Omaha, $41,123 and H. W. Culver, Hartington, $34,556; culverts to Giles & Co., Sioux City, Ia., $12,281. Noted Mar. 27.

★Neb., North Platte—Lincoln Co. let contract grading 19 mi. North Platte-Sutherland Rd., 24 ft. wide, involving 98,171 cu. yd. excav., to C. T. Whalen, North Platte, $36,660. Noted Mar. 27.

★Mont., Butte—City let contract paving Granite St. from Montana to Emmet Sts., bitulithic, to J. C. McGuire, Butte, $84,838.

★Ark., Harrisburg—Comrs. Poinsett Co. let contract building 13 mi. graded earth road in Rd. Impvt. Dist. No. 2, 22 ft. wide, to D. Smith, Marked Tree, $32,766. Work involves 79,900 cu.yd. earth excav., $0.34 per cu.yd.; 15 acres clearing and grubbing, $100 per acre; 28 cu.yd. rein.-con., $18 per cu.yd.; 55 cu.yd. plain concrete, $16 per cu.yd.; 630 lin.ft. 18-in. corrugated pipe $3.00 per lin.ft. and 236 lin.ft. 24-in., $3.50 per lin.ft.

★Washington—State Highway Bd., Olympia, let contract paving 6 mi. Pacific Highway from St. Clair to Nisqually, Thurston and Pierce Counties, involving 7533 sq.yd. 1-course concrete, 675 sq.yd. rein.-con., 2285 cu.yd. grading, and 768 lin.ft. rein.-con. guttering, to Allred, James & Hendricks, Centralia, $21,226. Noted Apr. 17.

★Washington—State Highway Bd., Olympia, let contract grading, draining and surfacing 6.2 mi. North Central Highway from Mohler to Harrington, involving 10,773 cu.yd. gravel surfacing, 29,235 cu.yd. grading and 9886 cu.yd. rock, to W. J. Smith & Co., Ritzville, $64,996. Noted Apr. 24.

Wash., Bremerton—City received bids grading and paving 4th Ave., from Pacific to High Sts., involving 11,000 sq.yd. concrete, 10,000 lin.ft. concrete curbing, sewers, etc., from R. H. Travers, Seattle, $47,335; W. O. Bullett, Bremerton, $48,271; S. Mocerl, Seattle, $48,425. Noted Mar. 27.

★Wash., Seattle—Bd. Pub. Wks. let contract building Fairview Ave. North Trestle roadway, involving 5250 cu.yd. grading, 7000 lin.ft. piling, 220,000 ft. lumber and 98,000 ft. planking, to Hansen & Hauge, 105 North 84th St., $17,908.

★Wash., Spokane—City let contract grading, curbing, building sidewalks and retaining wall on Trent Ave., et al, to De Camp Bros. & Hughes, $23,550. Noted Apr. 10.

★Oregon—State Highway Comn., Salem, let contracts grading and macadamizing 2.7 mi. Yamhill-Nestucca Highway, Grand Rd. Sect., Yamhill Co., to N. Trent, McMinnville, about $35,396; grading and graveling Columbia Highway, Echo-Morrow Co. Line, Umatilla Co., to Porter & Conley, Ry. Exch. Bldg., Portland, about $180,553; The Dallas-Seuferts Rd., to United Contg. Co., Northwest Bank Bldg., Portland, $46,430; paving 6.2 mi. Oregon Washington Highway, Milton-Washington State line, Umatilla Co., and 9 mi. Adams Athena Rd., to Warren Constr. Co., Journal Bldg., Portland, about $105,051 and $170,085, respectively; 1.7 mi. John Day River Highway, Wheeler Co., to Copenhagen Bros., Henry Bldg., $8039; grading 1000 ft. Pacific Highway, Divide Overhead Approaches, Lane Co., to A. Johnson, Grants Pass, $12,389. Noted Mar. 13, 20 and 27.

★Oregon—State Highway Comn., Portland, rejected bids received Apr. 15, improving following roads: 8.3 mi. Amity-Holmes Gap Rd., Yamhill and Polk Counties; 8 mi. Sheridan-McMinnville Rd., Yamhill Co.; 10.4 mi. Yoncalla Rd., Douglas Co., and 13 mi. Myrtle Creek-Dillard Rd.; 3 mi. Walker-Cottage Grove Rd., Lane Co. Work will be done by day labor. Noted Apr. 10.

★Ore., Astoria—City let contract hard surfacing Astor St. from 2nd to 10th Sts., to Miller & Bauer, Astoria, $125,980. Noted Apr. 3.

Ore., Astoria—City received lowest bid replanking Bond St. with 4 in. lumber and paving Taylor Ave. from west line McClure to Hull Aves., with concrete sidewalk 8 ft. wide, from S. Rytsala, Astoria, $18,400. Noted Feb. 27.

Railways

PROPOSED WORK

Illinois—East St. Louis Ry., 7 Collinsville Ave., East St. Louis, plans to extend electric railway line 5 mi., from east approach Free Bridge to Monsanto Chemical Wks., 2 mi. south of East St. Louis. H. Merker, ch. engr.

Washington—Chehalis, Cowlitz & Cascade Ry., Chehalis, plans to extend line 10 mi. from Onalaska to Winston Creek. W. R. Rehm, Chehalis, mgr.

BIDS DESIRED

Pennsylvania—Until May 24, by Bd. Comrs. Mt. Lebanon Twp., (Pittsburgh P. O.) rebuilding track of Pittsburgh Ry. on Washington Rd. also grading and repaving between rails of tracks. Work involves 3700 ft. track, 3000 sq.yd. vitr. brick on 6-in. concrete base. McCully Eng. Co., 709 Berger Bldg., Pittsburgh, engrs. Noted May 1.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Oregon—Port of Astoria Comn., Astoria, let contract laying belt line track on Astor St. from 2nd to 10th Sts., to Miller & Bauer, Astoria, $14,197, cost plus percentage basis. Work involves 75 tons steel rails.

Excavation and Dredging

PROPOSED WORK

Mich., Detroit—Excavation—See "Streets and Roads."

BIDS DESIRED

Ind., Hartford City—Drainage—Until May 20, by Blackford Co. Surveyor, building Beach drain consisting of 28,155 ft. open work, 10,577 ft. tile work. B. E. Peck, supt. constr.

Mich., Grosse Pointe—Excavation—See "Streets and Roads."

Ill., Edwardsville—Irrigation—Until July 1, by G. Smart, P. O. Box 123, digging irrigation ditches on part of 900 acre farm near here. About $15,000. Laud & Smart, Wright Bldg., East St. Louis, engrs.

Minn., Gaylord—Ditch—Until June 3, by F. Hoppenstedt, aud. Sibley Co., building Judicial Ditch No. 7, in Sibley, Nicollet and Renville Counties. Work involves removing 953,192 cu.yd. open ditch suitable for dry land machine and 3612 cu.yd. open work for team work, cost, $77,156; 163,305 lin.ft. tile laterals, $85,185. J. W. Richardson, New Auburn, engr.

Minn., Stillwater — Excavation — See "Streets & Roads."

Ont., Sarnia—Dredging—Until May 22, by city, dredging and laying steel intake pipe and concrete crib in St. Clair River, near here. J. D. Stewart, clk. F. W. Thorold, 167 Avenue Rd., Toronto, consult. engr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Minn., Anoka—See "Streets & Roads."

★Minn., Elbow Lake—Excavation—See "Streets and Roads."

Industrial Works

PROPOSED WORK

Mass., Athol—See "Buildings."

Mass., Boston—C. C. Whittemore plans to build 2 story, 32 x 135 ft. brick and concrete storage plant on Boylston and Ipswich Sts. About $30,000.

Mass., Fall River—J. J. Burke plans to build 2-story, 50 x 150 ft. brick and rein.-con. garage, rein.-con. flooring, concrete foundation. About $30,000. Fallows & McLauglin, 56 North Main St., archts.

Mass., Gardner—Central Oil & Gas Stove Co. soon receives bids building 1 story, 50 x 120 ft. and 3 story, 40 x 50 ft. brick, steel and concrete additions to factory, rein.-con. flooring, concrete foundation. About $40,000.

Mass., Holyoke—Goetz Silk Mfg. Co., 642 South Sumner St., soon lets contract building brick and steel addition to plant, rein.-con. flooring, concrete foundation. About $60,000. C. T. Main, 201 Devonshire St., Boston, engr.

Mass., Springfield—Natl. Equipment Co., 662 North Main St., plans to build 3-story, 100 x 372 ft. and 35 x 162 ft. rein.-con addition to factory. About $200,000.

Mass., Warren—Warren Steam Pump Co. soon receives bids building 1 story, 85 x 200 ft. factory, 1 story, 40 x 130 ft. boiler house and 1 story 40 x 130 ft. office addition, brick and concrete, rein-con. flooring, concrete foundation. About $75,000.

R. I., Providence—M. Nahigan, 1023 Broad St., soon receives bids building 1-story, 106 x 120 ft. brick, concrete and steel garage, rein.-con. flooring, concrete foundation, on Broad and Gallatin Sts. Cost between $40,000 and $45,000.

R. I., Providence—W. R. Walker & Son, archts., 17 Custom House, soon receive bids building 2-story, 58 x 110 ft. brick and rein.-con. fireproof garage, rein.-con. flooring, concrete foundation, on Friendship St., for P. H. Quinn, 1411 Turks Head Bldg. About $50,000.

R. I., Woonsocket—Jarret & Proulx soon lets contract building 2-story, 75 x 150 ft. brick and mill construction mill, wood flooring, concrete foundation, on Park Ave. About $60,000. W. F. Fontaine, 285 Main St., archt.

Conn., Bristol — Barnes-Wallace Co., 30 Main St., soon receives bids building 1 story, 60 x 100 ft. fireproof addition to factory, rein.-con. flooring, concrete foundation. About $25,000.

Conn., Hamden (New Haven P. O.)—Yale Tire & Rubber Co., c/o J. E. Hubinger, pres., 827 Main St., New Haven, recently organized, plans to build factory and power house on Dixwell Ave., here. About $100,000.

Conn., South Manchester—G. E. Keith Furniture Co., 829 Main St., purchased site on Main and Bissell Sts., and plans to construct 1 and 3-story, 50 x 280 ft. furniture and business building with storehouse in rear.

Conn., Waterbury—M. Joseloff, 17 Brown Pl., soon receives bids building 3-story, 50 x 132 ft. fireproof warehouse and grocery, rein.-con. flooring, concrete foundation, on South Leonard St. About $75,000. F. A. Webster, Waterville, archt.

N. Y., Albany—Normanskill Farm Dairy Co., 120 South Swan St., had plans prepared by R. Warden, archt., building 4-story, brick factory, at 126-128 Jay St. About $50,000. C. P. Stevens, pres.

N. Y., Buffalo—See "Buildings."

N. Y., Buffalo—Wheat Ice Cream Co., 235 Elm St., having plans prepared by R. J. Reidpath & Son, archts., Buffalo, building 2-story, 92 x 150 ft. rein.-con. garage, rein.-con. flooring, concrete foundation, on Elm St. About $50,000.

N. Y., New York—Baker, Carver & Morrell, 37-39 Water St., soon receives bids altering 8-story brick and steel warehouse, rein.-con. flooring. About $80,000. Severence & Van Allen, 4 West 37th St., archts.

N. Y., New York — McCormick Co., archts., 41 Park Row, preparing plans for 2 story, 139 x 155 x 69 x 134 ft. brick and steel bakery, rein.-con. flooring, brick foundation, on 165th St. and Park Ave. About $100,000. Owner's name withheld.

N. Y., New York—Park & Tilford, 529 West 42nd St., having plans prepared by H. O. Chapman, archt., 334 5th Ave., building 7-story, 130 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, at 541-543 West 43rd St. through to 548-552 West 44th St.

N. Y., New York—R. T. Rane, Jr., Chicago, had plans prepared by Starrett & Van Vleck, archts., 8 West 40th St., building 4-story, rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, at 1996-2010 Park Ave., here. About $175,000.

Industrial Works (Continued)

N. Y., Olean—United States Glue Co. purchased 40-acre site adjacent to Pennsylvania R.R. and extending ½ mi. east of Clark St., and will soon receive bids for plant. About $500,000.

N. Y., Rome—Rome Gas, Electric Light & Power Co., 139 North James St., plans to issue $245,164 bonds to build gas and electric plant.

N. J., Paterson—Sunburst Baking Co., having plans prepared by The McCormick Co., archts., Century Bldg., Pittsburgh, Pa., building addition to bakery. About $30,000.

N. J., Trenton—Atlas Tire & Rubber Co. having plans prepared by J. Hunt, archt., 114 North Montgomery St., building 1 story, 90 x 400 ft., brick and steel plant, on Enterprise Ave. About $225,000.

Pa., Phila.—O. J. Maigne Co., 1017 Sansom St., soon lets contracts altering 3-story brick and steel factory. About $30,000. Dodge & Morrison, 135 Front St., New York City, archts.

Pa., Phila—P. M. Sax, engr., Franklin Bank Bldg., soon lets contract building 12-story, 43 x 80 ft., rein.-con. and brick factory, rein.-con. flooring, at 1220-24 Sansom St. Owner's name withheld. Noted Mar. 20.

Pa., Philipsburg—Hagerty Baking Co. having plans prepared by McCormick Co., archts., Century Bldg., Pittsburgh, building 66 x 110 ft. rein.-con., steel and brick bakery, rein.-con. flooring, concrete foundation. About $30,000.

Pa., Scranton—Scranton Lace Co., Glenn and Meylert Sts., having plans prepared by Lockwood, Greene & Co., archts., 101 Park Ave., New York City, building 3 story, 72 x 140 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation. About $80,000.

Md., Baltimore—Hutzler Bros. Co., 212 North Howard St., plans to build 1 and 2-story, 60 x 60 x 154 ft., rein.-con., steel and brick garage, rein.-con. flooring, concrete and stone foundation, on Saratoga and State Sts. About $50,000. J. Pennington, 601 Professional Bldg., archt.

Va., Norfolk—Travelers' Garage Corp. plans to build 2 and 3-story rein.-con. garage, covering 66,000 sq.ft. floor space, on Plume St. W. P. Tunstall, Norfolk, engr.

W. Va., Clarksburg—Central Automobile Co., Morgantown, plans to build rein.-con. garage, concrete foundation, on Main St., here. About $75,000.

W. Va., Clarksburg—Lafayette Glass Co. plans to build 1 story, steel factory, rein.-con. foundation. About $125,000.

Ala., Albany—Southern Cotton Oil Co., 1st Natl. Bank Bldg., Montgomery, plans to increase capacity of mixing plant to 10,000 tons and build gin with 72-bale capacity, near oil mill here. About $50,000.

Ky., Louisville—Louisville Cotton Seed Oil Co., 1318 McHenry St., plans to rebuild plant recently destroyed by fire. Loss $500,000.

O., Cleveland—Bricklayers Assn., c/o L. E. Hoffman, 2416 East 9th St., had plans prepared by A. N. Ferguson, archt., 212 Erie Bldg., for 3-story, 61 x 140 ft., concrete, steel and brick garage and club rooms, concrete foundation, at 2101 East 21st St. About $100,000.

O., Cleveland—City Auto Tire & Supply Co., 2415 Chester Ave., had plans prepared by G. S. Rider Co., archts., Century Bldg., for 1-story, 40 x 137 ft., concrete, steel and brick factory addition. About $25,000.

O., Cleveland—W. S. Davidson, East 95th St. and St. Clair Ave., had plans prepared by W. Dunbar Co., archts., 8201 Cedar Ave., building 1-story, 132 x 139 x 140 x 162 ft., steel and brick garage, on East 95th St. and St. Clair Ave. About $50,000.

O., Cleveland—Ferry Cap & Set Screw Co., 2151 Scranton Rd., had plans prepared by E. McGeorge, archt., 1900 Euclid Bldg., for 3-story, 48 x 155 ft. and 56 x 189 ft., concrete, steel and brick factory addition. About $75,000.

O., Cleveland—Forest City Motor Co., 6504 Euclid Ave., plans to build 1- and 2-story, 55 x 300 ft. concrete, steel and brick service and sales building at 6510 Euclid Ave. About $60,000. E. E. Smith, 1529 Williamson Bldg., archt.

O., Cleveland—A. Haberman Provision Co., 2302 B'way Ave., had plans prepared building 2-story, 43 x 60 ft., rein.-con., steel and brick addition to factory. About $25,000.

O., Cleveland—Ko-Ko-Mar Co., Leader-News Bldg., having plans prepared by A. C. Bishop, archt., 427 Guardian Bldg., converting concrete, steel and brick brewery into food products plant. About $40,000.

O., Cleveland—Paul Bros. Co., Citizens Bldg., plans to build 6-story, 99 x 132 ft., rein.-con., steel and brick factory and garage., rein.-con. flooring, concrete foundation, on East 18th St. and Euclid Ave. About $175,000. W. S. Ferguson, 1900 Euclid Bldg., archt.

O., Cleveland—Peerless Motor Co., East 55th St. and Carnegie Ave., having plans prepared by W. J. Carter, archt., 723 Illuminating Bldg., for 3-story, 40 x 80 ft., concrete, steel and brick addition to factory on East 93rd St. and Quincy Ave. About $75,000.

O., Cleveland—Warner & Swasey Co., 5701 Carnegie Ave., had plans prepared by Truscon Steel Co., archts., 651 Hippodrome Bldg., for 1-story, 90 x 176 ft., steel factory addition at 5815 Cedar Ave. About $30,000.

O., Dayton—Borchers Auto Co., 6th and Canal Sts., plans to build 4-story, rein.-con. garage and salesroom, rein.-con. flooring and concrete foundation, at 366-370 South Main St. About $175,000. Frank Hill Smith Co., East 3rd St., archts.

O., Martins Ferry—See "Waterworks.'

O., Stacyville—See "Miscellaneous."

Ill., Granite City—M. Carney, archt., Wright Bldg., East St. Louis, receives bids about July 15, building 1 and 2-story, 100 x 125 ft., brick and steel warehouse, concrete flooring, rock foundation, on Elm St. and Bway., for Southern Mfg. Co., 320 Elm St., East St. Louis. About $50,000.

Wis., St. Anna—W. J. Stollenwerk plans to build 2-story, 50 x 100 ft., rein.-con. and brick garage, brick foundation. About $60,000.

Wis., Two Rivers—Wisconsin Textile Mfg. Co. soon lets contract building 1 story, 90 x 200 ft., rein.-con., brick and steel plant, rein.-con. flooring, brick foundation on Main St. About $100,000.

Minn., Wells—City plans to build power plant, electrical distribution system and concrete reservoir. About $40,000. C. L. Pillsbury Co., 801 Metropolitan Life Bldg., Minneapolis, engrs.

S. D., Aberdeen—Farmers Equity Union Creamery soon receives bids building 2-story, creamery. About $60,000.

N. D., Fargo—W. E. Heller, 604 Front St., plans to build 2-story, fireproof garage. About $25,000. W. D. Gillespie, 64½ Bway., archt.

N. D., Walhalla—Farmers' Seed Potato Growers' Assn. soon lets contract building 2-story, 70 x 130 ft. warehouse, 100,000 bu. capacity. A. D. Knutson, secy. G. L. Saxton, 1228 Plymouth Bldg., Minneapolis, Minn., archt. Noted Mar. 13.

Mo., St. Louis—S. Hamburg, Jr., 2407 North Bway., plans to build 5-story, 100 x 122 ft., rein.-con., and steel service station and mercantile building, rein.-con. flooring and concrete foundation, on Leonard and Locust Sts. Cost to exceed $50,000.

Mo., St. Louis—W. H. McNicol & Bros., c/o Weisels-Gerhart Real Estate Co., 8th and Chestnut Sts., plan to build 1-story, 100 x 140 ft., garage and service station on McPherson St. between Walton and Euclid Aves. Cost to exceed $50,000.

Mo., St. Louis—Motor Garage & Realty Co., 46 Kingsbury Pl., having plans prepared building 3-story, 250 x 250 ft., rein.-con., steel and brick garage, rein.-con. flooring, concrete foundation, on block bounded by 17th, 18th, Pine and Chestnut Sts. About $300,000. N. W. Ewing, pres.

Wash., Hoquiam—Whitney Motor Co., plans to build 2-story, 100 x 125 ft. fireproof garage, etc. About $50,000. F. T. Whitney, mgr.

Wash., Seattle—Journal Terminals, Inc., plan to build 2-story, 102 x 690 ft., rein.-con. terminal, rein.-con. flooring, concrete foundation, on Duwamish Waterway. Plans include depressing railroad tracks and building 20 x 420 ft. wharf. About $100,000. J. R. Nevins, Hoge Bldg., archt.

Wash., Seattle—Pike & Lind, Olive and Harvard Sts., plan to construct 5 story, 120 x 240 ft. automobile building, brick, concrete and heavy mill construction, rein.-con. flooring, concrete foundation, on Olive and Harvard Sts. About $125,000. H. Bittman, Securities Bldg., engr.

Ore., Astoria—Port of Astoria Comn. soon lets contract building 6-story, 47 x 100 ft. rein.-con. flour mill, 3-story, 32 x 47 ft. packing room annex, and 3-story 30 x 47 ft. office annex. R. R. Bartlett, ch. engr.

Ore., Linnton—Associated Oil Co. plans to build rein.-con. warehouse, 10 cottages and garage. About $175,000. A. D. Parker, dist. mgr.

Cal., Modesto—Modesto Gas Co. plans to build gas generating unit, 300,000 cu.ft. steel gas holder, install 2 purifiers and extend gas mains to new sections of city. About $65,000.

Ont., Toronto—W. Davies Co., Ltd., 521 Front St. E., plans to build rein.-con. slaughter house, at Ashbridges Bay. About $100,000. J. Gillies, c/o owner, archt.

Ont., Toronto—E. L. Ruddy Co., 11 Wellington St. E., having preliminary plans prepared by James, Loudon & Hertzberg, archts., Excelsior Life Bldg., for 1 story, 100 x 100 ft. brick and mill construction factory. About $30,000.

BIDS DESIRED

Conn., Hartford—E. M. Stone, archt., 327 Trumbull St., receiving bids building 7-story fireproof garage and 1-story salesroom, rein.-con. flooring, concrete foundation, on Ann St., for C. P. Cooley, 36 Pearl St. About $90,000.

Pa., Altoona—R. W. Nash, pres. Altoona Grocery Co., 200 Chestnut Ave., receiving bids building 2 story, 118 x 120 ft. brick, steel and concrete bakery on 9th Ave. and 28th St. About $90,000. Former bids rejected. McCormick Bros., Century Bldg., Pittsburgh, archts. Noted Apr. 24.

Pa., Harrisburg—See "Buildings."

Pa., Pittsburgh—Donaldson Commercial Truck Garage, North Side, receiving bids building 1 and 2-story, 100 x 227 ft., rein.-con., steel and brick garage, rein.-con. flooring, on Weston and Bidwell Sts., North Side. About $75,000. Hunting-Davis Co., Century Bldg., archts. Noted Apr. 24.

O., Cleveland—Drake's Process Mchy. Co., 1255 West 4th St., receiving bids building 3-story, 50 x 150 ft. concrete, steel and brick factory, rein.-con. flooring, concrete foundation, on East 105th St. and Quincy Ave. About $75,000.

O., Cleveland—H. M. Morse, archt., 413 Citizens' Bldg., receiving bids building 1-story, 75 x 160 ft., rein.-con., steel and brick

Minn., Hastings—Until Aug. 1, by State Bd. Control, St. Paul, building 1-story, 45 x 140 ft., rein.-con. and brick power plant, here. About $125,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Mo., Tebbetts—Until May 28, by R. C. Stone, archt., 320 Merchants Exch. Bldg., St. Louis, building grain elevator, 50,000 bu. capacity, for Tebbetts Milling & Elevator Co. About $35,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Adams Pond Co., Dorchester, will build 2-story, 50 x 100 ft., rein.-con. supply house, rein.-con. flooring, concrete foundation, on Commonwealth St., here. About $30,000. Work will be done by day labor.

★Mass., Brockton—Donnelly Machine Co., 26 North Montello St., let contract building 2-story, 40 x 177 ft. brick addition to machine shop, rein.-con. flooring, concrete foundation, to D. E. Green, 56 Taber Ave. About $35,000.

★Mass., Brookline (Boston P. O.)—See "Buildings.'

★Mass., Cambridge (Boston P. O.)—Cambridge Gas Co. let contract building 1 story, 66 x 92 ft. brick and concrete garage and repair shop, brick and concrete foundation, on Potter St., to W. A. Wentworth Co., 15 Exchange St., Boston. About $50,000.

★Mass., New Bedford—Fairhaven Mills, 115 Coggleshell St., let contract building 1-story, 200 x 300 ft., brick and mill construction addition to mill, rein.-con. flooring, concrete foundation, to C. Ranger Constr. Co., 20 Bond St., Holyoke. About $126,000. Noted Apr. 17.

★Mass., Swansea—Swansea Dye Wks. will build 2-story, 50 x 100 ft. brick and steel addition to bleach house, concrete foundation. About $25,000. Work will be done by day labor.

Industrial Works (Continued)

R. I., Providence—Coronet Worsted Co., 1029 Grosvenor Bldg., let contract building 2 story, 64 x 83 ft. brick and steel addition to factory, rein.-con. flooring, concrete foundation, in Maplewood, to C. I. Bigney Constr. Co., 898 Westminster St. About $28,000.

★**R. I., Woonsocket**—Sydney Worsted Co., Allen St., let contract building 2-story, 75 x 150 and 20 x 60 ft. brick and mill construction addition to mill on Mason St., to J. C. N. Bouvier, 189 Sayles St. About $75,000.

★**Conn., Bridgeport**—Greenbaum & Kovacs, 893 Hancock Ave., let contract building 1-story, 50 x 140 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Fairfield Ave. and Whittier St., to A. P. Pustay, King St. Cost between $25,000 and $30,000. Noted Feb. 27.

★**Conn., Bridgeport**—Home Brewing Co., 226 Hallam St., let contract building 1 story, 50 x 150 ft. brick and concrete ice plant, rein.-con. flooring, concrete foundation, on Hallam St., to Schwarz Bros. Co., 95 River St. About $200,000.

★**Conn., Bristol**—Dunbar Bros. Co., 80 South St., let contract building 3-story brick and steel addition to factory, concrete foundation, on South St., to Ellison Constr. Co. 60 Prospect St., Hartford. About $60,000.

★**Conn., Hartford**—Billings & Spencer, Park and Laurel Sts., let contract building 1 story, 60 x 80 ft. machine shop and 4 story, 16 x 30 ft. additon to factory, brick, steel and concrete, concrete foundation, to J. H. Grozier Co., 721 Main St. About $25,000.

★**Conn., Hartford**—Swift & Co., 60 North Market St., Boston, Mass., let contract building 2-story, 78 x 100 ft., brick and concrete storage building, rein.-con. flooring, concrete foundation, on Church St., here, to J. H. Grozier Co., 721 Main St. About $90,000. Noted Jan. 16.

★**Conn., Norwich**—M. B. Ring Estate, 21 Chestnut St., let contract building 1-story, 40 x 113 ft brick and concrete garage and paint shop, rein.-con. flooring, concrete foundation: also altering present plant, to P. F. Sweeney, 125 Spalding St. About $25,000.

★**Conn., Windsor Locks**—G. P. Clark Co., Canal Bank, let contract building 3 story, 60 x 185 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, to Ellison Constr. Co., 60 Prospect St., Hartford. About $100,000.

★**N. Y., Fredonia**—Red Wing Grape Juice Co. let contract building 4-story, 48 x 80 ft. rein.-con. and brick warehouse and factory, rein.-con. flooring, concrete foundation, to Tifft Constr. Co., Iroquois Bldg., Buffalo. About $70,000. Noted May 1.

★**N. Y., New York**—Congress St. Warehouse & Forwarding Co., 474 West Bway., let contract building, 1-story, 63 x 75 ft., brick and steel garage, rein.-con. flooring, brick foundation, to Lythic Bldg. Co., Inc., 103 Park Ave.

★**N. Y., New York**—H. Duys & Co., 170 Water St., let contract building 5-story, brick and steel warehouse, rein.-con. flooring, concrete foundation, at 142 Water St., to H. Hupfauf, 7 East 42nd St. About $35,000, cost plus percentage basis.

★**N. Y., New York**—A. J. Schwartzler, 369 East 167th St., will build 2-story, 122 x 190 ft. brick and steel ice plant, rein.-con. flooring, concrete foundation, on Fordham Rd. and Cedar Ave. About $45,000. Work will be done by day labor.

★**Pa., Milton**—Susquehanna Silk Mills, 149 Madison Ave., New York City, let contract building 3 story, 100 x 400 ft. rein.-con. silk mill here, to Turner Constr. Co., 244 Madison Ave., New York City.

★**Pa., Nanticoke**—Duplan Silk Co., 135 Madison Ave., New York City, let contract building 1 and 2-story, 100 x 550 ft. brick and steel, mill construction silk mill, rein.-con. flooring, concrete foundation, here, to United Proofing Co., 8 West 40th St., New York City. Noted May 1.

★**Pa., Phila.**—United Grocery Co. let contract building 3 story, 80 x 200 ft., rein.-con., brick and steel warehouse, at 943 North 2nd St., to B. Bornstein, 1510 North Franklin St. Noted Apr. 27.

Md., Baltimore—Crouch & Leeser, 114 East Lombard St., received bids building 1 story, 81 x 200 ft., concrete, steel and brick garage, cement flooring, brick and concrete foundation, on York Rd. and 35th St., from H. M. Reinhart, 523 Calvert Bldg.; H. T. Sorrell, 1334 North Gilmor St.; West Constr. Co., 907 Amer. Bldg.; G. Runge, Lauraville, and W. T. Childs, 14 West 20th St. About $50,000. Noted Apr. 17.

★**Md., Baltimore**—Helwig & Leight, 1533 Gorsuch Ave., let contract building 2-story, 48 x 90 ft., concrete and brick addition to factory, concrete foundation, at 1529 Gorsuch Ave., to G. A. Gebb, 1347 Gorsuch Ave. About $50,000.

★**W. Va., Mullins**—Roanoke Grocery & Milling Co. Roanoke, let contract building 5-story, brick and rein.-con. warehouse, on Main St., to D. J. Phipps, Roanoke. About $50,000.

★**O., Alliance**—Alliance Sanitary Milk Co. let steel contract building rein.-con., steel and brick dairy and ice cream plant, concrete foundation, to Alliance Structural Co., Alliance, concrete work, to D. Anderson, Alliance. Total about $40,000.

★**O., Cleveland**—Natl. Lamp Works, Nela Park, will build 1-story, 63 x 194 ft., concrete, steel and brick garage, at 1141 East 152nd St. About $50,000. Work will be done by day labor.

★**Ind., Richmond**—Starr Piano Co. let contract building 6-story, 100 x 200 ft., rein.-con. factory, to Grant Smith Co., Chicago, Ill. About $100,000.

★**Ill., East St. Louis**—East Side Packing Co., 2nd and Lynch Sts., let contract building 6-story, 75 x 125 ft., brick and concrete cooling and sausage-making plant, rein.-con. flooring, concrete foundation, at stockyards, to Tait & Nordmeyer, International Life Bldg., St. Louis, Mo. About $300,000.

Wis., Chilton—Meli-Blumberg Co. let contract building 2-story, 60 x 130 ft., rein.-con. and brick garage, rein.-con. flooring, brick foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac. About $48,000.

★**Wis., Sheboygan**—Bemis-Riddel Fibre Co., South Water and 9th Sts., let contract building 4-story, 60 x 150 ft., brick and steel plant, rein.-con. flooring, brick foundation, on South 15th St., to Verhulst Bros., Sheboygan. About $55,000. Noted Apr. 24.

Wis., Sheboygan—Jenkins Machine Co., 315 North 8th St., let contract building 1-story, 50 x 191 ft., steel and brick machine shop, brick foundation, on Niagara and 8th Sts., to Verhulst Bros., Sheboygan. About $41,000.

Wis., Sheboygan—Standard Oil Co., 105 Wells St., Milwaukee, let contract building 1-story, 50 x 90 ft., concrete, stucco and brick, filling station, brick foundation, on 7th and Wisconsin Sts., to M. Schuchard, 1511 North 6th St. About $38,000.

★**Minn., Minneapolis**—Sheffield Elevator Co., 908 Flour Exch., let contract building concrete grain elevator, 89 ft. high, on Garfield Ave. and 29th St., S., to J. H. Brown Co., 511 South 3rd St. About $70,000.

★**Neb., Lincoln**—Union Wall Paper & Paint Co., 145 South 10th St., let contract building 3-story, 50 x 142 ft., rein.-con. and brick warehouse, rein.-con. flooring, concrete foundation, at 1420 P St., to Olson Constr. Co., 205 Chapin Bldg., $50,200.

★**Mo., Joplin**—Christmas Dry Goods Co., 5th and Main Sts., let contract building 3-story, 104 x 120 ft., concrete and brick warehouse, rein.-con. flooring, concrete foundation, on 5th St. and Virginia Ave., to C. A. Dieter Constr. Co., Independent Bldg. About $50,000. Noted May 8.

★**Mo., Joplin**—Connor Investment Co., Miners Bank Bldg., let contract building 1-story, 60 x 120 ft. laundry, concrete foundation, on 4th and Joplin Sts., to A. Greenwell, 1712 Baxter St. About $25,000.

•**Mo., St. Louis**—McQuay Norris Piston Ring Co., 2808 Locust St., let contract building 1- and 2-story plant on Oak Hill R.R. and Cooper St., rein.-con., steel and brick, rein.-con. flooring and concrete foundation, to Fruin Colon Constr. Co., Merchants' Laclede Bldg. About $150,000. Plans include 101 x 181 ft. machine shop, 61 x 181 ft. storage building, 61 x 181 ft. foundry, 60 x 34 x 73 ft. garage and service building and 60 x 120 ft. administration building. Noted Mar. 13.

Mo., St. Louis—Monarch Metal Weather Strip Co., 4121 Forest Park Blvd., let contract building 1-story, 145 x 169 ft., rein.-con., steel and brick factory, concrete foundation, at 5026-32 Penrose St., to Woersmann Constr. Co., Century Bldg. About $40,000. Noted Apr. 24.

★**Wash., Seattle**—Rhodes Bros. Co., 2nd and Union Sts., let contract building 3-story, 50 x 110 ft., mill construction warehouse, concrete foundation, on Westlake N. and Republican Sts., to H. F. Allen, Seattle, $42,350.

★**Ore., Salem**—Valley Packing Co. let contract building packing plant to F. J. Leonard, Lewis Bldg., Portland. Cost, including equipment, $130,000. Plans include 3-story, 82 x 82 ft. main building, and 24 x 36 ft. building for rendering tanks, boiler room and fertilizer department.

★**Cal., Fresno**—H. A. Seller & Co., 829 J St., let contract building 1 story, 80 x 150 ft., rein.-con. garage and shop, on J and Monterey Sts., to A. Mattei, I and Los Angeles Sts. About $30,000.

★**Cal., San Fernando**—San Fernando Lemon Assn. let contract building 2 story, 100 x 199 ft., rein.-con., hollow tile and frame packing house, on Brand Blvd. to Hamm & Shepherd, 205 Central Bldg., Pasadena. About $30,000.

★**Cal., Whittier**—Whittier Walnut Growers' Assn. let contract building 2 story, 90 x 100 ft., frame and plaster, packing house, concrete foundation, to F. S. Bishop, Santa Ana. About $30,000.

★**Que., Montreal**—Montreal Biscuit Co., 1008 Green Ave., let general contract building 4 story, 90 x 308 ft., mill construction factory, on Brewster Ave., to I. Collins, 207 Ash Ave.; masonry, to W. E. Pick, 354 Hingston Ave. About $110,000.

Buildings

PROPOSED WORK

Mass., Amherst—Dormitory—State Legislature, Capitol, Boston, appropriated $127,400 to build women's dormitory on campus, for Massachusetts Agricultural College here.

Mass., Athol—Church—St. Francis Lithuanian congregation plans to build new church on Main St. to replace one destroyed by fire. About $50,000. A. Petraitis, pastor.

Mass., Athol—Office, etc.—Frost & Chamberlain, archts., State Bldg., Worcester, soon receives bids building 4 story, 63 x 190 ft. brick office and storage building, concrete foundation, for Union Twist Drill Co., Athol. About $100,000.

Mass., Athol—Hospital—E. T. Chapin, archt., State Mutual Bldg., Worcester, soon receives bids building 3 story, 40 x 75 ft. with 2 wings and 3 story, 40 x 70 ft. brick addition, rein.-con. flooring, concrete foundation, for Athol Memorial Hospital, Newton St. About $75,000.

Mass., Boston—Theater—O. F. Farley, 27 State St., having plans prepared by Blackall, Clapp & Whittemore, archts., 20 Beacon St., building 2-story, 200 x 200 ft. brick and concrete, on West Bway. About $300,000.

Mass., Plymouth—Hall—Town plans to build hall on Court St. About $75,000. A. Lord, North St., chn. bldg. com. McKim, Mead & White, 101 Park Ave., New York City, archts.

Mass., Ware—Community—Bd. Trade, 45 Main St., plans to build community house. About $60,000. D. L. Washburn, chn.

Mass., Warren—Office—See "Industrial Works."

R. I., Howard—Jail—State Penal and Charitable Comn., Providence, plans to build 3 story, 60 x 300 ft. rein.-con. addition, here. About $125,000.

R. I., Howard—Institute—State Penal and Charitable Comn., Providence, plans to convert 2 story house of correction into almshouse. About $75,000. J. H. Cady, 10 Weybossett St., Providence, archt.

R. I., Howard—Institute—State Penal and Charitable Comn., Providence, soon receives bids building 3 story, fireproof, house of correction, rein.-con. flooring. About $300,000. J. H. Cady, 10 Weybossett St., Providence, archt.

Conn., Bridgeport—Hotel—F. H. Beckwith, archt., 10 Post Office Arcade, soon receives bids building 5-story, 75 x 86 ft. brick and terra cotta, rein.-con. flooring, concrete foundation, on Golden Hill St. About $100,000. Owner's name withheld.

Conn., Bristol—Hotel—F. C. Walz, arch., 348 Trumbull St., Hartford, soon receives bids building 4-story, 42 x 80 ft. concrete and brick, rein.-con. flooring (1st floor only), concrete foundation, on North Main St., here, for H. Perlstein, 82 Oakland Terrace, Hartford. About $50,000.

Buildings **(Continued)**

Conn., Hampden (New Haven P. O.)—School—Brown & Von Beren, archts, 185 Church St., New Haven, soon receive bids building 2-story, 4-room, brick and steel addition, rein.-con. flooring, concrete foundation, on State St., for Bd. Educ. About $50,000. F. W. Dietter, 1262 Whitney Ave., chn.

Conn., Hartford — Club — Italian-Amer. Club plans to build clubhouse on Prospect St. About $100,000. Address J. M. D'Esopo, 60 Temple St.

Conn., Hartford—Sales, etc.—M. J. Unkelbach, archt., 162 Main St., New Britain, soon receives bids erecting 2-story, 65 x 300 ft. fireproof auto sales and service building, rein.-con. flooring, concrete foundation, on Washington St., for A. C. Hine Co., 314 Pearl St. About $80,000.

Conn., Harwinton—School—Town plans to build fireproof school at Harwinton Center. About $70,000.

Conn., Manchester—Hospital—Town had plans prepared by Smith & Bassett, archts., 36 Pearl St., Hartford, building 3-story, 45 x 90 ft., brick, steel and concrete, rein.-con. flooring, concrete foundation, on Haynes St. About $80,000.

Conn., Mansfield—School, etc.—Mansfield State Training School & Hospital plans to erect school, custodial building, dining room and amusement hall. State Legislature, Hartford, appropriated $250,000 bonds for project.

Conn., New Britain—Church and Parish House—G. A. Zunner, archt., 756 Main St., Hartford, receives bids about June 1, building 1 story, 60 x 92 ft. church and 2 story, 35 x 45 ft. parish house, brick, rein.-con. flooring, concrete foundation, on Wilcox and West Sts., for All Saints' Church. About $80,000.

Conn., New Haven—Business, etc.—Resnik-Slade Co., 865 Chapel St., plans to build 3-story brick, on Temple St., also convert present building into assembly hall. About $60,000.

Conn., South Manchester—Business—P. J. O'Leary, 887 Main St., purchased site on Main St. and plans to erect business building. About $50,000.

Conn. South Manchester—Church—St. Mary's Episcopal congregation, 49 Park St., plans to build brick church. About $50,000. J. S. Neill, pastor.

Conn., Stratford (Bridgeport P. O.)—School—Town plans to issue $100,000 bonds to build school.

Conn., Waterford—School—Town plans to issue $50,000 bonds to build school.

N. Y., Batavia—Hospital—Sisters of Mercy, c/o St. Jerome Hospital, Banks St., soon receives bids building 3-story, 37 x 70 ft. brick, fireproof construction. About $80,000.

N. Y., Brooklyn—Home and Hospital—Brooklyn Hebrew Home and Hospital for Aged, Howard and Dumont Aves., having plans prepared by L. Abramson, archt., 220 5th Ave., New York City, building 4-story, 90 x 100 ft. brick and steel addition, brick foundation. About $100,000. C. Rosenthal, pres. Noted May 1.

N. Y., Brooklyn—Theatre—I. Miller, 1663 Union St., having plans prepared by T. Short, archt., 370 Macon St., building 2 story, 100 x 145 ft. brick and steel, brick foundation, on St. Johns Pl. and Utica Ave. About $150,000.

N. Y., Buffalo—Barn—H. L. Beck, city archt., soon receives bids building 2-story, 175 x 400 ft. brick and rein.-con., rein.-con. flooring, concrete foundation, on Hudson St., for city. About $300,000.

N. Y., Buffalo—Home—H. L. Beck, city archt., soon receives bids building 3-story, 60 x 125 ft. brick and steel detention home, rein.-con. flooring, concrete foundation, on East Ferry St. About $100,000.

N. Y., Buffalo—Office, etc.—Meyer Motor Car Co., Inc., 1056 Main St., plans to build brick and steel office, salesroom and service shop, at 1271 Main St. About $50,000.

N. Y., Depew—High School—Bd. Educ. having plans prepared by Kidd & Kidd, archts., 232 Delaware Ave., Buffalo, for 2-story brick and rein.-con. addition, rein.-con. flooring, concrete foundation. About $50,000.

N. Y., Long Island City—Bank—Long Island City Savings Bank, Bridge Plaza, having plans prepared by R. G. Ecob and T. C. Visscher, archts., 299 Madison Ave., New York City, building 3-story, 70 x 85 x 100 ft. brick and steel, brick foundation, at Queensboro Bridge Plaza.

N. Y., Mt. Morris—Hospital—Bd. Supervs. Livingston Co., (Geneseo) and Genesee Co., (Batavia) plan to build tuberculosis hospital on J. F. White site here. About $75,000. Address F. L. Willett, Portage.

N. Y., New York—Office—Merchant Marine House, Inc., 56 Beaver St., had plans prepared by Zeister & Kerrigan, archts., 53 Beaver St., building 4½-story, brick and steel, at 53 Beaver St. About $125,000.

N. Y., New York—Hotel—Warren & Clark, archts., 108 East 29th St., preparing plans building 16 story, 150 x 200 ft. brick and steel, brick foundation, on 5th Ave. near 50th St. About $500,000. Owner's name withheld.

N. Y., New York—Store and Office—Hudson Motor Co. of New York, 1842 Bway., had plans prepared by E. J. Moeller, archt., 103 Park Ave., building 10-story, 100 x 100 ft. brick and steel, concrete foundation, on 62nd St. and Amsterdam Ave. About $550,000.

N. Y., Syracuse—Club—Syracuse Boys' Club, 436 East Jefferson St., soon receives bids erecting 2-story, brick, on 90 x 160 ft. site. About $100,000. H. W. Cook, pres. M. L. King, Snow Bldg., archt.

N. Y., Syracuse—Club—A. S. Carlson, Syracuse Savings Bank Bldg., purchased 150 acre site on South Bay Rd., and is having plans prepared for several buildings to be used as a mens' training camp. About $50,000.

N. Y., Watertown—Temple—Media Temple, A. A. O. N. M. S., having plans prepared for shrine temple. About $200,000. Address F. L. Moore, Keyes Ave., potentate.

N. J., Hackensack—Hospital—Bd. Freeholders Bergen Co. plans to build tuberculosis hospital. About $50,000.

Pa., Altoona—Hotel—Leroy Hotel Co., 1021 Chestnut Ave., plans to build 8 story, 109 x 130 ft., concrete, steel and brick, concrete flooring, on Chestnut Ave. W. Frieling, Hutchinson Bldg., archt.

Pa., Phila.—Bank—Kensington Trust Co., Kensington and Allegheny Aves., soon receives bids building 1 story, 54 x 78 ft. and 15 x 54 ft. rein.-con. addition to existing building. About $50,000. Heacock & Hokanson, Bailey Bldg., archts. Noted Feb. 6.

Pa., Phila.—Stations—W. S. Twining, dir. dept. city transit, 1211 Chestnut St., rejected bids received Apr. 29 for elevated stations for Frankford Elevated Ry. on Kensington Ave., as same were too high. New bids will be asked. Noted Apr. 24.

Pa., Phila.—Theatre—Fisher & Jones, archts., Westinghouse Bldg., Pittsburgh, soon lets contract building 6 story, rein.-con. and brick, on Queens Lane and Schuyler Rd. here, for W. Hutchinson, Jr., Phila. About $450,000.

Pa., Pittsburgh—Home—Western Pennsylvania Institution for Blind, Bellefield Ave., plans to build addition of 2 wings to existing building at Bellefield Ave. and Bayard St. About $115,000.

Md., Baltimore—Clubhouse—A. Blumberg, 223 West Baltimore St., N. Sauber and L. Kramer, 113 South Hanover St., and associates, plan to build 4-story, 45 x 105 ft., rein.-con., steel and brick, concrete and brick foundation, on Eutaw Pl. L. Levi, Real Estate Trust Bldg., Phila., archt.

Md., Baltimore—School—St. Mary's Industrial School plans to rebuild school on Wilkens and Caton Aves. About $700,000. O. B. Corrigan, St. Gregory's Church parsonage, Gilmer and Baker Sts., chn.

Md., Baltimore—Store and Office—G. R. Morris, pres. Apartments Corp., 533 Title Bldg., plans to remodel old Y. M. C. A. building on Charles and Saratoga Sts. Plans include converting first floor into stores with arcade running from Charles to Saratoga Sts., and 3 upper floors into offices. About $60,000.

Md., Baltimore — Theatre — Vagabond Players, 5 West Center St., having plans prepared by E. L. Palmer, Jr., archt., 519 North Charles St., building 1 and 2 story, 70 x 100 ft., concrete, steel and brick, at 16-22 East Hamilton St. About $50,000.

W. Va., Fairmont—High School—Bd. Educ. plans election May 20 to vote on $150,000 bonds to build high school in Union Dist.

S. C., Charleston—Hotel—T. T. Hyde is forming corporation to build 12-story, 107 x 167 ft., brick and stone on King and Calhoun Sts. Total cost, $750,000. About $100,000 available.

Ga., Atlanta—Bank—Federal Reserve Bank, Hutt Bldg., plans to construct 3-story bank, and 1-story addition to existing building on Marietta St. About $150,000. A. T. Brown, Forsythe Bldg., archt.

Ga., Lagrange — School — See "Waterworks."

Fla., Daytona—Theatre and Store—T. Titus soon receives bids building 79 x 100 ft. About $50,000.

Ala., Birmingham—Theatre—L. Pizitz, 118 19th St., plans to build theatre and roof garden, in connection with department store, on 19th St. and 2nd Ave. About $500,000.

O., Cleveland—Bank—Cleveland Trust Co., East 9th St. and Euclid Ave., plans to build 4-story, rein.-con., steel and brick addition. About $75,000. G. B. Post & Son, Schofield Bldg., archts.

O., Cleveland — Church — Cleveland Heights Methodist congregation, Lee Rd. and Euclid Heights Blvd., plans to build 2-story, concrete, steel and brick. About $100,000.

O., Cleveland—Club Rooms—See "Industrial Works."

O., Cleveland—Commercial—Arjo Realty Co., c/o J. Laronge, Williamson Bldg., having plans prepared by Lehman & Schmidt, archts., 201 Electric Bldg., for 5-story, 80 x 109 and 100 x 420 ft., concrete, steel and brick, on East 66th St. and Carnegie Ave. About $750,000.

O., Cleveland — Store and Office — C. 413 Engrs. Bldg., having surveys made and plans prepared by Whitworth & Johnson, archts., 413 Engrs. Bldg., for 2-story, concrete, steel and brick, on West 117th St. and Lorain Ave. About $125,000.

O., Cleveland—Office—Cleveland Arcade Co., 458 The Arcade, plans to add 1-story, 60 x 235 ft. concrete, steel and brick addition to present building on East 4th St. and Euclid Ave. About $60,000.

O., Cleveland—Office—Eleventh St. Co., c/o F. H. Gunn, Williamson Bldg., plans to remodel and build 7-story, rein.-con., steel and brick addition to Lenox Bldg., on East 9th St. and Euclid Ave. About $150,000.

O., Cleveland—Sales—See "Industrials."

O., Delaware—Sanitarium—C. L. Insco, archt., Brunson Bldg., Columbus, receives bids about June 1, building 3-story, 40 x 154 ft., brick and rein.-con., concrete foundation, near here, for Delaware Springs Sanitarium Co. About $85,000.

O., Cleveland — Store and Office — C. Shane, c/o Liberty Theater, 10315 Superior Ave., plans to build 5-story, concrete, steel and brick, on East 4th St, and Euclid Ave. About $150,000.

O., Cleveland—Store—W. Taylor & Son Co., Euclid Ave. and 6th St., plans to build 9-story, concrete, steel and brick addition. About $500,000.

O., Cleveland—Temple—Cleveland Masonic Club, East 6th St. and Superior Ave., plans to build 3-story, 220 x 700 ft., rein.-con., steel and brick, at 3515 Euclid Ave. About $500,000.

O., Cleveland—Theater—W. G. Montgomery, 1420 Alameda Ave., Lakewood, plans to build 3-story, rein.-con., steel and brick, on West 32nd St. and Bridge Ave., here. About $150,000.

O., Cleveland—Theater and Store—Normay Theater Co., West 50th St. and Storer Ave., having plans prepared by E. Huberty, archt., 8017 Whitehorn Ave., building 1-story, 81 x 137 ft., concrete, steel and brick, at 5310 Storer Ave. About $50,000.

O., Cleveland—Theater and Stores—N. I. Stone, Rockefeller Bldg., had plans prepared by A. G. Yost, archt., Rockefeller Bldg., for 4-story, 73 x 198 ft., concrete, steel and brick, at 10613 Euclid Ave. About $250,000.

O., Dayton — Salesroom — See "Industrials."

Buildings (Continued)

Mich., Detroit — Church — Maranatha Baptist congregation, Brush and Bethune Sts., having plans prepared by J. E. Mills & Son, archts., 1305 Kresge Bldg., building 1 story, rein.-con. and brick, rein.-con. and tile flooring, concrete foundation, on East Grand Blvd. near Beaubien St. About $70,000.

Mich., Detroit—Theater, Stores, Hall, Offices, etc.—Oakman Blvd. Theater Co., 9 Fort St., W., having plans prepared by C. H. Crane and E. G. Kiehler, archts., Dime Bank Bldg., building rein.-con., brick, steel and fireproof construction. About $350,000.

Mich., Grand Rapids—Theater—Regent Theater Co., Woodward Ave., Detroit, having plans prepared by C. H. Crane and E. G. Kiehler, archts., Dime Bank Bldg., Detroit, building 2 story, 100 x 152 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Monroe Ave., here. About $300,000.

Mich., Highland Park (Detroit P. O.)—School—City voted $325,000 to enlarge Willard School.

Mich., Lansing—Hotel—Hotel Michigan Co. having plans prepared by C. Allen, archt., Jackson, building 12 story, 94 x 140 ft., rein.-con., brick and fireproof construction, rein.-con. flooring, concrete foundation, on East Michigan Ave. About $630,000.

Ill., Belleville—High School—City election May 17, to vote on $200,000 bonds to build high school on Illinois and Lincoln Sts.

Ill., Belleville—Hotel and Theater—C. T. Mullen, 11 Pennsylvania Ave., plans to build 5-story brick and concrete, on Main and High Sts. About $125,000.

Wis., Bloomer—High School—Bd. Ed. plans to build 2 story 100 x 120 ft. school and 50 x 70 ft. auditorium, tile and brick, concrete foundation. About $70,000. J. D. Preuher, pres. C. Volkman, 106½ Grand Ave. E., Eau Claire, engr.

Wis., La Crosse—Theater, Stores and Offices—Burford-Rosenstein Co., having plans prepared for 4-story, 122 x 152 ft. on 4th St. between Main and State Sts. About $150,000. Parkinson & Dockendorff, Linker Bldg., archts.

Wis., Sheboygan — Church — Congregational Church, c/o E. Hammett, plans to build 2-story, 90 x 150 ft., rein.-con. and brick, brick foundation, on North 7th St. About $100,000. W. C. Weeks, 730 Ontario Ave., archt.

Wis., Sheboygan—School—Weeder Sta. School Bd., Weeder Sta., plans to build 1-story, 40 x 90 ft., brick, brick foundation. Cost between $40,000 and $50,000.

Ia., Sioux City—Hotel—War Eagle Corporation, 507 Trimble Blk., having plans prepared building 9 story. About $1,000,000. Noted Mar. 13.

Minn., Hastings—Dormitory—State Bd. Control, St. Paul, soon lets contract building 2 story, 50 x 120 ft. About $60,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. Noted May 8.

Minn., Hibbing—Hotel—S. S. Rumsey, engr., Wolvin Bldg., Duluth, receives bids about June 15, building 5-story, rein.-con. and brick, rein-con. flooring, concrete foundation, in central addition, here, for Oliver Mining Co., Wolvin Bldg., Duluth, About $200,000.

Minn., Minneapolis—Hotel—Hotel Dyckman Co., 6th St. between Nicollet and Hennepin Aves., plans to build 2-story brick addition, at 29-31 South 6th St. About $100,000. Long, Lamoreaux & Long, 1028 Andrus Bldg., archts.

S. D., Humboldt—School—Bd. Educ. plans election to vote on $85,000 bonds to build school.

S. D., Sioux Falls—School—City voted $100,000 bonds to build new school. W. F. Fuller, clk.

N. D., Dickinson—Auditorium, etc.—City plans election to vote on $50,000 bonds to build auditorium and community house.

Wyo., Casper—High School—Bd. Educ. plans to build high school. About $100,000.

Mont., Bozeman—Hall—Montana State College, Bozeman, having plans prepared by F. F. Willson, archt., Owenhouse Bldg., for 2 story, 60 x 140 ft. engineering hall. About $125,000.

Mont., Deer Lodge—Temple—Masonic Lodge plans to build 2 story, 54 x 131 ft. on Main St. About $70,000. Whitehouse & Price, Hutton Bldg., Spokane, Wash., archts.

SEWER—NEWARK, N. J.

Bids were received by Passaic Valley Sewerage Commissioners, May 6th, for constructing Sect. No. 20, Rutherford-East Rutherford branch intercepting sewer, from (A) U. S. Drainage & Irrigation Co., 17 Battery Pl., New York City; (B) Bruno & Petitti, 18 Tremont St., Boston; (C) North Jersey Contg. Co., Dover; (D) Culp Co., Inc., 356 East 23rd St., Paterson, $127,133; (E) Cenedella & Co., 136 Bloomfield Ave., Passaic, $132,192; (F) J. F. Shanley Co., 31 Clinton St., $162,020; (G) O'Gara Constr. Co., 242 Market St., $169,963; (H) Fusco Contg. Co., Newark, $231,699; (I) C. Ippolito, 252 Main St., Orange, $287,709. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
1,538 lin.ft. 87-in. brick pipe	$20.48		
1,538 lin.ft. 84-in. segment block pipe			$23.17
1,538 lin.ft. 84-in. concrete pipe		$22.30	
362 lin.ft. 84-in. brick pipe	20.15		
362 lin.ft. 78-in. segment block pipe			20.32
362 lin.ft. 78-in. concrete pipe		21.91	
826 lin.ft. 78-in. brick pipe	17.40		
826 lin.ft. 72-in. segment block pipe		13.99	14.02
826 lin.ft. 72-in. concrete pipe			
714 lin.ft. 72-in. brick pipe	11.72		
714 lin.ft. 66-in. segment block pipe		13.95	12.78
714 linft. 66-in. concrete pipe			
410 lin.ft. 66-in. brick pipe	11.24		
410 lin.ft. 60-in. segment block pipe		11.89	11.80
410 lin.ft. 60-in. concrete pipe			
325 lin.ft. 60-in. brick pipe	10.07		
325 lin.ft. 54-in. segment block pipe		9.35	9.52
325 lin.ft. 54-in. concrete pipe			
282 lin.ft. 54-in. brick pipe	9.50		
282 lin.ft. 48-in. segment block pipe		9.21	8.90
282 lin.ft. 48-in. concrete pipe			
222 linft. 48-in. brick pipe	8.90		
222 lin.ft. 45-in. segment block pipe		7.62	7.27
222 lin.ft. 45-in. concrete pipe			
155 lin.ft. 45-in. brick pipe	8.54		
155 lin.ft. 42-in. segment block pipe			7.24
155 lin.ft. 42-in. concrete pipe		6.59	
557 lin.ft. 39-in. brick pipe	7.49		
557 lin.ft. 36-in. segment block pipe			5.73
557 lin.ft. 36-in. concrete pipe		5.95	
80 ft. 24-in. vitrified pipe	2.25	3.50	3.86
50 ft. 18-in. vitrified pipe	1.65	2.50	2.05
315 ft. 15-in. vitrified pipe	1.50	1.60	1.28
750 ft. 12-in. vitrified pipe	1.50	1.40	1.10
25 manholes	50.00	60.00	80.50
80 storm water inlets	50.00	51.50	55.00
1 junction chamber "A"	826.04	1,000.00	990.00
1 junction chamber "B"	546.33	950.00	800.00
1 junction chamber "C"	246.78	325.00	255.00
1 junction chamber "D"	328.12	550.00	465.00
1,500 cu.yd. rock excavation	2.00	3.00	4.00
50 cu.yd. extra concrete	10.00	10.00	12.50
100 cu.yd. extra brick	17.00	18.50	20.00
500 lin.ft. curb and gutter	.60	1.25	1.25
800 sq.ft. cement sidewalk	.20	.25	.25
100 cu.yd. earth excavation	1.00	1.50	1.50
2000 ft.b.m. lumber	75.00	50.00	60.00
Extended totals	$94,532	$98,575	$100,448

DRAIN—COATESVILLE, PA.

Bids were received by city (lowest 3) for constructing Gibbons Run Drain, from (A) Dunleavy Bros., Coatesville, (awarded contract); (B) Ryan Constr. Co., Baltimore, Md.; (C) E. C. Fish Co., Real Estate Trust Bldg., Phila. The unit bids were as follows:

	A	B	C
768 lin.ft. earth excavation and refilling, in trench, for 24-in. concrete sewer	$13.50	$12.00	$14.00
3,047 lin.ft. earth excavation and refilling, in trench, for 27-in. concrete sewer	17.00	17.00	19.00
1,110 lin.ft. earth excavation and refilling, in trench, for 36-in. concrete sewer	18.00	20.00	24.00
1,500 cu.yd. concrete masonry, in trench, Portland cement mortar	14.50	13.50	12.00
100 cu.yd. brick masonry, in manholes, Portland cement mortar and appurtenant work	20.00	30.00	30.00
100 cu.yd. rock excavation in trench	6.00	3.00	4.00
Excavation and refilling for two weir chambers, etc., and all appurtenant work (lump sum)	6,000.00	6,000.00	2,080.00
Furnishing and erecting tide gates in local sewer (lump sum)	600.00	500.00	500.00
Erie R.R. Crossing, including furnishing timbering, piling, etc., and all appurtenant work (lump sum)	5,500 00	8,000.00	4,000.00
21,000 lb. furnishing and placing steel for reinforcement, etc	.065	.08	.06
Extended totals	$119,962	$122,945	$124,525

Mont., Missoula—Library—University of Montana, University Ave., having plans prepared by Cohagen & Marsh, archts., Billings, building 2 story, on campus. About $250,000.

Mo., St. Louis—Bank—Mercantile Trust Co., 8th and Locust Sts., plans to build 2-story, 100 x 200 ft. addition on 8th and Locust Sts. Cost to exceed $50,000.

Mo., St. Louis—Mercantile—I. Mathes Shoe Co., 1409 Washington St., plans to build at 1333-35 Washington St. Cost to exceed $50,000.

Mo., St. Louis—Mercantile—Washington University, Skinker and Lindell Sts., having plans prepared by P. J. Bradshaw, archt., International Life Bldg., for 3-story, 150 x 250 ft., on 19th and Locust Sts. Cost to exceed $50,000.

Mo., St. Louis—Mercantile—See "Industrials Works."

Tex., San Antonio—Store—Natl. Grocery Co., Monterey and Salado Sts., plans to build 1-story, 150 x 210 ft. brick, on Medina and Lakeview Sts. About $50,000.

Tex., Yoakum—Hospital—City soon receives bids building 3-story, 42 x 75 ft., rein.-con. and brick. About $60,000. L. Harrington Co., Frost Bldg., San Antonio, archt.

Idaho, Boise—Y. M. C. A. having plans prepared by Tourtellotte & Hummel, archts., McKay Bldg., Portland, Ore., for 3 story building. About $160,000. Noted Mar. 27.

Idaho, Nampa—Bank—Farmers & Merchants Natl. Bank, having plans prepared by Tourtellotte & Hummel, archts., McKay Bldg., Portland, Ore., building 1 story, 50 x 100 ft. stone. About $60,000.

Ariz., Phoenix—Lodge and Business—B. P. O. E. Lodge having plans prepared by Lescher & Kibbey, archts., Bank of Arizona Bldg., building 6 story, 100 x 137 ft., on Adams and 2nd Aves. About $200,000.

Wash., Vancouver—Office and Store—Red Ash Coal Co., 901 Washington St., plans to build 2 story, 100 x 100 ft., rein.-con., rein.-con. flooring, concrete foundation, on 7th and B Sts. About $60,000.

Buildings (Continued)

Wash., Walla Walla—Store—A. M. Jensen Co., 2nd and Alder Sts., plans to build 1 story, 107 x 170 ft., concrete, on East Main St. About $75,000. Beezer Bros., Seaboard Bldg., Seattle, archts.

Ore., Astoria—Office—See "Industrial Works."

Ore., Portland—Schools—City election June 21, to vote on $2,500,000 bonds to build Northeast High School, James John High School and elementary schools in various districts. G. A. Grout, supt. city schools. Noted Mar. 6.

Cal., Long Beach—Store—Mercantile Co., Pine Ave., plans to build 4 story, 75 x 150 ft. concrete, brick and steel addition on Pine Ave. and Bway., also 2 story, 75 x 150 ft. addition to existing building. About $150,000.

Cal., Long Beach—Y. M. C. A. plans to build 6 story, 150 x 150 ft. building on 6th St. and American Ave. About $280,000 available for work. C. F. Van de Water, member of com. Noted Jan. 30.

Cal., Redondo Beach—Bank, Lodge and Office—First Natl. Bank of Redondo Beach and Redondo Beach Savings Bank having plans prepared by L. B. Pemberton, archt., 630 Esplanade St., for 3-story, 96 x 100 ft., brick, concrete foundation. About $50,000.

Cal., Vallejo — Church — First Presbyterian congregation having plans prepared by G. Rushforth, archt., 354 Pine St., San Francisco. About $50,000.

Que., Quebec—Hotel—Canadian Pacific Ry., Windsor St. Sta., Montreal, plans to build 10-story, on St. Louis St., here. About $1,500,000. J. M. R. Fairbairn, asst. ch engr.

Que., Verdun—Memorial Hall—City plans to build memorial hall on Wellington St. About $55,000. J. A. Leclair, mayor.

Ont., London—Store—T. F. Kingsmill, 130 Dundas St., purchased site and plans to build 3 story, brick. About $100,000.

Ont., Niagara Falls — Hospital — City Council plans to build 3-story, brick. Total cost $100,000. Bonds for $50,000 have been voted for project and balance to be raised by subscription.

Ont., Toronto—Schools—Bd. Educ., 150 College St., having plans prepared by D. F. Franklin, archt., Lansdowne Ave., building John Ross Robertson Memorial School, 2-story brick, on Glenholme Ave., and 2-story, stucco, on Glengrove Ave. About $130,000 and $100,000 respectively. Noted Jan. 30.

BIDS DESIRED

R. I., Howard — Administration — Until May 27, by State Bd. Charitable and Penal Institutions, Providence, converting 2-story fireproof service building, here, into administration building. About $50,000. G. F. Hall, 806 Union Trust Bldg., Providence, archt. Noted Mar. 14, 1918.

Conn., Waterbury—School—Until May 19, by Bd. Educ., building 2 story fireproof addition to Croft St. School, rein.-con. flooring, concrete foundation. About $125,000. L. A. Walsh, 51 Leavenworth St., archt. Noted May 1.

N. Y., Brooklyn—School—Until May 27, by C. B. J. Snyder, supt. school bldgs., Municipal Bldg., New York City, building P. S. 97, on easterly side Stillwell Ave., 80 ft. north of Ave. S.

N. Y., Central Islip—Hospital—Until June 4, by State Hospital Comn., Capitol, Albany, building 3 story, 39 x 296 ft. addition to building for acute patients, with wings, 35 x 39 ft., brick and rein.-con., concrete foundation, at Central Islip State Hospital, here. About $150,000. Noted May 1.

N. Y., New York—Schools—Until May 19, by C. B. J. Snyder, supt. school bldgs., Municipal Bldg., altering, repairing, etc., P. S. 5, 57, 62, 78, 93, 106, 109, 158, 172, 179 and De Witt Clinton High School.

Pa., Harrisburg—Sanitorium, Dormitories, etc.—Until May 19, by E. Martin, comr. dept. health, for work at State Sanatorium near Mont Alto to consist of 6 employees' houses, dormitory, boiler house for hospital group, alterations and additions to camp boiler house, laundry and community buildings, heating installations, alterations and addition to heating plant, electric transmission and distribution lines and coal and ash handling apparatus in camp boiler house; at sanatorium near Cresson, 4 employees' houses, community building, solarium additions, fire towers in east ward buildings, and heating systems for same; at sanatorium near Hamburg, community building, dairy barn, wind brake additions to ward buildings, cement pavements, also heating system for community building.

Ala., Bessemer—Court House and Jail—Until June 10, by Bd. Revenues Jefferson Co., building 3 story, brick fireproof court house and jail. About $120,000. J. W. Gwin, pres. H. B. Wheelock, Steiner Bldg., Birmingham, archt.

O., Cleveland—Office—Osborne Eng. Co., engrs., 2848 Prospect Ave., receiving bids building 3-story, 37 x 60 ft., concrete, steel and brick, on East 55th St. and Krakow Ave., for Fishel & Marks Co., 3013 East 55th St. About $50,000.

Ill., Chicago—Hospital—Until June 1, by W. H. Pruyn, Jr., archts., 122 South Michigan Ave., building 6-story, 150 x 200 ft. rein.-con. and brick addition, rein.-con. flooring, concrete foundation, on Winchester and Wilson Ave., for Ravenswood Hospital Assn., 1917 Wilson Ave. About $400,000. Noted Apr. 17.

Wis., Clintonville—Bank—Until June 1, by Foeller & Schober, archts., 123 North Washington St., Green Bay, building 2-story, 40 x 160 ft., rein.-con. and brick, brick foundation, on Main and Elm Sts., for 1st Natl. Bank. C. Gibson, pres. Cost between $55,000 and $60,000.

Wis., Kenosha—Court House—Until Aug. 1, by Comrs. Kenosha Co., building 4-story, 114 x 168 ft., rein.-con. and steel, rein.-con. flooring, concrete foundation, on Park St. About $400,000. White, White & White, Pub. Serv. Bldg., archts.

Wis., Sheboygan—Exchange and Office—Until July 15, by W. C. Weeks, archt., 720 Ontario Ave., building 4-story, 70 x 80 ft., rein.-con. and brick, brick foundation, on 7th St. and Center Ave., for Citizens Telephone Co., North 8th St. About $70,000.

Minn., Cambridge—High School—Until May 23, by F. W. Nesbitt, clk., bd. educ., building 2 story, 54 x 100 ft. About $130,000. Foss & Foss, Phoenix Bldg., St. Cloud, archts.

Minn, Faribault—Dormitory—Until June 1, by State Bd. Control, St. Paul, building 2-story, 45 x 140 ft., rein.-con. and brick, at School for Feeble Minded, here. About $75,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., St. Peter—Dormitory—Until May 20, by C. H. Johnston, engr., 715 Capital Bank Bldg., St. Paul, building 2 story, 45 x 140 ft., rein-con. and brick, at State Hospital for State Bd. Control, St. Paul. About $50,000.

Minn., Willmar—Cottages—Until June 1, by State Bd. Control, St. Paul, building 2-story, 45 x 120 ft., rein.-con. and brick at Asylum for Insane, here. About $110,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Willmar—Service Hall, etc.—Until June 1, by State Bd. Control, St. Paul, building 2-story, 45 x 120 ft., rein.-con. and brick service hall and building at State Asylum, here. About $85,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

N. D., Pembina—School—Until May 27, by Bd. Educ. building grade and high school. W. D. Gillespie, 64½ Bway., Fargo, archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Brookline (Boston P. O.)—Bank—Brookline Trust Co., Beacon St., let contract building 2-story, 60 x 120 ft. brick and concrete, rein.-con. flooring, concrete foundation, to E. A. Abbott Co., 185 Devonshire St., Boston. About $150,000. Noted Apr. 10.

★Mass., Brookline (Boston P. O.)—Sales, etc.,—Boston Buick Co., Boston, let contract building 2 story, 85 x 300 ft. brick and concrete fireproof sales and service station, concrete foundation, on Babcock St. here, to Evatt Constr. Co., 161 Devonshire St., Boston. About $100,000.

★Mass., Foxboro—Hospital—State Comn. Mental Diseases, State House, Boston, let contract building 3 story, 50 x 160 ft. brick and rein.-con. hospital annex, brick and concrete foundation, here, to J. A. Munroe, North Attleboro. About $87,000.

★Conn., Bridgeport—Business—F. Jacoby, 1083 Broad St., let contract building 3 story, 50 x 150 ft. brick and steel, rein.-con. flooring, concrete foundation, on Main St. opposite Lumber St., to T. J. Pardy Constr. Co., 15 Fairfield Ave. About $65,000. Noted Apr. 10.

★Conn., Hartford—Business—E. A. Slattery, 280 Oxford St., let contract building 2-story, 48 x 116 ft., brick and terra cotta, rein.-con. flooring (1st floor only), concrete foundation, on Pratt St., to T. R. Fox & Son, 251 Sheldon St. About $50,000

★Conn., Hartford—Market—City let contract building 1 story, 63 x 122 ft. brick and concrete, concrete flooring and foundation, on Connecticut Blvd., to Ahern & Welch Co., 721 Main St., $91,999. Noted May 1.

★Conn., New Haven—Parish—Chapel St. Ecclesiastical Society, Whitney St., let contract building 2-story, brick and steel, brick foundation, to Larkin, Carey Co., New Haven. About $115,000. Noted Apr. 10.

★Conn., Stratford (Bridgeport P. O.)—Theater—O. Christensen, 920 Main St., Bridgeport, will build 1 story, 75 x 123 ft. brick and timber, concrete flooring, concrete foundation, on Main St., here. About $50,000. Work will be done by day labor. Noted Mar. 27.

N. Y., Albany—School—Bd. Contr. and Supply received bids Apr. 21, building P. S. 19, 3 story, 41 x 160 ft. brick and rein.-con., concrete foundation, on New Scotland Ave., from Bame & Cardell, 176 Warren St., $115,500; H. Goodman, Albany, $121,552; A. E. Stephens Co., Binghamton, $122,900. Noted Mar. 27.

★N. Y., Brooklyn—Mausoleum—M. Beck, 1564 Bway., New York City, let contract building 1 story, 20 x 40 ft. granite and marble, at Salem Fields Cemetery, to Adler Monumental Wks., 148 East 59th St., New York City. About $50,000.

★N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York City, let contract building P. S. 100, 4-story, 100 x 144 ft. brick and steel, brick foundation, on West 1st St. and P. S. 80, on West 18th St., to T. A. Clarke Co., 122 Livingston St. About $523,000. Noted Apr. 10.

★N. Y., Brooklyn—Synagogue—Congregation Sons of Israel, 8625 Bay 21st St., let contract building, 1-story, 100 x 100 ft. brick and stone, brick foundation, on Benson Ave. and Bay 21st St., to Rangeley Constr. Co., 405 Lexington Ave., New York City. About $70,000.

★N. Y., Brooklyn—Theater—J. Spielberg, 308 Sheffield Ave., let contract building 2-story, 75 x 100 ft. brick and steel, brick foundation, on Stone and Pitkin Aves., to Shoner Bldg. Co., 149 Christopher Ave. About $100,000. Noted Apr. 17.

N. Y., Long Island City—High School—C. B. J. Snyder, supt. school. bldgs., Municipal Bldg., New York City, received bids May 6, building 3 story, 100 x 100 ft. brick and steel addition to Bryant High School, rein.-con. flooring, concrete foundation, on Wilbur Ave., from Emerson Bldg. Co., 103 Park Ave., New York City, $500,500; J. MacArthur, 120 Bway., New York City, $524,493; T. A. Clarke Co., 122 Livingston St., Brooklyn, $533,300. Noted May 1.

★N. Y., Long Island City—School—Bd. Educ. 500 Park Ave., New York City, let contract building P. S. No. 3, 3-story, 105 x 108 ft. brick and steel, brick foundation, on Colonial Ave. between Livingston and Meteor Sts., here, to Nugent Constr. Co., 505 5th Ave., New York City. About $155,000. Noted May. 1.

★N. Y., S. I., New Dorp—Home—St. Johns Guild, 103 Park Ave., New York City, will build 3 story hollow tile and stucco nurses' home, brick foundation, here. About $150,000. Work will be done by day labor.

★N. Y., New York—Bank and Office—S. W. Barasch, 77 Ridge St., will build 5-story, 22 x 75 ft. brick and steel, brick foundation, at 150 Delancey St. About $50,000. Work will be done by day labor.

★N. Y., New York—Office—Lawyers Realty Co., 160 Bway., let contract building 5-story, 25 x 100 ft., brick and steel, concrete foundation, at 45 Maiden Lane, to W. Higginson, 1123 Bway. Noted May 1.

★N. Y., New York—Office—Sixty Wall St. Corp. let contract building 5-story brick and steel addition, to C. T. Wills, 286 5th Ave. About $100,000. Cost plus percentage basis. Noted May 1.

★N. Y., Rome—School—Bd. Educ. let contract building 2 story, 103 x 132 ft. brick, on Linden St., to E. H. Owens, 114 Front St. About $143,702. Noted May 8.

★Pa., Boyertown—High School—School Bd. let contract building 2½-story, brick and timber, rein.-con. flooring, brick foundation, on East 4th St., between Monroe and Madison Sts., to W. J. Elliott, Coatesville, $74,684.

Md., Homewood (Baltimore P. O.)—Laboratory—Trustees John Hopkins University received bids building 1-story, 50 x 150 ft., rein.-con. and brick, concrete and brick foundation, on Charles St. Ave., from Consolidated Eng. Co., 243 Calvert Bldg.; B. F. Bennett Bldg. Co., 123 South Howard St.; Frainie Bros. & Haigley, 18 Clay St., all contractors of Baltimore. About $55,000. Noted Jan. 30.

Buildings (Continued)

W. Va., Montgomery—High School—Bd. Educ. received bids building 3 story, brick and rein.-con., from Charleston Concrete Steel Co., Charleston, $92,000; P. J. Phipps, Roanoke, Va., $100,000; Hains Co., Wash., D. C., $105,000. Noted May 1.

★Ga., Atlanta—Club—Atlanta Nurses' Club let contract building brick on Luckie St., to Turman & Calhoun, Empire Bldg. About $100,000.

★Tenn., Memphis—Hospital—Baptist Memorial Hospital, Madison Ave., let contract building 8 story, 92 x 101 ft., brick and concrete addition, to J. Alexander Constr. Co., 388 North Front St. About $250,000. Noted Apr. 10.

★O., Akron—Welfare—Goodyear Tire & Rubber Co., East Market St., let contract building 6-story, 158 x 385 ft., rein-con., steel and brick, concrete foundation, on East Market St., to Hunkin Conkey Co., 601 Century Bldg., Cleveland. About $100,000. Noted May 1.

★O., Cleveland—Office—East 9th St. Euclid Co., 764 Euclid Ave., let contract remodeling 8-story, 79 x 163 ft., concrete, steel and brick, on East 9th St. and Euclid Ave., to J. E. Christian Co., 1311 St. Clair Ave. About $100,000. Noted Apr. 24.

★O., Columbus—Store and Office—D. W. McGrath, New 1st Natl. Bank Bldg., will build 2-story, 45 x 187 ft., steel and brick, rein.-con. flooring, on East Broad St. About $60,000. Work will be done by day labor.

★Mich., Detroit—Store and Auditorium—Academy of Music, c/o C. H. Crane and E. G. Kiehler, archts., Dime Bank Bldg., let contract building 2 and 3 story, 100 x 171 ft. rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Woodward Ave. and Paissus St., to Walbridge, Alldinger Co., Penobscot Bldg. About $350,000.

★Ill., Alton—Bank—Citizens' Natl. Bank let contract building 1-story, 35 x 50 ft. brick and terra cotta, to Hoggson Bros., 38 South Dearborn St., Chicago. About $125,000.

★Neb., Omaha—Hospital—P. Findley, 670 Brandeis Theater Bldg., let contract building 3 story, 33 x 104 ft., rein.-con., rein.-con. flooring, to A. C. Bush, 543 Ry. Exch. About $60,000; cost plus 10% basis.

★S. D., Fairfax—School—Bd. Educ. let contract building 2 story, 60 x 140 ft. brick and Bedford cut stone, to Western Constr. Co., Commerce Bldg., St. Paul, Minn. About $70,000.

★S. D., Hurley—School—Bd. Educ. let contract building 2 story, 60 x 134 ft. brick, steel and concrete, to Floyd-Niebuhr Co., 1726 Newton Ave. N., Minneapolis, Minn. About $80,300. Noted Apr. 10.

★Mo., St. Louis—Fire House—Bd. Pub. Wks. let contract building two 2 story, 36 x 76 ft. and 28 x 63 ft., brick and timber firehouses, No. 3, to H. O. Hirsch Constr. Co., Wainwright Bldg., $22,438; No. 32, to Kellermann Constr. Co., Internatl. Life Bldg., $21,019. Noted Apr. 10.

★Cal., San Francisco—Office—Winship Estate, c/o G. T. de Calmesmil, archt., 907 Rialto Bldg., will build 3 story, rein.-con. addition to Union Sq. Bldg., on Post St. near Powell St. About $90,000. Work will be done by day labor.

Cal., San Francisco—School—Bd. Pub. Wks. received bids building 2 story, brick and timber, concrete foundation, on 17th and Cabrillo Aves., from Anderson & Ringrose, 630 Sutter St., $87,600; H. Williams, Hearst Bldg., $87,742; W. Henderson, Monadnock Bldg., $89,844.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Building, etc.—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to construct building "F" and alter stairway of Naval Hospital; Spec. 3892. About $828,000.

N. Y., Brooklyn—Heating Plant and Distributing System—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to extend heating plant and distributing system at Naval Hospital, here; Spec. 3891. About $830,000.

N. Y., Montauk—Power House—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3889. About $4000.

N. Y., New York—Barracks—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build receiving ship barracks, here; Spec. 3894. Bids will be received at local yard.

Va., Hampton Roads—Crane and Bridges—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 2 electric traveling cranes in 3 story storehouse and build 2 transfer bridges, here; Spec. 3895. About $25,000.

Va., Hampton Roads—Electric Freight Elevator—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to install, here; Spec. 3890. About $25,000.

Fla., Key West—Power House and Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build and install, here; Spec. 3896. About $20,000.

Mich., Midland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., plans to build here. About $70,000.

Ia., Muscatine—Earth Work—Mississippi River Comn., International Life Bldg., St. Louis, soon receives bids for 200,000 cu.yd. earth work, here.

Idaho, Orafino—Road Work—Bureau Pub. Rds., Missoula, Mont., plans to grade 40 mi. Pierce City-Bungalow National Forest Rd., 12 ft. wide, Clearwater Co. About $230,000. C. H. Purcell, dist. engr.

Ore., Empire—Oil Station and Wharf—U. S. Engr. Office, Portland, plans to build oil station and 200 ft. wharf, here. About $50,000. J. Polheumus, engr.

Cal., San Diego—Building, Hangar, etc.—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to construct main building, kite balloon hangar and concrete floors, here; Spec. 3893. Bids will be received at local yard.

BIDS DESIRED

Mass., Chatham—Roads—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3884. About $10,000. Noted May 8.

R. I., Newport—Boathouse—Until June 4, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building here; Spec. 3786. About $83,000. Former bids rejected. Noted Apr. 3.

N. J., Cape May—Storage Tanks—Until June 4, by Bureau Yards and Docks, Navy Dept., Wash., D. C., installing Diesel and gasoline oil storage tanks, here; Spec. 3721. About $91,000; $10 deposit required for plans and spec.

Pa., Ft. Mifflin—Fence—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3848. About $16,000. Noted Apr. 3.

Pa., Phila.—Heating and Humidifying Apparatus—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing at Aircraft Storage Plant, here; Spec. 3854. About $75,000. Noted Apr. 10.

D. C., Wash.—Elevator and Shaft—Until May 19, by Bureau Yards and Docks, Navy Dept., installing elevator and shaft for heavy machine shop; Spec. 3851. About $14,000; $10 deposit required for plans and spec.

Va., Hampton Roads—Air and Water Systems—Until May 26, by Bureau Yards and Docks, Navy Dept., Wash., D. C., installing high pressure air and water systems at submarine base, here; Spec. 3883. About $43,000; $10 deposit required for plans and spec. Noted May 8.

Va., Hampton Roads—Revolving Platform—Until June 4, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building at Naval Air Sta., here; Spec. 3880. About $7500; $10 deposit required for plans and spec. Noted May 8.

Va., Hampton Roads—Steel Water Tank and Tower—Until May 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 150,000 gal. steel tank and tower at Navy Yards, here; Spec. 3868. About $25,000. Noted Apr. 24.

W. Va., Charleston—Roof Decks—Until May 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building gypsum roof decks at Naval Ordnance Plant, here; Spec. 3839. About $169,000. Noted Apr. 3.

S. C., Charleston—Storehouse—Until May 26 (change of date), by Bureau Yards and Docks, Navy Dept., Wash., D. C., building fixed ammunition storehouse, here; Spec. 3842. About $52,000; $10 deposit required for plans and spec. Noted Apr. 24.

Tex., Denton—Post Office—Until June 5, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here; advertised in this issue.

Tex., Honey Grove—Post Office—Until May 20, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here. Former bids rejected. Noted Apr. 10.

Alaska, Ketchikan—Elevator—Until May 28, by Supt. Light Houses, furnishing electric freight elevator for 2-story lift, 5000 lb. capacity.

P. I., Cavite—Power Plant Equipment—Until May 26, by Bureau Yards and Docks, Navy Dept., Wash., D. C., installing, here; Spec. 3871. About $90,000; $10 deposit required for plans and spec. Noted Apr. 24.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Portsmouth—Building Addition—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract building addition to Bldg. 42 for spar shop, to Hughes, Foulkrod Co., 1405 Commonwealth Bldg., Phila., $60,986 (45 days). Noted Apr. 17.

★Mass., Boston—Dredging—U. S. Engr. Office, Boston, let contract dredging channel and turning basin near Hog Island, Boston Harbor, involving 100,000 cu.yd. floating dredgework, to Bay State Dredging & Development Co., 62 Condor St., $.44 per cu.yd. Noted Apr. 24.

R. I., Newport—Torpedo Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 12, building, here, (1) work complete, from

Falliace Bros., 7 East 42nd St., New York City, (1) $167,273, (150 days); (2) concrete piles add $105, deduct $15, timber piles add $30, deduct $10; (3) concrete piles add $3.50, no deduction, timber piles add $1, no deduction; (4) $21.

F. G. Fearon Co., 280 Madison Ave., New York City, (1) $184,700; (2) concrete piles add $100, deduct $50, timber piles add $30, deduct $10; (3) concrete piles add $3, deduct $1, timber piles add $1, deduct $.25; (4) $40.

McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $195,300 (175 days), (2) concrete piles add $105, deduct $45, timber piles, add $35, deduct $15; (3) add $2.50, deduct $.50, timber piles, add $1.05, deduct $.20; (4) $16. Noted Apr. 24.

R. I., Newport—Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building double quarters for officers at Naval Training Sta., here, (1) work complete, from

R. A. Smith, 28 Bellevue Ave., (1) $19,152.90 (90 days); (2) $18,352.90.

H. S. Roberts & Co., 123 Bway., New York City, (1) $21,000 (90 days); (2) $20,725.

Hydes & Baxter, 711 13th St., N. W., Wash., D. C., (1) $26,150 (90 days); (2) deduct $450.

★N. Y., New York—Electric Elevator—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract, installing elevator in light machine and electric shop, here, to Seaberg Elevator Co., 407 Douglas St., Brooklyn, $28,000 (175 days). Noted Feb. 6.

★N. J., Cape May—Cold Storage Building—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract building cold storage building at Section Base, here, to Post & McCord, 101 Park Ave., New York City, $36,000 (180 days). Noted May 1.

Del., Wilmington—Dredging—U. S. Eng. Office, Old Federal Bldg., received bids May 5, dredging waterway between Rehoboth Bay and Delaware Bay (Lewis Canal), from Delaware Dredging Co., Colonial Trust Bldg., Phila., $.36½ per cu.yd.; Dorsey & Miller Co., 420 Equitable Bldg., Baltimore, Md., $.45 per cu.yd. Noted Apr. 10.

★Del., Wilmington—Paving—U. S. Shipping Bd., Emergency Fleet Corp., Phila., Pa., and Street and Sewer Dept., Wilmington, let contract paving Union Park Gardens, to Union Paving Co., 30th and Locust St., Phila., Pa., $22,666.

★Md., Dundalk—Store, Post Office and Telephone Exchange—U. S. Emergency Fleet Corp., Phila., Pa., let contract building, here, to Gladfelter & Chambers, 36th St. and Roland Ave., Baltimore, $72,580.

★Va., Hampton Roads—Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing additional buildings, at Aircraft Sta., here, to Post & McCord, 101 Park Ave., New York City, $519,500 (230 days). Noted Apr. 24.

★Va., Langley Field—Tank and Tower—Constr. Div., War Dept., let contract building 250,000 gal. steel tank and tower, here, to Memphis Steel Constr. Co., Magee Bldg., Pittsburgh, Pa., $18,487.

Federal Government Work (Continued)

★**Va., Norfolk**—Cranes—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract installing one 6 ton electric traveling crane and two 1 ton pillar cranes, in galvanizing plant at Navy Yard, here, to Bedford Fdry. & Machine Co., 1107 5th Ave., Bedford, Ind., $13,665 (120 days). Noted Apr. 24.

★**W. Va., South Charleston**—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building fence at U. S. Naval Ordnance Plant, here, to Cyclone Fence Co., 2787 Woolworth Bldg., New York City, $20,980 (60 days). Noted May 1.

★**W. Va., Wheeling**—Pass, Weir, etc.—U. S. Engr. Office, Wheeling, let contract building pass, weir, beartrap, etc., for Dam No. 23, to Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh, Pa., $609,000 and Dam No. 25, Natl. Contg. Co., Citizens Bank Bldg., Evansville, Ind., $620,000. Noted Apr. 17.

S. C., Paris Island—Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 12, building 2 barracks, crew house, 6 outbuildings, 2 storehouses, double officers' quarters, wash house, cell house, bakery and work shop at Marine Barracks and Prison Camp, here, (1) work complete, from

Newport Contr. & Eng. Co., Sibley Bldg., Newport News, Va., (1) $70,130, (100 days); (2) $10,358; (3) $10,039; (4) $6981; (5) $8047; (6) $31,251; lump sum bid $134,446 for all buildings.

H. S. Roberts & Co., 1123 Bway., New York City, (1) $70,814, (100 days); (2) $14,862; (3) $13,406; (4) $8888; (5) $10,982; (6) 31,483.

W. T. Hadlow, 15 Baldwin Bldg., Jacksonville, Fla., (1) $71,502, (100 days); (2) $10,696; (3) $12,388; (4) $7350; (5) $8690; (6) $35,336. Noted May 1.

Fla., Pensacola—Conduit System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 12, building underground conduit system and transformer houses at Naval Air Sta., here, (1) work complete, from

G. E. Eng. Co., Laight and Varick Sts., New York City, (1) $93,468, (180 days); (2) $.27; (3) $175; (5) $2.10; (6) $862; (7) $343.

H. E. Crook, 28 Light St., Baltimore, Md., (1) $97,500, (180 days); (3) $175; (6) $1100; (7) $375.

H. E. Box Constr. Co., 81 East 125th St., New York City, (1) $109,983, (150 days); (2) $.14; (3) $200; (5) $1.20; (6) $600; (7) $250. Noted Apr. 24.

★**Fla., Pensacola**—Electrical Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing in Central Power Plant, at Navy Yard, here, to Carroll Electric Co., 714 12th St., Wash., D. C., $21,915 (150 days). Noted Apr. 10.

★**Ill., Carthage** — Earthwork — Secy. Mississippi River Comn., 1311 International Life Bldg., St. Louis, Mo., let contract for 110,000 cu.yd. earthwork, to H. Merritt, 827 Metropolitan Bldg., Minneapolis, Minn., $.30 per cu.yd.

★**Ill., Quincy**—Earthwork—Secy. Mississippi River Comn., 1311 International Life Bldg., St. Louis, Mo., let contract for 290,000 cu.yd. earthwork, to H. Merritt, 827 Metropolitan Bldg., Minneapolis, Minn., $.30 per cu.yd.

Tex., Mt. Pleasant—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids May 8, building post office, here, from Cooper & Lund, Inc., Newark, N. J., $46,969; A. Blair, 11 South Lawrence St., Montgomery, Ala., $49,300; Henry & Hatfield Constr. Co., 120 South Meridan St., Indianapolis, Ind., $50,132. Noted Apr. 10.

★**Okla., Woodward**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building, here, to Hatfield Constr. Co., 102 South Meridan St., Indianapolis, Ind., $84,398. Noted May 1.

SEWERS—DALLAS, TEX.

Bids were received by city for constructing storm sewer in Douglas St. Dist. from, (A) Klein Bros. Co., Junius and Walton Sts.; (B) Cramer & Cullum, Dallas; (C) Standard Eng. & Constr. Co., Interurban Bldg.; (D) Dallas Lime & Gravel Co., Main St., $80,347. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
1,624.4 lin.ft. 60-in. monolithic concrete pipe	$8.45	$9.84	$10.72
562.6 lin.ft. 54-in. monolithic concrete pipe	8.65	9.60	11.07
460.0 lin.ft. 51-in. monolithic concrete pipe	8.35	9.40	9.58
661.0 lin.ft. 45-in. monolithic concrete pipe	7.70	7.60	8.28
617.0 lin.ft. 39-in. monolithic concrete pipe	5.75	6.10	6.12
395.0 linft. 36-in. monolithic concrete pipe	5.20	5.39	5.71
516.0 lin.ft. 30-in. monolithic concrete pipe	4.55	4.54	5.21
1,275.0 lin.ft. 24-in. tile pipe, double strength	4.70	4.75	3.48
1,127.0 lin.ft. 21-in. tile pipe, double strength	4.10	3.84	3.00
48.0 lin.ft. 21-in. tile pipe, double strength	4.10	3.84	3.00
2,882.0 lin.ft. 18-in. tile pipe, double strength	3.10	3.35	2.48
235.0 lin.ft. 18-in. tile pipe, double strength	3.10	3.35	2.48
431.0 lin.ft. 15-in. tile pipe, double strength	2.55	2.34	2.21
1,790.5 lin.ft. 15-in. tile pipe, double strength	2.50	2.34	2.21
1 24 in. x 21 in. "Y," double strength	16.00	15.00	15.00
1 24 in. x 18 in. "Y," double strength	16.00	15.00	15.00
13 24 in. x 15 in. "Y," double strength	15.00	15.00	15.00
1 21 in. x 18 in. "Y," double strength	14.00	14.00	12.50
15 21 in. x 15 in. "Y," double strength	13.00	14.00	12.50
21 18 in. x 15 in. "Y," double strength	10.00	12.00	9.50
3 15 in. x 15 in. "Y," double strength	9.00	10.00	6.50
7 quadruple inlets	100.00	125.00	178.00
21 triple inlets	87.50	95.00	133.50
78 double inlets	55.00	65.00	89.00
4 single inlets	30.00	35.00	44.50
9 concrete manholes	70.00	80.00	70.00
24 brick manholes	67.00	80.00	75.00
93.0 lin.ft. curb to remove	0.10	0.10	0.15
10.6 lin.ft. curb and gutter to remove (24-in.)	.15	.20	.25
29.0 lin.ft. curb and gutter to remove (12 in.)	.15	.20	.20
62.0 lin.ft. curb and gutter to replace	1.00	1.50	2.00
82.0 sq.yd. bitulithic paving to remove and replace	5.85	6.50	6.65
10.0 sq.yd. concrete paving to remove and replace	2.25	3.00	3.00
630.0 cu.yd. rock excavation	2.75	3.50	3.00
Extended totals	$73,691	$79,506	$79,698

FREIGHT SHED—NEW YORK, N. Y.

Bids were received by L. Nixon, supt. pub. wks., Capitol, Albany, Apr. 28 building Barge Canal terminal freight shed on Pier 93, West 53rd St., North River, Contr. No. 218 from (A) Donnell-Zane Co., Inc., 309 B'way.; (B) A. E. Norton, Inc., 105 West 40th St.; (C) Harris Structural Steel Co., Inc., 1480 B'way. The unit bids were as follows:

	A	B	C
35 M.ft.b.m. sawed lumber	$112.50	$120.00	$90.00
23 cu.yd. 1st-class concrete	21.00	22.00	20.00
366,000 lb. structural steel	.0549	.067	.06
715 sq.ft. 4-in. terra-cotta tile	.30	.38	.30
1,635 sq.ft. solid metal windows	1.10	.70	.95
2 metal-covered doors, 3 ft. x 7 ft. 6 in	50.00	45.00	60.00
6 pier-shed doors, 18 ft. x 18 ft	810.00	800.00	972.00
7 pier-shed doors, 16 ft. x 18 ft	760.00	720.00	900.00
1 pier-shed door, 16 ft. x 18 ft., with wicket	800.00	750.00	972.00
6,580 sq.ft. corrugated metal siding	.32	.26	.33
3,980 sq.ft. flashings	.45	.33	.45
14,060 sq.ft. roof covering	.13	.125	.13
515 lin.ft. gutters	1.68	1.40	1.40
180 lin.ft. corrugated conductors	.56	.65	.58
157 lin.ft. 4-in. pipe conductors	1.70	1.30	1.60
2 flagpoles	30.00	30.00	25.00
5 24-in. ventilators	32.00	24.00	30.00
1 8-in. ventilator	15.00	15.00	18.00
Extended totals	$44,799	$47,646	$47,343

Idaho, Coeur d'Alene—Roadwork—Bureau Pub. Rds., Missoula, Mont., received bids May 7, grading 3 mi. Sect. 2, Fourth of July Canyon Rd., involving 18 acres clearing, 3350 cu.yd. rock and 19,200 cu.yd. earth excav., from De Camp Bros. & Hughes, Chatcolet, $21,664; Carlson & Norman, Realty Bldg., Spokane, Wash., $23,370.

Cal., Yreka—Road Work—B. J. Finch, dist. engr., U. S. Forest Serv., Mills Bldg., San Francisco, received bids building (1) 10.4 mi. Forest Highway from Orleans Bridge to Salmon River Project; (2) 7.4 mi. National Forest Rd., from Orleans Bridge to Humboldt-Siskujou Co. line; (3) 15 mi. Forest Highway from Happy Camp to point near Crawford Creek, from W. B. Arndt, San Francisco, (1) $204,736, $199,991 if government furnishes explosives; (2) $151,242, $149,002 if government furnishes explosives; W. A. Bechtel, 625 Market St., San Francisco, (1) $235,553; (2) $175,488; (3) $267,550; D. O'Day Co., San Francisco, (3) $296,813, $286,813 if government furnishes explosives.

Miscellaneous

PROPOSED WORK

Parks—Connecticut—State Park Bd., Capitol, Hartford, plans to develop parks throughout various reservations in state, to include trees, shrubbery, plants, flowers, etc. About $100,000.

Fire Alarm and Telegraph Systems—Salamanca, N. Y.—City plans election to vote on $15,000 bonds to build and operate new fire alarm and telegraph systems.

Drydock—Watervliet, N. Y.—P. J. Matton Boat Bldg. Co., 1240 Bway., plans to build 1000-ton drydock.

Levee—Port Allen, La.—Bd. State Engrs., New Orleans Court Bldg., New Orleans, received no bids building part of Port Barre South Levee, in Parish of St. Martin. New bids about July. Noted Apr. 3.

Bakery Ovens—Lorain, O.—Essig Baking Co., c/o H. Essig, having plans prepared by McCormick Co., archts., Century Bldg., Pittsburgh, building 2 rein.-con., steel and brick ovens, rein.-con. flooring and concrete foundation. About $30,000.

Dam and Power Plant—Stacyville, O.—J. A. Weber plans to build concrete dam and power plant. Plans include 1 water wheel, 100 lin.ft. 7-in. Lackawanna steel piling, 10-12 ft. lengths, and 500 cu.yd. concrete. Power Eng. Co., 510 Corn Exch. Bldg., Minneapolis, Minn., engrs.

Terminal—Milwaukee, Wis.—City plans to build marine terminal to include 3 or 4 piers, 1-story, 200 x 1000-ft. sheds, several 8-story, rein.-con. warehouses, railway tracks, etc. Cost, several million dollars. H. McL. Harding, 52 Vanderbilt Ave., New York City, engr.

Miscellaneous (Continued)

Bank Protection—Olympia, Wash.—State Highway Bd. rejected bids received Apr. 28, building 2000 lin.ft. pile and brush bank protection on Nisqually River, Thurston and Pierce Counties. Noted Apr. 17 under "Streets and Roads."

Port Development—Tacoma, Wash.—Port Comn. of Tacoma will hold election May 31, to vote on $2,500,000 bonds for port developments.

Fire Protection System—Watford, Ont.—City plans election to vote on $60,000 bonds to build fire protection system, involving 6000 ft. 6-in. c.i. pipe and water tank. F. W. Thorald, Toronto, engr.

BIDS DESIRED

Capstans and Hoists—Albany, N. Y.—Until June 3, by L. Nixon, supt. pub. wks., Capitol, installing 10 electric capstans, and 2 electric trolley hoists, at various barge canal terminals. Contr. No. 113. About $14,000 and $1000 respectively.

Street Encroachments—New York, N. Y.—Until May 19, by C. B. J. Snyder, supt. school bldgs., Municipal Bldg., removing street encroachments, etc., at hall of Bd. Educ., Park Ave. and 59th St.

Manholes, etc.—New York, N. Y.—Until May 20, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 100 castings standard manhole heads, 600 of standard manhole covers, 200 standard receiving basin hoods and plates, 100 standard receiving basin covers, 100 flat corner grate bars, 75 flat straight grate bars, 25 Herringbone straight bars, 150 Type "B" gratings, 150 standard w.i. steps.

Boiler Breeching—Ogdensburg, N. Y.—Until May 20, by State Hospital Comn., Albany, for boiler breeching at St. Lawrence Hospital here. E. S. Elwood, secy.; advertised in this issue. Noted Jan. 30.

Piles, Timber, etc.—St. George, S. I., N. Y.—Until May 21, by J. H. Delaney, comr. plant and structures, Municipal Bldg., New York City, furnishing and delivering piles, timber and hardware to St. George Terminal of Staten Is. Ferry.

Brick—Saranac Lake, N. Y.—Until June 3, by city, furnishing 1800 sq.yd. vitr. paving brick. S. A. Miller, clk.; advertised in this issue.

Laundry Machinery—Wards Island, N. Y.—Until May 20, by State Hospital Comn., Capital, Albany, for laundry machinery and motors to be installed at Manhattan State Hospital, here. L. F. Pilcher, state archt.; advertised in this issue. Noted Jan. 30.

Paving Material—Camden, N. J.—Until May 19, by Com. Streets & Highways, furnishing 50 tons each of asphalt, crushed stone, stone dust, cement, fuel, slag, bituminous coal and asphalt sand, f.o.b. cars Camden from June 1, 1919 to June 1, 1920. O. W. Johnson, ch. clk.

Retaining Wall—Bridgeville, Pa.—Until May 20, by Boro. Council, building 110 cu. yd. rein.-con. retaining wall. J. E. Franks, clk.

Platforms—Phila., Pa.—Until May 20, by W. E. Twining, dir. dept. city transit, 1211 Chestnut St., for furnishing and erecting platforms and connecting passages stations on Kensington Ave., at Allegheny Ave. and Somerset St., Contr. No. 531. Work consists of alteration and reinforcement of certain of existing platform girders and their bracing, furnishing and placing steel framework and railing, rein.-con. platform floor, steel sash and glass slide enclosures, wood and slag roofing, copper drain gutters, galvanized pipe down spouts and appurtenant work.

Transmission Line—La Grange, Ga.—See "Sewers."

Retaining Wall—Grosse Pointe, Mich.—See "Streets and Roads."

Paving Blocks—Kalamazoo, Mich.—Until May 24, by C. L. Miller, city pur. agt., furnishing 1,886,000 vitr. paving blocks; advertised in this issue.

Cast Iron Pipe—Lewiston, Mont.—Until May 19, by City Council, furnishing 38 tons 6-in., 60 tons 4-in. and 10 tons 8-in. class "C" c.i. pipe, and specials, f.o.b. Lewiston. H. L. Fitton, city clk.

Ferry Dock—Seattle, Wash.—Until May 27, by Comrs. King Co., building Vashon Heights ferry dock. About $25,000. S. Humes, co. engr.

BARGE CANAL WORK—NEW YORK, N. Y.

Bids were received by L. Nixon, supt. pub. wks., Capitol, Albany, Apr. 29, paving parts of terminal sites at Mott Haven, Greenpoint and Gowanus Bay, Contr. No. from (A) Asphalt Constr. Co., 208 B'way.; (B) M. J. O'Hara, 557 3rd St., Brooklyn; (C) Continental Contg. Corp., 4-6 Washington Pl. The unit bids were as follows:

	A	B	C
2,700 cu.yd. excavation	$1.30	$1.25	$1.10
1,900 cu.yd. 3rd-class concrete	8.50	8.00	7.50
2 catch basins	60.00	100.00	80.00
2 pull boxes	35.00	50.00	40.00
20 lin.ft. drilling holes through masonry	2.00	2.75	2.00
12,000 lb. cast-iron pipe and specials	.05	.065	.06
1,900 lin.ft. concrete curb and edging	80.00	.90	.98
2,100 sq.yd. macadam pavement	1.50	1.25	1.20
10,000 sq.yd. stone block pavement	4.46	4.775	5.03
2,500 sq.yd. relaid stone block pavement	1.67	1.50	2.75
1,125 sq.yd. asphalt pavement	2.20	3.00	2.25
4 crane stops	20.00	25.00	25.00
1,200 lin.ft. crane rail	3.85	3.35	3.60
1,000 lin.ft. fibre duct	.25	.30	.30
Extended totals	$81,360	$83,340	$84,328

Pipe—Anaheim, Cal.—Until May 22, by E. B. Merritt, clk., furnishing 1350 ft. 12-in., and 300 ft. 4-in. c.i. pipe; also deep well pump and motor.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Castings—Boston, Mass.—Dept. Pub. Wks. received bids Apr. 17, furnishing (a) 600,000 lbs. iron castings, including manhole and catchbasin covers, lamphole frames and covers, catchbasin grates, tide gates, iron inlets, etc.; (b) water service including castings, (1) 8000 lbs.; (2) 25,000 lbs., (3) 3500 lbs. from Mechanics Iron Fdry. Co., 38 Kemble St., (a) $4.02 per lb., 200,000 lbs. prior to July 1; Gibby Fdry. Co., East Boston, (a) $3.06, 200,000 lbs. prior to July 1, (b1) $.35., (b2) $.29, (b3) $.22; J. M. McCafferty Co., Boston, (b1) $.29, (b2) $.26, (b3) $.25; Essex Brass Co., Cambridge, (b1) $.375, (b2) $.355, and (b3) $.305.

★Castings—Boston, Mass.—Dept. Pub. Wks. let contracts furnishing 70 ton c.i. boxes, to Davis Fdry. Co., 68 Island St., Lawrence, $.05 per lb.; 70 ton c.i. special fittings and 25 ton c.i. frames and covers, to Mechanics Iron Fdry. Co., 38 Kemble St., Roxbury, $0.0495 and $0.032 per lb. respectively.

★Dam, etc.—Scituate (North Scituate P. O.) **R. I.**—Water Supply Bd., City Hall, Providence, let contracts building portions of main dam of Scituate Reservoir, Contr. 11, to Sperry Eng. & Contg. Co., 82 Church St., New Haven, Conn., $164,577; 3.5 mi. earth road, 10 mi. westerly of Providence, Contr. 10, to Lundberg & Street, 69 Summit Ave., Brookline, Mass., $53,450. Noted May 8.

★Tanks—Mechanicsville, Conn.—French River Textile Co. let contract building rein.-con. fuel oil tank, with 110,000 gal. capacity, to T. I. Ellis, 171 Westminster St., Providence, R. I.

★Tracks—New York, N. Y.—Pub. Serv. Comn., 1st Dist., 49 Lafayette St., let contract furnishing and installing tracks for portion of Bway. 4th Ave. line, Queens and Manhattan Boro., to T. Crimmins Constr. Co., 444 East 69th St., $94,974. Noted Apr. 24.

★Park Improvements—East Orange, N. J.—Town let contract improving Elmwood Park, to Craig & Harrison, East Orange. About $100,000.

★Breakwater—Sheboygan, Wis.—City let contract building 490 lin.ft. rein.-con. breakwater along shore Lake Michigan opposite Vallrath Park, to McMullen & Pitz Co., 8th St., Manitowoc, $14,455.

Paving Blocks—Minneapolis, Minn.—City received bids May 1, furnishing 100,000 sq. yd. yellow pine creosoted paving blocks, (a) 3½ in., (b) 4 in., from Central Creosoting Co., 111 West Washington St., Chicago, Ill., (a) $2.105 per sq.yd., (b) $2.38 per sq.yd.; Republic Creosoting Co., 1614 Merchants Bldg., Indianapolis, Ind., (a) $2.13, (b) $2.39; Kittle River Co., Madison, Ill., (a) $2.18; Midland Creosoting Co., 2463 Bway., Toledo, O., (a) $2.23, (b) $2.56. Noted Apr. 24.

★Diesel Oil Engine—Lincoln, Neb.—City let contract furnishing diesel oil engine, to Allis-Chalmers Mfg. Co. About $50,000.

★Road Graders—Grand Forks, N. D.—Comrs. Grand Forks Co. let contract furnishing 6 one-man 4-horse blade road graders, weighing not less than 1200 lb. to N. W. Sheet & Iron Wks., Wahpeton. Noted May 1.

★Levee—Newport, Ark.—Newport Levee Dist., Jackson Co., let contract building new earth levee and enlarging old one, to W. H. Denison, Cushman. About $165,000. Noted Mar. 13.

Retaining Wall—Spokane, Wash.—See "Streets and Roads."

★Foundation, etc.—Astoria, Ore.—Standard Oil Co., Yeon Bldg., Portland, let contract laying concrete foundation for 10 tanks, building 10-ft. concrete wall around plant, replacing present wharf with 40 x 200 ft. dock, and building approach, to Portland Bridge and Bldg. Co., Worcester Bldg., Portland. About $50,000. Noted Feb. 13 under "Industrial Works."

★Pier — Portland, Ore. — Comn. Pub. Docks let contract building Pier No. 2, extension of Pier No. 1, and connecting wharf, to Elliott & Scoggins, McKay Bldg., $329,279. Noted Apr. 10.

★Pipe—Los Angeles, Cal.—Bd. Pub. Serv. Comn. let contract furnishing 385.5 tons c.i. pipe, f.o.b. Birmingham, Ala., to Amer. Cast Iron Pipe Co., Balboa Bldg., San Francisco, $19,706.

CONTRACTS AWARDED FOR SALE OF PORTION OF ARMY CAMPS

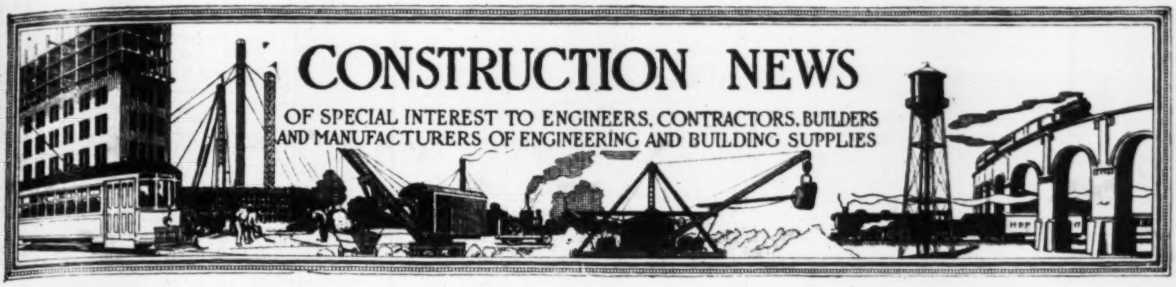
The sale excludes in some cases storage area, remount, rifle range, hospitals and the utilities supplying same.

Camp Beauregard, Alexandria, La. J. W. Alexander, Alexandria, La.	$19,175
Camp Bowie, Ft. Worth, Tex. Henry Marks Sons, Indianapolis, Ind.	66000
Camp Colt, Gettysburg, Pa. Lewis Bros., Rock Island, Ill	10,000
Camp Hancock, Augusta, Ga. J. . Mulherin, Augusta, Ga	38,500
Camp Kendrick, Lakehurst, N. J. Geo. C. Demeritt, 153 Remson St., Brooklyn, N. Y., conditionally—on being taken over by the Navy.	
Camp Logan, Houston, Tex. Geo. T. Brown, Houston, Tex	66,000
Camp North Jackson, Columbia, S. C. Lewis Bros., Rock Island, Ill	17,000
Camp Polk, Raleigh, N. C. State of North Carolina, terms of sale to be arranged.	
Camp Shelby, Hattiesburg, Miss. S. Steinberg & Co., Memphis, Tenn	35,100
Camp Sheridan, Montgomery, Ala. City of Montgomery	10,000
Camp Wadsworth, Spartansburg, S. C. Frank Hodges, Spartansburg, S. C	10,000
Camp Wheeler, Macon, Ga E. Ness, Savannah, Ga	67,500

William W. Mead, 100 East Fulton St., Grand Rapids, Mich., would like to receive prices and catalogs from firms dealing in highway construction materials and machinery.

Antiebolaget Kasper Hoglund, Brunkebergstorg 12, Stockholm, would like to receive prices and catalogs from manufacturers of materials required for roofings, waterproofings and general asphalt work.

Bryant Engineering & Development Co., P. O. Box 134, Ranger, Tex., would like to receive catalogs and prices on sewer and cast iron pipe, cement, concrete mixers and grading machines and paving materials.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
May 26	Coatesville, Pa.	May 15
	Adv. May 15.	
May 27	Niles, Mich.	May 1
May 27	Niles, Mich.	May 15
May 28	Florence, Ariz.	May 15
May 28	Jersey City, N. J.	May 15
	Adv. May 15.	
May 29	Tamaqua, Pa.	Apr. 24
	Adv. Apr. 24.	
June 2	Mankato, Minn.	**May 1**
	Adv. May 1.	
June 2	Newark, N. Y.	May 15
	Adv. May 15.	
June 2	North Mankota, Minn.	May 15
June 3	Albert Lea, Minn.	May 22
June 4	Poughkeepsie, N. Y.	May 22
	Adv. May 22.	
June 5	Bellevue, O.	May 22
June 11	Baltimore, Md.	May 22
	Adv. May 22.	

SEWERS

Bids Close		See Eng. News-Record
May 24	Silver Lake, O.	May 22
May 26	Coatesville, Pa.	May 15
	Adv. May 15.	
May 26	Detroit, Mich.	May 22
May 27	Nutley, N. J.	May 22
May 27	New York, N. Y.	May 22
May 27	Niles, Mich.	May 1
May 27	Meadville, Pa.	May 15
	Adv. May 15.	
May 27	Nashville, Tenn.	May 15
May 29	Stratford, Ont.	May 22
June 2	Bishop, Cal.	May 15
June 2	Hibbing, Minn.	May 22
June 4	Garner, Ia.	May 15
June 4	Weston, W. Va.	May 22
June 4	Cuyahoga Falls, O.	May 22
June 4	Freehold, N. J.	May 22
June 9	Pontiac, Mich.	May 22
	Adv. May 22.	
June 9	Stratford, Conn.	May 15
	Adv. May 15.	
June 9	Osgood, Ont.	May 22

BRIDGES

Bids Close		See Eng. News-Record
ay 24	Cochran, Ga.	May 22
ay 26	Lisbon, O.	May 22
May 27	Harrisburg, Ark.	May 8
	Adv. May 8.	
May 27	Arthur, Ont.	May 15
May 28	Statesboro, Ga.	May 15
May 28	Bowmanville, Ont.	May 22
May 29	Chicago, Ill.	May 22
May 29	West Union, W. Va.	May 15
May 30	Madison, W. Va.	May 15
May 30	Danville, W. Va.	May 15
June 4	Charleston, W. Va.	May 15
June 4	Swainsboro, Ga.	May 15
June 5	Stratford, Conn.	May 8
June 6	Monroe, Ga.	May 8
June 6	Danville, W. Va.	May 22
June 6	Madison, W. Va.	May 22
June 9	Montgomery, Ala.	May 8
	Adv. May 8.	
June 16	Valdosta, Ga.	May 22
	Adv. May 22.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
May 24	St. Peter, Minn.	May 22
May 26	Pennsylvania	May 8
	Adv. May 8.	
May 26	Stillwater, Minn.	May 15
May 26	Minneapolis, Minn.	May 15
May 26	Madison, Neb.	May 15
	Adv. May 15.	
May 26	Ohio	May 15
May 26	Saginaw, Mich.	May 22
May 26	Minneapolis, Minn	May 22
May 26	Braddock, Pa.	May 22
May 27	Crafton, Pa.	May 22
May 27	Jersey City, N. Y.	May 22
May 27	New York, N. Y.	May 22
May 27	St. George, S. I., N. Y.	May 22
May 27	Emporia, Kan.	May 22
May 27	Seattle, Wash.	May 15
May 27	Maryland	May 15
	Adv. May 15.	
May 27	Preston, Minn.	May 1
May 27	Henderson, Minn.	May 8
May 27	Mahnomen, Minn.	May 8
May 27	Harrisburg, Ark.	May 8
	Adv. May 8.	
May 27	St. Louis, Mo.	May 8
May 27	Toronto, Ont.	May 15
May 27	Chaska, Minn.	May 15
May 27	Hedrick, Ia.	May 15
May 28	Willmar, Minn.	May 8
May 28	Wisconsin	May 15
May 28	Illinois	May 15
May 28	New Jersey	May 15
May 28	Nashville, Tenn.	May 1
	Adv. May 1.	
May 28	Milan, Mich.	May 15
May 28	Terra Haut, Ind.	May 15
May 28	Ebensburg, Pa.	May 22
May 28	Brooklyn, N. Y.	May 22
May 28	Mahnomen, Minn.	May 22
May 29	Ottawa, Ont.	May 22
May 29	Wilkes-Barre, Pa.	May 22
May 29	Pittsburgh, Pa.	May 15
May 29	Michigan	May 8
May 29	Maryland	May 15
May 29	West Union, W. Va.	May 15
May 29	Cambridge, Minn.	May 15
May 30	Evansville, Pa.	May 15
May 30	Dallas, Tex.	Apr. 17
	Adv. Apr. 17 and 24.	
May 31	Arkansas	May 22
June 1	Michigan	May 8
June 1	Perce, Que.	May 15
June 1	Gilboa, N. Y.	May 22
	Adv. May 22.	
June 2	St. Severe, Que.	Apr. 24
June 2	Elkins, W. Va.	May 8
	Adv. May 8.	
June 2	Kingwood, W. Va.	May 15
June 2	Wayne, W. Va.	May 15
June 2	Indianapolis, Ind.	May 15
June 2	Lincoln, Neb.	May 15
June 2	Bury, Que.	May 15
June 2	Freeland, Pa.	May 22
June 2	Osceola, Ark.	May 22
June 2	Albert Lea, Minn.	May 22
June 3	Emmetsburg, Ia.	May 22
	Adv. May 22.	
June 3	Worthington, Minn.	May 22
June 3	Burlington, N. J.	May 22
June 3	Minot, N. B.	May 15
June 3	Griffin, Ga.	May 8
June 3	New York, N. Y.	May 8
	Adv. May 8.	
June 3	Blair, Neb.	May 15
June 3	Indianapolis, Ind.	May 22
June 3	Butler, Pa.	May 22
	Adv. May 22.	
June 3	Sanford, Fla.	May 22
June 3	Fremont, Neb.	May 22
June 4	New Rockford, N. D.	May 15
June 4	Albion, Neb.	May 15
June 4	Bradford, O.	May 15
June 4	Burlington, N. J.	May 22
	Adv. May 22.	
June 5	Metter, Ga.	May 15
June 5	Glenwood, Minn.	May 15
June 5	Seward, Neb.	May 22
June 5	Ponca, Neb.	May 22
June 5	Lyon, Neb.	May 22
June 5	Gastonia, N. C.	May 22
June 6	Red Wing, Minn.	May 22
June 6	Centersburg, O.	May 15
June 9	Austin, Minn.	May 22
June 9	Hastings, Minn.	May 22
June 10	Montivideo, Minn.	May 22
June 10	Marlington, W. Va.	May 22
June 10	Clarksville, Pa.	Apr. 3
June 11	Morris, Minn.	May 22
June 12	Brainerd, Minn.	May 22
June 12	Pittsburgh, Pa.	May 22
June 13	Hinton, W. Va.	May 22
June 13	Bemedji, Minn.	May 22
June 14	Grand Rapids, Mich.	May 22
June 16	Elk River, Minn.	May 22
June 17	Elbow Lake, Minn.	May 22
June 17	Luzerne, Minn.	May 22
June 18	Moorehead, Minn.	May 22
June 19	Little Falls, Minn.	May 22
June 19	Junction City, Kan.	May 22
June 20	Harrisonville, W. Va	May 22
July 1	Marshall, Ark.	May 22

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
May 26	Minneapolis, Minn.	May 22
May 28	New York, N. Y.	May 22
June 2	Beaufort, N. C.	Apr. 24
	Adv. Apr. 24.	
June 3	Henderson, Minn.	May 15
June 3	New Castle, Pa.	May 22
	Adv. May 2.	
June 5	Marks, Miss.	May 22
June 10	Wapello, Ia.	May 22
	Adv. May 22.	
July 1	Edwardsville, Ill.	May 15

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
May 24	Brooklyn, N. Y.	May 8
May 28	Tebbetts, Mo.	May 15
May 28	Gardiner, Mass.	May 22
June 9	Sarasota, Fla.	May 22
June 16	New Orleans, La.	May 22
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
May 21	Philadelphia, Pa.	May 22
May 26	Beloit, Kans.	May 22
May 26	Gallipolis, O.	May 1
May 26	Britt, Ia.	May 22
May 26	East Broughton, Que.	May 22
May 27	Roxbury, Mass.	May 22
May 27	Howard, R. I.	May 15
May 27	Pembina, N. D.	May 15
May 27	Brooklyn, N. Y.	May 15
May 27	Tracy's Landing, Md.	May 22
May 28	Aberdeen, Md.	May 22
May 28	Ottawa, Ont.	May 22
May 30	Medicine Hat, Alta.	May 22
June 1	Moose Lake, Minn.	May 22
June 1	Montreal, Que.	May 8
June 1	St. Cloud, Minn.	May 8
June 1	Rochester, Minn.	May 8
June 1	Faribault, Minn.	May 15
June 1	Willmar, Minn.	May 15
June 1	Chicago, Ill.	May 15
June 1	East St. Louis, Ill.	May 22
June 2	New Orleans, La.	May 22
June 2	Hibbing, Minn.	May 22
June 4	New Brunswick, N. J.	May 22
June 4	Central Islip, N. Y.	May 15
June 5	Fergus Falls, Minn.	May 22
June 10	Bessemer, Ala.	May 15
June 12	Staunton, O.	May 22
June 12	Detroit, Mich.	May 22
June 14	Hubbard, O.	May 22
June 15	Anoka, Minn.	May 8
June 17	Ossining, N. Y.	May 22
	Adv. May 22.	
July 1	Austin, Minn.	May 22
Aug. 1	Kenosha, Wis.	May 15

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
May 26	Laboratory—Fairport, Ia.	May 1
May 26	Superstructure — Chicago, Ill.	May 1
	Adv. May 1.	
May 26	Bridge—Washington, D. C.	May 8
May 26	Tunnel—Spec. 3879—Philadelphia, Pa.	May 8
May 26	Medical Storage Building—Spec. 3462 — Hampton Roads, Va.	May 8
May 26	Steam Distributing System—Spec. 3876—Philadelphia, Pa.	May 8
May 26	Motor Generator Sets and Switchboard—Spec. 3872—Hampton Roads, Va.	May 8
May 26	Rip Rap—Philadelphia, Pa.	May 1
May 26	Storehouse — Spec. 3842 — Charleston, S. C.	May 15
May 26	Air and Water System—Spec. 3883—Hampton Roads, Va.	May 15
May 26	Roof Decks—Spec. 3839—Charleston, W. Va.	May 15
May 26	Steel Water Tank and Tower—Spec. 3868—Hampton Roads, Va.	May 15
May 27	School—Ft. Bidwell, Cal.	May 8
May 27	Dredging—Wilmington, Del.	May 1
	Adv. May 1.	
May 28	Jetty and Revetment—Jacksonville, Fla.	May 1
	Adv. May 1.	
May 28	Lock and Abutment—Cincinnati, O.	May 1
	Adv. May 1.	

Bids Close		See Eng. News-Record
May 28	Post Office—Elkhart, Ind.	May 8
May 28	Dredging — New London, Conn. Adv. May 8.	May 8
May 28	Power Plant Equipment — Spec. 3871—Cavite, P. I.	May 15
May 28	Elevator—Ketchikan, Alaska	May 15
June 2	Dam and Bridge—Sacaton, Ariz. Adv. May 1.	May 1
June 2	Buildings, Sewer, Water Mains, Etc.—Camp Travis, Tex. Adv. May 22.	May 22
June 4	Air Station—Spec. 3864—Galveston, Tex.	May 8
June 4	Bath House—Spec. 3786—Newport, R. I.	May 15
June 4	Repairing Pier Walls — Spec. 3815—Boston, Mass.	May 22
June 4	Revolving Platform—Spec. 3880—Hampton Roads, Va.	May 15
June 4	Storage Tanks—Spec. 3721 Cape May, N. J.	May 15
June 4	Fence — Spec. 3848 — Ft. Mifflin, Pa.	May 15
June 4	Roads — Spec. 3884 — Chatham, Mass.	May 15
June 4	Heating and Humidifying Apparatus—Spec. 3854—Philadelphia, Pa.	May 15
June 4	Oil Burning Equipment — Spec. 3847—Key West, Fla.	May 22
June 5	Post Office—Denton, Tex. Adv. May 15.	May 15
June 6	Post Office—Bellefourche, S. D. Adv. May 1.	May 1
June 11	Dredging — Spec. 3548 — Hingham, Mass.	May 22
June 11	Fire Protection System — Spec. 3808 — Hingham, Mass.	May 22
June 11	Power House—Spec. 3889—Montauk, N. Y.	May 22
June 11	Laundry — Spec. 3887 — Portsmouth, N. H.	May 22
June 16	Dredging — New York, N. Y.	May 22
June 19	Levee Work—St. Louis, Mo. Adv. May 22.	May 22
June 20	Boilers—Memphis, Tenn. Adv. May 22.	May 22

MISCELLANEOUS

May 27	Culverts—Warren, Minn.	May 22
May 28	Castings, etc. — Quincy, Mass.	May 22
May 29	Bituminous, Concrete — St. George, S. I., N. Y.	May 22
May 29	Fill and Bulkhead—Astoria, Ore.	May 8
May 31	Pumps—Wheeling, W. Va. Adv. May 22.	May 22
June 3	Capstans and Hoists—Albany, N. Y.	May 15
June 3	Coal Handling Equipment—Toledo, O.	May 8
June 3	Paving Bricks — Saranac Lake, N. Y. Adv. May 8.	May 8
June 5	Ice Breakers, Richmond, Que.	May 22
June 6	Flooring—Clearfield, Pa.	May 22
June 9	Flusher and Sprinkler — Lewiston, Mont.	May 22
June 12	Breakwater — Louis, P. E. I.	May 22

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., East Boston (Boston P. O.)—State Waterworks Comn., Capitol, Boston, had plans prepared for building 36 in. water main, 1800 ft. long, to supply additional water here. About $40,000. A. O. Doane, 1 Ashburton Pl., Boston, engr.

Mass., Lexington—City had plans prepared building 6000 ft. 16 in. water main. About $65,000. A. O. Doane, 1 Ashburton Pl., Boston, engr.

Mass., Milton (Boston P. O.)—State Waterworks Comn., Capitol, Boston, had plans prepared building 12 in. c. i. water main in Poplar St., West Roxbury, and under Neponset River to provide supply to Milton Twp. A. O. Doane, 1 Ashburton Pl., Boston, engr.

N. Y., Border City—See "Industrial Works."

Pa., Blairsville—See "Buildings."

Ky., Ashland—Comrs. Water Wks. Dept. receive bids about June 15 for 2,000,000 gal. filtration plant, electric driven centrifugal pumps and miscellaneous appurtenances and connections. About $90,000. Noted Feb. 13.

Ia., Ft. Dodge—See "Streets and Roads."

Kan., St. John—City election June 10, to vote on $50,000 bonds to build and extend water works and electric light plant. A. O. Seevers, city clk.

Mont., Denton—City election May 29, to vote on $45,000 bonds to build concrete reservoir and lay 17,500 ft. wood and 8000 ft. c. i. pipe. W. B. Saunders, Helene, engr.

Utah, Price—City plans to remodel present distribution system and waterworks, build 25 mi. pipe line from Calton to here. About $150,000. E. K. Olson and W. W. Jones, Price, engrs.

Utah, Provo—City voted $175,000 bonds to improve waterworks system and $75,000 bonds to pave streets.

Ariz., Mesa—See "Industrial Works."

Ariz., Phoenix—City had plans prepared by H. Phillips, consult. engr., International Life Bldg., St. Louis, Mo., for gravity water supply from Verde River, to include filtration system, 42 in. pipe line and 25,000,000 gal. concrete reservoir. About $1,350,000. Noted Mar. 20.

Cal., Arcadia—City plans election to vote on $150,000 bonds to increase water supply and extend distributing system. E. Grimes, clk. Engineer not selected.

Cal., Blythe—City having plans prepared by Olmstead & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for water system. About $36,000. Noted Mar. 20.

Cal., East San Diego (San Diego P. O.)—City having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for water and sewer systems. About $400,000. Bonds will be voted for project.

Cal., Huntington Beach—City retained Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, to prepare estimates and report on advisability of building water system.

BIDS DESIRED

N. Y., Poughkeepsie—Until June 4, by State Hospital Comn., Capitol, Albany, for additions and alterations to water supply system to include additional filter, changing water main, building reservoir and 20 x 25 pump house, etc., at Hudson River State Hospital, here. About $30,000; advertised in this issue. Noted Feb. 20.

N. J., Freehold—See "Buildings."

Md., Baltimore—Until June 11, at office of City Register, City Hall, furnishing and erecting one 25 and one 15 k.w. turbo-generator sets and switchboard for Mt. Royal Pumping Sta. W. E. Lee, water engr.; advertised in this issue.

O., Bellevue—Until June 5, by Dir. Pub. Serv., building (a) impounding reservoir involving 100,000 cu.yd. earth excav. and embankments, 20 x 26 ft. low service pumping station, between 1500 and 3000 ft. 18 in. vitr. tile pipe; (b) furnishing and erecting 2 gas engine driven centrifugal pumping units, each having 5000 gal. per minute capacity; (c) furnishing and delivering chlorinator for disinfecting water supply. W. G. Clark, 1047 Spitzer Bldg., Toledo, consult. engr.; advertised in this issue.

Ind., Whiting—Until June 2, by Bd. Pub. Wks. building water system: (A) mechanical water filtration plant, gravity type, involving 4,000,000 gal. per day capacity, including aerating basin, coagulating basin, filters, reservoir, head house; making connections with city mains and erection of equipment specified in (B). (B) one 5,000,000 gal. centrifugal pump, two 5,000,000 gal. centrifugal pumps, one 3,000,000 gal. centrifugal pump, two 3,000,000 gal. centrifugal pumps, 1 washwater pump, and 1 switchboard, and equipment. Work under (A) includes 6,000 cu.yd. excav. and 440,000 lbs. reinforcing steel. S. A. Greeley, 39 West Adams St., Chicago, engr.

Minn., Albert Lea—Until June 3, by C. J. Dudley, clk., building 1,500,000 gal. rein.-con. circular reservoir, 125,000 gal. rein.-con. tank and tower, 800 gal. per minute, centrifugal pump direct connected to 15 h.p. steam turbine, piping, valves, water mains, etc. About $50,000. J. H. A. Brantz, 506 Chamber of Commerce Bldg., St. Paul, engr. Former bids rejected, Noted May 8.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, received lowest 3 bids building dam here, same being part of Schoharie Watershed development for New York City water supply, from Winston & Co., 290 Bway., New York City, $7,200,000; Hardway Constr. Co., $7,443,000; P. J. McGovern, 637 West 50th St., New York City, $7,600,000. Noted Apr. 17.

★Pa., Pottsville — Girard Water Co., Thompson Bldg., let contract building earth fill dam, 870 ft. long, 235 ft. wide at base, with concrete gate tower, bridge, spillway and cut-off walls, to impound waters on Whiskey Mill Creek, to Central Constr. Corp., Commonwealth Trust Bldg., Harrisburg, $170,551, plus 10%. Work involves 5400 cu.yd. earth and 2200 cu.yd. rock excav., 2513 cu.yd. concrete, 526 tons c.i. pipe, 522 tons c.i. specials, sluice gate, etc. Noted Apr. 17.

★O., Akron—City let contract furnishing and laying 2.3 mi. 48 in. lock bar steel pipe and 0.1 mi. 36 in. c.i. pipe, to T. E. McShaffrey Constr. Co., 173 South Forge St. Noted Apr. 3.

★O., Bryan—Trustees Pub. Affairs let contract for 1,000,000 gal. concrete reservoir and pump house, to Toledo Residence Constr. Co., 322 Nasby Bldg., Toledo, $23,700; 14,500 ft. 4, 6 and 8 in. c.i. water mains, to Gessner Co., 616 Nicholas Bldg. Toledo, $24,990; sinking two 10-in. wells, to R. E. Kersey, South Bend, Ind., $6.75 per ft. Noted May 1.

★O., Salem—City let contract building additional filtration beds, to Jones Constr. Co., Salem, $30,800.

★O., Silver Lake—City let contract furnishing and laying 17,000 ft. 6-12 in. c.i. water mains, to Gangl Constr. Co., Akron. About $28,000.

Wash., Seattle—Bd. Pub. Wks. received bids May 9, laying 3710 ft. 8 in. c. i. water mains on 60th Ave., S. W., et al, from Scalzo & Co., Seattle, $12,970; S. A. Moceri, 1212 South M St., $13,109; Fiorito Bros. Seattle, $13,545.

Cal., Manhattan Beach—See "Streets and Roads."

Sewers

PROPOSED WORK

Mass., Reading—Metropolitan Water & Sewer Bd., Ashburton Pl., Boston, has been authorized to build outlet sewer to connect city system with metropolitan system. About $280,000. A. O. Doane, 1 Ashburton Pl., Boston, engr. Noted Feb. 20.

Pa., Blairsville—See "Buildings."

Mich., Detroit—City soon lets contract furnishing all labor and materials (except iron manhole rings and covers) which will be furnished by city, building and finishing complete, together with backfilling for lateral sewers Nos. 3048, 3051, 3052, 3503, 3129, 3130, 3131, 3132, 3133, 3135, 3136, 3137, 3138, 3139 and 3140, 8-10-in. vitr. crock sewers with brick manholes, etc. About $52,000.

Mich., Rochester—City retained L. A. Bouley Co., engr., 1250 Nicholas Bldg., Toledo, O., to make surveys and prepare plans for 12-15 mi. sewerage system.

Ia., Pochahontas—City soon receives bids building sanitary sewer, septic tank and beds in practically all streets in city. About $37,000. C. H. Currie, Webster City, engr.

Kan., Junction City—City soon lets contract extending sanitary sewerage system. Burns & McDonnell, Inter-State Bldg., Kansas City, Mo., engrs.

Tex., Ft. Worth—City voted $1,890,000 bonds to build sewage disposal plant and extend and repair sewer and water mains.

Idaho, Twin Falls—See "Streets and Roads."

Wash., Seattle—Bd. Pub. Wks. rejected bids received May 2, building sewer in 44th Ave. S. W., et al. Noted May 8.

Cal., East San Diego (San Diego P. O.)—See "Waterworks."

Cal., Holtville—City having plans prepared building sewers. W. J. Bathrick, city engr.

BIDS DESIRED

N. Y., New York—Until May 27, by H. Bruckner, pres. Bronx Boro., building sewers and appurtenances in East 180th St. between 3rd and Monterey Aves.; Holland Ave. between Rhinelander and Hunt Aves.; Hunt Ave. between Holland and Bronxdale Aves.; Bronxdale Ave. between Hunt Ave. and Bronx Park E.; between Bronxdale Ave. and existing drain north of Waring

Sewers (Continued)

Ave.; Pelham Parkway N., between Bronx Park E. and Boston Rd.; Olinville Ave. between Pelham Parkway N. and summit north of Mace Ave.; Boston Rd. between Pelham Parkway N. and White Plains Rd.; White Plains Rd. between Boston Rd. and Waring Ave. and across White Plains Rd. at Waring Ave.; White Plains Rd. between Waring Ave. and summit north of Mace Ave.

N. J., Nutley—Until May 27, by city, building vitr. sanitary sewers in various streets, involving 10,700 ft. trenching, various depths, 2000 ft. 6 in. and 8700 ft. 8 in. sewer and 35 manholes.

Pa., Butler—See "Streets and Roads."

W. Va., Weston—Until June 14, by State Bd. Control, Charleston, building sewage pumping station, equipped with 2 electric motors, 2 centrifugal pumps and automatic control equipment, also sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant for Weston State Hospital, here. Noted May 30, 1918.

O., Cuyahoga Falls—Until June 4, by F. O. Vail, village clk., building sanitary sewers in Chestnut St. from Front St. to Mereline Ave.; also building sewers, grading, curbing and paving Chestnut St. from Front to 7th Sts.

O., Silver Lake—Until May 24, by E. A. Tewksburg, clk., building storm water and sanitary sewers in Dover Rd. from Highland Dr. to Graham Rd.; Highland Dr. from Silver Lake Blvd. to Dover Rd.; Silver Lake Blvd. throughout its entire length. Former bids rejected. C. W. Courtney, 509 Leader-News Bldg., Cleveland, engr.

Mich., Detroit—Until May 26, (change of date) by Dept. Pub. Wks., furnishing all labor and material (except iron manhole rings and covers) and building and finishing complete together with back-filling 852 ft. Harper Ave. Pub. Sewer, Sect. "A" in Harper and Gratiot Aves. from Gratiot Ave. to north line Bessmore Ave., 399 ft. Sect. "B" in Gratiot Ave. from Bessmore Ave. to point 91 ft. north of north line of Georgia Ave. C. W. Hubbell, city engr. Noted May 15.

Mich., Pontiac—Until June 9, by C. W. Ham, city clk., building 2052 lin.ft. outfall sewer, grit chamber, 2 story, settling tanks, trickling filters, secondary tanks, sludge bed and appurtenances, involving 34,710 cu.yd. excav., 4078 cu.yd. rein.-con., 15,700 cu.yd. filter stone and 35 tons c. i. piping. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engrs.; advertised in this issue. Noted Apr. 24.

Ia., Emmetsburg—See "Streets and Roads."

Ont., Osgood—Until June 9, by Town, building 27,624 ft. Greys Creek Extension Drain and 13,000 ft. Blanchfield Drain. Work involves 25 acres clearing and grubbing, 48,650 cu.yd. earth and 1350 cu.yd. rock trenching, etc. About $20,000. Nagwood & Stidwill, Cornwall, engrs.

Ont., Stratford—Until May 29, by A. B. Manson, city engr., building concrete drain, involving 4400 ft. 42 in. and 2000 ft. 36 in. circular pipe. Alternate bids will be received for concrete tile and segmental block.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Binghamton—Bd. Contr. & Supply let contract building 9 lengths of sewer in various parts of city, to C. W. Rose, $14,307.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received lowest 3 bids May 14, building sewers in (a) West 7th St. from Bay Pkway. to Ave. O; (b) Skillman Ave.; (c) 8th St. from Ave. K to I; (d) 91st St. from Ridge Blvd. to 3rd Ave., from Murphy Bros., 30 East 42nd St., New York City, (a) .7889%; (b) 1.04%; P. Tomasetti, (a) .8888%; (c) .95%; (d) .8889%; C. Petraca, (a) .8989%; (b) 1.0389%; (d) .8998%; P. J. Donlin, (b) 1.07%; J. H. Johnson, (c) .97%; (d) 1.02%; F. L. Paino, 67 Bay 47th St., (c) .99%; (d) .99%; A. Baino, 2622 Bath Ave., (c) .8484%.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract furnishing all labor and material for building sewers in Rutland Rd. from Remsen to Nostrand Aves., to Fenlack Constr. Co., Brooklyn, $242,223. Noted May 15.

★Mich., Detroit—City let contracts to R. D. Baker, 1415 Penobscot Bldg., building lateral sewer No. 3062, cost, $3666, No. 3116, $10,201, No. 3117, $3693, No. 3118, $3574, No. 3123, $2100, No. 3126, $8800 and No. 3127, $3450; Western Constr. Co., 1208 Ford Bldg., No. 3119, $3467, No. 3125, $9242; W. Blanck & Co., 330 Longfellow Ave., No. 3120, $18,103, No. 3122, $22,000; Walker & Teeteart, Windsor, Ont., No. 3124, $1170. Noted May 15.

★Mich., Detroit—Dept. Pub. Wks. let contracts to J. Connelly Constr. Co., Dime Bank Bldg., for Seven Mile Rd. Pub. Sewer from Woodward to Yakama Aves., 4781 ft. long, cost $276,300; to Walbridge Aldinger Co., 2356 Penobscot Bldg., Sects. 1 and 2 Lonyo Rd. Pub. Sewer, $1,430,000. Noted May 15 and 22.

★Mich., Detroit—City let contract building vitr. crock sewers in Frischkorns Tireman Park subdivision, to Walker & Teeteart, Penobscot Bldg., $26,499. Noted May 1.

★Ill., Chicago—J. McGillen, clk. sanitary dist., Room 700, 910 South Michigan Ave., let contracts building Des Plaines River sewage treatment works, Div. A, to Leyden-Ortseifen Co., 53 West Jackson Blvd., $384,281; Div. P, to W. A. Jackson Co., 37 West Van Buren St., $22,795; Div. W, to Builders' Iron Fdry., 209 South La Salle St., $12,760. Noted May 8.

Wis., Milwaukee—Sewerage Comn. received lowest bid, building 1800 ft. rein.-con. sewer in Menomonee Valley, from Mid-Western Co., 140 South Dearborn St., Chicago, $86,100.

★Ia., Alta—City let contract building sewage disposal plant, to Ward & Weighton, 516 Davidson Bldg., Sioux City, $12,740.

★Minn., Duluth—See "Streets & Roads."

★Minn., Duluth—City let contract building sewerage system and outlet sewer for various streets in Fairmont Addition, 11,768 ft. long, to Pastoret Const. Co., 510 Lyceum Bldg., $44,782. Noted Apr. 3.

Minn., St. Paul—H. W. Austin, purch. agt., City Hall, received bids building storm water sewers in Fairview, Wheeler, Summit, McAlester and Snelling Aves., from W. Danforth, 707 Germania Life Bldg., $97,000; O'Neill & Preston, 60 East 6th St., $104,500.

★Neb., Humphrey—City let contract building 3½ mi. sanitary sewer, 8-12 in. vitr. pipe, to A. Dobson, 3140 Sheridan Blvd., Lincoln, $24,950. Noted May 1.

★Neb., Omaha—City let contract building 10,485 ft. 8-30 in. vitr. sewers in L and M Sts., from 38th to 41st Sts., to Katz Constr. Co., 409 Brandeis Theater Bldg., $18,348.

★Mont., Butte—City let contract building 48 in. segmental block storm sewer in Dakota St., to P. Stamsos, 616 Nevada Ave., $5409; rein.-con. storm sewer in Henry Ave., to G. L. Gagnon, 41 Owsley Blk., $5290.

★Mo., Rockport—City let contract building sewers to Katz Constr. Co., 620 Brandeis Bldg., Omaha, Neb. About $20,000.

★Tex., Dallas—City let contract building concrete storm sewer in Fairmount St. from Mellborn to Wolf and from Fairmount to Maple Sts., to Klein Bros. Co., Juniun and Walton Sts., $20,757. Noted May 1.

★Ariz., Flagstaff—City let contract building sewerage system, using cement pipe, to McLean & Walsh, El Segundo, $82,396. Noted May 15.

Wash., Camas—City received bids building trunk line sewer from Washington Slough to Hill Dist., (a) concrete, (b) vitr., from W. D. Marshbank, Camas, (a) $19,071, (b) $19,926; J. Keating, Portland, (a) and (b) each $24,098; Jacobsen-Jensen Co., 407 Stanton St., Portland, (a) $21,074, (b) $22,107.

Wash., Seattle—Bd. Pub. Wks. received bids May 9 building Firland Sanitorium Sewer, involving 10,710 ft. 8-in. pipe, (a) clay (b) concrete, from Coluccio & Niblett, (a) $29,372, (b) $29,211; J. Paduano, 646 West 51st St., (a) and (b) each $29,384; J. Di Julio & Co., Seattle, (a) and (b), each $29,929.

★Cal., Los Angeles—City let contract building cement sewers in Long Beach Ave. et al, to B. D. Zaich, 2218 Sheridan St., $15,885. Noted May 15.

Cal., Palo Alto—City received bids building sewerage system, from J. Heafey, 22 Mess Ave., Oakland, $23,477; F. Meyers, Oakland, $24,661; R. H. Downer, Berkeley, $25,323. Work involves 14,419 ft. 6-14 in. pipe, 48 manholes and 4597 ft. 14 in. outfall sewer on concrete base.

Bridges

PROPOSED WORK

Mass., Springfield—Hampden Co. plans to build new steel and rein.-con. bridge on Berkshire St. Cost to exceed $10,000.

N. Y., Leroy—City rejected estimates submitted by J. P. Wells, engr., Cutler Bldg., Rochester, building bridge over Oatka River. Estimate of $47,890 for concrete arch bridge and $46,000 for steel girder did not include necessary $4000 for right of way. Town may construct foot bridge. Address D. J. O'Shea, Leroy. Noted Apr. 24.

S. C., Beaufort—Comrs. Beaufort Co. had tentative plans prepared for 3700 ft. bridge, 20 ft. wide, over Beaufort River, probably concrete. About $160,000.

Ill., Belleville—R. Millikan, engr., Central Bldg., East St. Louis, receives bids in September, building 2 bridges and approaches, 100 ft. long, 40 ft. wide (1 contract), also 1 bridge and approach, across Little Mud Creek, about 15 mi. east of East St. Louis.

Ia., Denison—Bd. Supervs. Crawford Co. rejected bids received Apr. 30, building one 18 x 90 ft. rainbow arch bridge, involving 448 cu.yd. rein.-con., 13,600 lbs. structural and 24,300 lbs. reinforcing steel and 1536 lin.ft. wood piling. About $16,000. Bids will probably be readvertised.

Kan., Lawrence—See "Streets and Roads."

Cal., Fresno—See "Streets and Roads."

BIDS DESIRED

W. Va., Danville—Until June 6, by Comrs. Boone Co. (Madison) building steel highway bridge over Little Coal River here, two 126 ft. spans, 16 ft. wide. About $15,000. S. E. Bradley, Madison, engr. Noted May 15.

W. Va., Madison—Until June 6, by Comrs. Boone Co. (Madison) building steel highway bridge over Coal River here, two 105 ft. spans, 16 ft. wide. About $11,000. S. E. Bradley, Madison, engr. Noted May 15.

Ga., Cochran—Until May 24, by Comrs. Bleckley Co., building 3 bridges over Gum Swamp, one to consist of twelve 30 ft. arches, involving 435 cu.yd. Class "A" concrete, 235 cu.yd. Class "B" concrete and 59,000 lbs. reinforcing steel; one 26 ft. bridge, 25 cu.yd. Class "A" concrete, 42 cu. yd. Class "B" concrete and 6788 lbs. reinforcing steel; one 22 ft. bridge, 19 cu.yd. Class "A" concrete, 41 cu.yd. Class "B" concrete and 5790 lbs. reinforcing steel. Federal Government will appropriate toward cost. Garrett & Slack, Montgomery, Ala., engrs.

Ga., Valdosta—Until June 16, by Comrs. Lowndes Co. building bridge over Withlacoochee River, about 5 mi. from here. Work involves 40 cu.yd. dry excav., 155 cu.yd. wet excav., 1240 lin.ft. wood piles under foundation piers, 880 lin.ft. creosoted piles under foundation piers, 3720 lin.ft. 14 x 14 in. rein.-con. piles, 812 lin.ft. 10 x 10 in. rein.-con. piles, 904 cu.yd. Class A concrete, 463 cu.yd. Class B concrete and 94,520 lbs. reinforcing steel, etc. B. G. Lastinger, clk. of comr. J. B. McCrary Co., Valdosta, engrs.; advertised in this issue. Noted Apr. 24.

O., Lisbon—Until May 26, by State Highway Comn., Columbus, building 131 ft. bridge, 20 ft. wide, over west fork of Beaver Creek, on Sect. E-1 of Lisbon-Canton Southern Rd., I. C. H. No. 368, in Hanover Twp., Columbiana Co. About $13,600. C. Cowen, state highway comr.

Ill., Chicago—Until May 29, by C. R. Francis, comr. pub. wks., 406 City Hall, building superstructure of double decked, trunnion bascule bridge over Chicago River on Wells St., to carry elevated railroad on upper deck and trolley cars and street traffic on lower deck. About $350,000. T. G. Pielfeldt, city bridge engr.

Minn., St. Peter—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of Contract)

N. J., Brielle—Comrs. Ocean Co., (Toms River) and Monmouth Co. (Freehold) let contract replanking and replacing stringers on drawbridge over Manasquan River between here and Point Pleasant, 1886 ft. long, to F. Brower, Freehold, $16,049.

★Pa., Pine Grove—Comrs. Schuylkill Co. (Pottsville) let contract building concrete bridge over Swatara Creek, here, to Whittaker & Diehl, Union Trust Bldg., Harrisburg, $17,876. Noted Apr. 17.

Bridges (continued)

★Pa., Scranton—City let contract improving and repairing Lackawanna Ave. bridge, to Anthracite Bridge Co., Mears Bldg., $21,147. Cost will be borne equally by city and Scranton Ry., 284 Lackawanna Ave. Noted May 1.

★O., Akron—Comrs. Summit Co. let contract building North Hill Viaduct, rein.-con., 2790 ft. long, consisting of 16 arch spans from 116-191 ft. long, 12 short girder spans, 52 ft. roadway and two 10 ft. sidewalks, to J. O. Hayworth, Chicago, $1,227,850. Noted Apr. 10.

★Ia., Boone—Bd. Supervs. Boone Co. let contracts, to N. E. Marsh & Son, Des Moines, building one 18 x 85 ft. arch bridge and one 16 x 18 ft. concrete slab bridge, cost, $11,198; Witmer Co., Des Moines, 2 concrete box culverts, 2 concrete slab

★Wis., Oshkosh—Bd. Pub. Wks. let contract building 470 ft. bridge over Fox River on Oregon and Jackson Sts., to A. Green Constr. Co., Green Bay. Noted Apr. 10.

★Ia., Chariton—Bd. Supervs. Lucas Co. let contract building 18 x 60 ft. pony truss bridge, concrete floor and abutments, 16 x 32 ft. I-beam, concrete floor and abutments and one I-beam bridge, with three 18 x 18 ft. spans, to Pittsburgh-Des Moines Steel Co., 4th St. south of Tuttle St., Des Moines, $14,500. Work involves 419 cu.yd. rein.-con., 2304 lin.ft. wooden piling, 23½ tons structural and 14½ tons reinforcing steel. Noted May 1.

★Ia., Denison—Bd. Supervs. Crawford Co. let contracts, to Deloit Bridge Co., Denison, building 7 concrete box culverts, cost, $4705; to Pickus Eng. & Constr. Co., 532 Davidson Bldg., Sioux City, 1 concrete box culvert, one 18 x 90 ft. truss bridge, concrete floor and abutments, $16,350; to Iowa Bridge Co., 712 Hubbell Bldg., Des Moines, one 18 x 90 ft. pony truss bridge concrete floor and abutments, $12,960.

★Ia., Newton—Bd. Supervs. Jasper Co. let contract, to A. Phelps & Son, Knoxville, building 3 pony truss bridge, concrete floor and abutments, cost, $19,270; M. M. Stark & Co., 1215 Mulberry St., Des Moines, 3 I beam bridges, concrete floors and abutments, $10,130. Work involves 8702 cu.yd. rein.-con., 49 tons structural and 28 tons reinforcing steel.

★Tex., Dallas—City let contract building rein.-con. bridge over Turtle Creek, on Fairmont St., to Klein Bros. Co., Junius and Walton Sts., $29,120. Noted May 1.

★Wash., Orting—Comrs. Pierce Co. let contract building 180 ft. Baltimore truss bridge, concrete piers and trestle approaches, near here, to D. W. Rutherford, Municipal Dock, Tacoma, $24,200. Noted May 8.

★Wash., Spokane—Comrs. Spokane Co. received lowest 3 bids building concrete bridge over Latach Creek, 2½ mi. west of here, from G. Groschoff, 1604 Main Ave., $8900; C. L. Graves, 2108 Montgomery St., $11,900; C. W. McClung, $12,000.

Que., St. Croix—Lotbiniere Co. received bids building steel and concrete bridge between St. Edouard and St. Emelie, from U. Ouellette, Lachine, $34,100, H. Paris, Portierville, $35,000, C. Laroche, Lotbiniere, $37,000. Noted May 1.

★Ont., Ottawa—Dept. Pub. Wks., Ottawa, let contract building steel highway bridge over Ottawa River between here and Hull, Que., to Dominion Bridge Co., Ltd., Dominion St., Lachine. About $110,000. Noted Feb. 20.

Reinforced Concrete

PROPOSED WORK

Mich., Detroit—See "Miscellaneous."

Kan., Lawrence—See "Streets and Roads."

Cal., El Centro—See "Industrial Works."

BIDS DESIRED

Ga., Cochran—See "Bridges."

Ill., East St. Louis—See "Buildings."

Minn., Albert Lea—See "Waterworks."

Minn., Hibbing—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ill., Chicago—See "Industrial Works."

★Ia., Chariton—See "Bridges."

★Ia., Denison—See "Bridges."

Cal., Quincy—See "Buildings."

Que., St. Croix—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Northampton—J. L. Fowler, supt. streets, soon receives bids for 31,000 sq.yd. Springfield grit mixture pavement and 50,000 sq.yd. asphalt. Noted May 1.

Conn, Norfolk—Town appropriated $26,000 for constructing asphalt top on Hall Meadow Highway.

New Jersey—State Highway Comrs., Broad St. Bank Bldg., Trenton, plan to pave section Highway Route No. 8 between Pequannock and Butler.

Pa., Ebensburg — West Carroll Twp., Cambria Co., election June 10 to vote on $65,000 bonds to pay township's share of county aid road from Carrolltown to Bakerton, and Sproul route to Spangler Boro.

W. Va, Berkeley Springs—Morgan Co. plans election soon to vote on $500,000 bonds to pave 30 mi. and grade 46 mi. road. C. A. Rathrock, Berkeley Springs, engr.

W. Va., Elkins—Comrs. Randolph Co. soon receive bids improving 1.92 mi. Street Car Rd., 22 ft. wide, involving 18,000 cu.yd. grading, etc. About $17,000. F. A. Parsons, Elkins, engr.

W. Va., Lewisburg—Comrs. Greenbrier Co. plan to build 2.75 mi. James River and Kanawha Turnpike, surfacing 9 and 16 ft. wide, involving 19,200 sq. yd. penetration macadam, etc. About $30,000. F. K. Rader, Lewisburg, engr.

W. Va., Martinsburg—Comrs. Berkley Co. had plans prepared surfacing 61,600 sq.yd. of macadam, with local stone. About $18,000. J. W. Sperow, Martinsburg, engr.

W. Va., Morgantown—Comrs. Monongalia Co. plan to build 12 mi. concrete road, 16 ft. wide, and 7 mi. concrete road, 98 ft. wide in Grant Dist., involving 69,000 cu.yd. grading, etc. Total cost, $500,000. Election soon to vote on $300,000 bonds for project; balance to be raised by levy. L. M. Cox, Morgantown, engr.

W. Va., Moundsville — Marshall Co., Washington Dist., plans election soon to vote on $200,000 bonds to build main roads, 16 ft. wide; Benwood Moundsville Rd. will be first to be improved. S. H. Bonar, Moundsville, engr.

W. Va., Parkersburg—City voted $300,000 bonds to pave, build sidewalks, curbs and sewers in various streets. Noted Mar. 13.

W. Va., Parkersburg—Comrs. Wood Co. soon receive bids building 1½ mi. Parkersburg-Elizabeth Rd. and 3 mi. Northwestern Turnpike, concrete, about $36,000 and $56,000 respectively. Burdett & Woodyard, Parkersburg, engrs. Noted May 15.

W. Va., Princeton—Comrs. Mercer Co. soon receive bids building 6 mi. Princeton-Flat Top Rd., waterbound macadam. About $54,000. K. E. Kiankle, co. engr.

W. Va., Wayne—Comrs. Wayne Co. soon receive bids building 2 mi. road between Kenova and Wayne, vitr. brick. About $60,000. J. D. French, Ceredo, engr.

W. Va., Wellsburg—Comrs. Brooke Co. receive bids about June 15, grading, draining and surfacing 1 mi. Wellsburg-Wheeling Rd., 16 ft. wide, concrete and macadam. Estimate cost $30,000. C. S. Donaldson, Wellsburg, engr.

W. Va., Weston—Lewis Co., Hacker Creek Dist., plans election soon to vote on $300,000 bonds to build roads, 26 ft. wide, W. K. Spaur, Weston, engr.

S. C., Aiken—Comrs. Aiken Co. plan to re-locate, grade drain, and surface with sand clay, 23 mi. Natl. Highway Rd. from here to Mouelta, 20 ft. wide. About $50,000. J. R. Pennell, Columbia, state highway engr.

S. C., Camden—Comrs. Kershaw Co. plan to re-locate, drain and surface 2 mi. road from Columbia to Aiken and from Wateree river bridge to city limits of Camden, 20 ft. wide. About $20,000. J. R. Pennell, Columbia, state highway engr.

S. C., Chesterfield—Comrs. Chesterfield Co. plan to re-locate, grade, drain and surface with some temporary material, 14 mi. road from here to Pageland, 20 ft. wide, cost, $30,000; 5 mi. road from Cheraw to here, 20 ft. wide, $16,000. J. R. Pennell, Columbia, state highway engr.

S. C., Dillon—Comrs. Dillon Co. plan to re-locate, grade, drain and surface 40 mi. Little Rock-Bennettsville Rd. via Dillon, 20 ft. wide. About $80,000. J. R. Pennell, Columbia, state highway engr.

S. C., Florence—Comrs. Florence Co. plan to re-locate, grade, drain and surface 2 mi. Dargan St. extension to Coles Cross Rd., 16 or 20 ft. wide. About $43,084. J. R. Pennell, Columbia, state highway engr.

S. C., Georgetown—Comrs. Georgetown Co. plan to re-locate, grade, drain and sand clay surface 20 mi. road from here to Andrews, 20 ft. wide. About $33,000. J. R. Pennell, Columbia, state highway engr.

S. C., Hampton—Comrs. Hampton Co. plan to re-locate, drain, grade and surface with sand clay, 22 mi. road from Brunson to Yemassee, 20 ft. wide. Cost, $44,000; 18 mi. road from Brunson to Jasper Co. line, via Estill, 20 ft. wide, $36,000. J. R. Pennell, Columbia, state highway engr.

S. C., Lauren—Comrs. Lauren Co. plan to re-locate, grade, drain and surface with top soil, 25 mi. Spartanburg-Lauren-Greenwood Highway, from Enoree to Greenwood Co. line section, 20 ft. wide, cost, $100,000; 18 mi. Predmont Highway from here to Fountain Inn, 20 ft. wide. About $50,000. J. R. Pennell, Columbia, state highway engr.

S. C., Lexington—Comrs. Lexington Co. plan to re-locate, grade, drain and sand clay surface, 29.2 mi. Washington-Atlanta Highway, from Brockland to Saluda Co. line, 20 ft. wide. About $40,822. J. R. Pennell, Columbia, state highway engr.

S. C., Manning—Comrs. Clarendon Co. plan to re-locate, grade, drain and sand clay surface 9 mi. Manning-Sumter Highway, from here to Sumter Co. line section, 20 ft. wide. About $31,538. J. R. Pennell, Columbia, state highway engr.

S. C., Spartanburg—Comrs. Spartanburg Co. plan to re-locate, grade, drain and surface with asphaltic concrete, 1.9 mi. road from here to Union via Cedar Springs, 16 ft. wide, $55,193. J. R. Pennell, Columbia, state highway engr.

S. C., Union—Comrs. Union Co. plan to re-locate, grade, drain and surface 14 mi. roads from here to Lockhart, 20 ft. wide. About $30,000. J. R. Pennell, Columbia, state highway engr.

S. C., Walhalla—Comrs. Oconee Co. plan to re-locate, grade, drain and surface 10 mi. roads from here toward Russell, Ga., to meet Federal Forest Reserve Rd. from Russell, 20 ft. wide. About $20,000. J. R. Pennell, Columbia, state highway engr.

Ga., Athens—Clarke Co. election June 11 to vote on $250,000 bonds to build roads. Federal government will appropriate like amount if election carries.

Ga., Newnan—Coweta Co. voted $500,000 bonds to build roads.

Ga., Sylvester—Worth Co. election June 25 to vote on $400,000 bonds to build roads.

Fla., Jacksonville—Okeechobee Co. voted $300,000 bonds to build and improve roads. Noted Apr. 24.

Fla., Quincy—City voted $50,000 bonds to pave various streets.

Ala., Birmingham—Bd. Revenue Jefferson Co. instructed S. R. Batson, co. engr., to prepare plans for 36 mi. trunk line highways to be permanently paved with concrete or other material on concrete base. About $600,000. Federal Government and State will appropriate toward project.

La., Covington—St. Tammany Parish voted $750,000 bonds to build roads.

Tenn., Murfreesboro—City having plans prepared paving West Main St., involving 15,000 sq.yd. asphaltic concrete. G. B. Howard & Co., 150 4th Ave., Nashville, engrs.

O., Mt. Gilead—Village Council soon lets contract grading, curbing and paving Iberia St., brick on concrete base. T. E. Buck, Mt. Gilead, engr.

O., Toledo—City receives bids about July 1, grading, draining, curbing and paving 2581 ft. Oakdale Ave. from Oak St. to East Bway., 26 ft. wide, involving 5012 cu.yd. earth excav., estimated cost $35,724; 4190 ft. Hudson St. from Lagrange St. to Stickney Ave., 24 ft. wide, 7172 cu.yd. earth excav., $49,428; 1176 ft. Fremont St. from Wheeling to end of street, 24 ft. wide, 2404 cu.yd. earth excav., $13,778. Bids will be received on all types of pavement. H. C. McClure, city engr.

Mich., Caro—Comrs. Tuscola Co. plan to pave portions of Alma and Frank Sts., concrete. About $38,000. R. W. Roberts, 201 Schirmer Bldg., Saginaw, engr.

Mich., Davison — City plans to pave three blocks Main St., 2400 ft. long, 40 ft. wide, concrete. About $22,000. R. W. Roberts, 201 Schirmer Bldg., Saginaw, engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on concrete foundation, Amherst or Medina curb, Maxwell Ave. from Kellogg to Harper Ave., 24 ft. wide, $12,200; Garland Ave. from Canfield to Shoemaker Aves., $58,780; Hurlbut Ave. from Warren to Shoemaker Aves., $38,390; Parkdale Terrace from McGraw to Warren Aves., $7450;

Streets and Roads (continued)

Colfax Ave. from Warren to Milford Aves., $20,700; Kulick Ave. from Junction Ave. to Pere Marquette R.R., $19,530; Kopernick Ave. from Lockwood Ave. to Pere Marquette R.R., $29,330; Konkel Ave. from Junction to Wesson Aves., $16,480, all 26 ft. wide.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on concrete base, Amherst or Medina curb, Garfield St. from Chene St. to Mt. Elliott Ave., cost, $57,100, Apple St. from St. John to Michigan Aves., $8840, Minnesota Ave. from Woodward Ave. to John R St., $24,100, Grinell Ave. from Evelyn to French Sts., $43,760, Moran St. from Milwaukee Ave. to Griffin St., $7470, St. Clair Ave. from Warren to Shoemaker Aves., $31,440, all 26 ft. wide, also alley between Trumbull Lincoln, Calumet and Canfield Aves., 18 ft. wide. $1630 and alley between 12th, 10th, Howard and Abbott Sts., brick on concrete base, $1210.

Mich., Detroit—Dept. Pub. Wks. soon lets contract paving with asphaltic concrete on 6-in. concrete foundation, curbing with Berea, Amherst or Medina, Cosper Ave. from Ferndale to Dix Aves., Carter Ave. from Dexter Blvd. to Quincy Ave., Greeley Pl. from Westminster to Caniff Aves., Honorah Ave. from Ferndale to Dix Aves., Longworth Ave. from Springwells to Elsmere Aves., Norman Ave. from Ferndale to Woodmere Aves., Olivet Ave. from Springwells Ave. to Michigan Central R. R., Solvay Ave. from Fort St. to Michigan Central R. R., Witt Ave. from Lawndale to Elsmere Aves., all 26 ft. wide, Webb Ave. from 12th St. to Oakman & Stolls' Subdivision, 2 roadways 16 ft. wide and one 26 ft. wide, involving 23,137 cu.yd. excav., 34,497 lin.ft. curbstone, 50,914 sq.yd. paving and concrete base, 968 cu.yd. concrete under and behind curb, etc.

Mich., Highland Park (Detroit P. O.)—City having plans prepared by L. C. Whitsit, engr., 20 Gerald Ave., paving, grading and curbing with asphaltic concrete on concrete base, 1200 ft. Brush St. from Ferris Ave. to Six Mile Rd., 2700 ft. Oakland Ave. from Farrand to Manchester Aves., 1500 ft. Davison Ave. from Oakland Ave. to Grand Trunk R. R. tracks.

Mich., Oakwood (Oxford P. O.)—City soon lets contract paving 5800 ft. Fort Blvd. from River Rouge bridge to Dearborn Rd., 6-in. concrete, 2 strips 3000 ft. long, 20 ft. wide and two strips 2800 ft. long, 15 ft. wide, concrete curbing, etc. H. L. Russell, 505 Moffat Bldg., Detroit, engr. Noted Apr. 24.

Mich., Three Rivers—City retained G. Champe, engr., 610 Nasby Bldg., to prepare plans for grading, draining, curbing and paving with concrete, 2 mi. Main and 6th Sts., 30 and 40 ft. wide.

Illinois—State Highway Comn., Springfield, received no bids May 14, paving roads in following counties: La Salle Co., 5940 ft. Sect. K. Route 15, 15 ft. wide; Shelby Co., 3750 ft. Sect. I, Route 5, 16 ft. wide; Macoupin Co., 3274 ft. Sect. H, Route 7, 10 ft. wide and 5200 ft. Sect. I, Route 12, 24 ft. wide. Noted May 1.

Illinois—State Highway Comn., Springfield, receives bids about July building ½ mi. state road from Benton to Frankfort, 10 or 16 ft. wide. About $11,000 available. H. E. Bilger, state highway engr.

Illinois—State Highway Comn., Springfield, rejected bids received Apr. 30, paving roads in following counties: Lake Co., 6060 ft. Sect. J, Route 6, 18 ft. wide; Bond Co., 1783 ft. Sect. E, Route 6, 10 ft. wide; Stephenson Co., 5300 ft. Sect. F, Route 1, 10 ft. wide; Adams Co., 4459 ft. Sect. E, Route 5, 15 ft. wide. Noted May 15.

Ill., Belleville—City appropriated $30,000 bonds to improve streets and bridges.

Ill., Chicago—Cook Co. receives bids about June building 13,755 ft. Homeward-Lansing Rd., Sect. 43-15d, 18 ft. wide, Thornton Twp., involving 27,518 sq.yd. (a) cement concrete or (b) bituminous concrete, 7300 cu.yd. earth excav., etc. Cost, (a) $90,955, (b) $109,343. B. D. Barker, co. engr.

Wis., Janesville—Rock Co. voted $1,500,000 bonds to build concrete roads.

Wis., Milwaukee—Milwaukee Co. soon lets contract grading and paving Howell Rd. No. 4 from Ryan Rd. south 2 mi. to county line, involving 21,200 sq.yd. one course concrete paving, 9200 cu.yd. excav. and 150 cu.yd. concrete culverts; Wauwatosa Ave. from North Main St. in city of Wauwatosa, north 2 mi. to Lisbon Rd., 20,500 sq.yd. concrete paving, and 5000 cu.yd. excav.; Kilbourn Rd. No. 1 from city limits 1.1 mi. south to Loomis Rd., 15,600 sq. yd. asphaltic concrete surfacing, etc. G. Hampel, co. clk.

Ia., Ft. Dodge—Bd. Supervs. Webster Co. soon receives bids grading, surfacing and draining 11.7 mi. road, 24 ft. wide, gravel 18 ft. wide. About $42,470. Work involves 30,400 cu.yd. gravel, 47,336 cu.yd. excav. etc. J. L. Parsons, co. engr.

Ia., Iowa City—Johnson Co. election June 23, to vote on $1,500,000 bonds to pave entire primary road system, 70.6 mi. long, 18 ft. wide, probably concrete. A. F. Fischer, co. engr.

Ia., Primghar—Bd. Supervs. O'Brien Co. election June 17 to vote on $1,500,000 bonds to pave and grade primary road system, about 80 mi. J. C. Kerrigan, co. engr.

Ia., Waterloo—Blackhawk Co., election June 3 to vote on $1,500,000 bonds to pave entire primary road system, 76.95 mi. long, 18 ft. wide, probably concrete. C. M. Fisher, co. engr.

Minn., Blue Earth—City soon lets contract for 5000 sq.yd. rein.-con. paving. E. Floe, clk.

Minn., Faribault—Comrs. Rice Co. soon receive bids building 11 mi. road from Northfield to here, 18 ft. wide. About $200,000. W. P. Chapman, Faribault, engr.

Minn., Mahnomen—Comrs. Mahnomen Co. plan to build 19 mi. gravel road from Becker to Polk Co. line, 20 ft. wide. About $200,000. H. R. Chapin, Mahnomen, engr.

Kan., Anthony—City soon lets contract for 8000 sq.yd. concrete paving on South Anthony Ave. from Main to Hayes Sts. C. C. Eastham, city engr.

Kan., Eureka—City soon lets contract for 23,400 sq.yd. paving and 15,000 lin.ft. curbing and guttering. W. J. Bilson, city engr.

Kan., Garden City—City soon lets contract paving, curbing and guttering Main and various other streets. Work involves 27,336 sq.yd. 3 in. vertical fiber brick on 4 in. concrete base, 7900 ft. curb and gutter, 3200 cu.yd. excav., etc. Ruckel Eng. Co., Garden City, engrs.

Kan., Lawrence—City soon lets contract for 18½ mi. concrete paving, 18 ft. wide, and two 40 ft. rein.-con. bridges. About $445,000. L. Duffee, engr.

Kan., Peabody—City soon lets contract paving sections of Olive, Walnut, Sycamore, Maple, Elm, Division, 1st, 3rd and 4th Sts. Work involves 18,000 cu.yd. excav., 28,345 lin.ft. combined curb and gutter, 2145 lin.ft. oak and concrete headers, 41,532 sq.yd. paving, etc. Black & Veatch, Inter State Bldg., Kansas City, Mo., engrs.

Neb., Geneva—C. Underwood, clk., receives bids about June 1, paving 10½ blocks Main St., involving 10,000 lin.ft. curbing and 30,000 sq.yd. vertical fiber, asphalt or concrete. About $130,000. Grant & Fulton, Lincoln, engrs.

Neb., Omaha—Douglas Co. plans election to vote on $3,000,000 bonds to pave 105 mi. of roads.

Mont., Great Falls—City plans to pave and improve sections of 1st Ave. S., 2nd Ave. S., 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th and 15th Sts., in Dist. No. 357. About $140,000. L. B. Evenson, city engr.

Mont., Hardin—Big Horn Co. plans to grade 20 mi. Hardin-Foster-Custer Rd. About $20,000. Federal Government asked to appropriate toward cost. P. D. Pratt, Helena, state highway engr.

Mont., Kalispell—Flathead Co. plans to grade 6 mi. Kalispell-Ovando Rd. Sect. No. 2, $15,000; 22 mi. Smith Valley Rd., $10,000; 7.25 mi. Spotts-Columbia Falls Rd., $10,000; Federal Government asked to appropriate toward cost. P. D. Pratt, Helena, state highway engr.

Mont., Laurel—City plans to pave 1 mi. Main St., 20 ft. wide. About $47,000. Federal Government will be asked to appropriate toward cost. P. D. Pratt, Helena, state highway engr.

Mont., Roundup—City plans to pave Main St., cost, $20,000; 1st Ave. W., $30,000; 8th Ave., $20,000; Federal Government will appropriate toward cost. F. Quinnel, city engr.

Mo., Excelsior Springs—City plans to pave 1200 ft. Kansas City Ave., 30 ft. wide, involving 4700 sq.yd. vertical fibre brick on old base; 700 ft. Elm Blvd., 36 ft. wide, involving 3400 sq.yd. bituminous macadam on old base. About $16,000. C. A. Shockley, 740 Reserve Bank Bldg., Kansas City, engr.

Mo., Joplin—City soon lets contract paving Forrest Ave. from 4th St. to Central Ave., 45 ft. wide, class "G" macadam, cost $18,740; Byers Ave. from 1st to 10th Sts., 45 ft. wide, bituminous macadam, $21,000. S. P. Ashcraft, city engr.

Mo., St. Joseph—City plans to pave 1637 ft. 26th St. from Mitchell to Doniphan Aves., 26 ft. wide, involving 4190 sq.yd. 2 in. asphaltic concrete on 6 in. concrete base, cost $14,700; 1200 ft. Shady Ave. from St. Joseph Ave. to 5th St., 26 ft. wide, 3800 sq.yd. 6 in. concrete, 2400 lin.ft. integral curb and 4400 sq.ft. concrete sidewalk, $11,600; 1520 ft. Valley St. from King Hill Ave. to 3rd St., 26 ft. wide, 4760 sq. yd. 6 in. concrete, 3050 lin.ft. integral curbing and 1800 sq.ft. sidewalk, $15,100; 1110 ft. Market St. from Prospect Ave. to 2nd St., 30 ft. wide, 3640 sq.yd. asphaltic concrete on 6 in. base, 2140 lin.ft. combination curb and gutter and 600 sq.ft. concrete sidewalk, $13,300; 620 ft. 27th St. from Duncan to Jackson Sts., 30 ft. wide, 1670 sq.yd. vertical fiber on 6 in. concrete base, 1240 lin.ft. plain curbing and 5900 sq.ft. concrete sidewalk, $11,800. H. Judson, city engr.

Tex., Ballinger—Runnels Co. plans to gravel surface and drain 8.36 mi. State Highway No. 7, from Rowena to Ballinger, involving 190 cu.yd. concrete, 5479 cu.yd. earth excav. and 8692 cu.yd. rock and sand excav. About $38,235. J. L. Dellis, Ballinger, engr.

Tex., Beeville—Bee Co. voted $600,000 bonds to build roads. Noted Apr. 3.

Tex., Bonham—Fannin Co. plans to gravel surface 7.121 mi. State Highway No. 5, Bonham-Sherman Rd., from Ector to county line, 14 ft. wide. Work involves 2 acres clearing and grubbing 420 cu.yd. concrete for drainage structures and 12,801 cu.yd. earth excav. About $26,357. A. J. Goode, Bonham, engr.

Tex., Brenham—Washington Co. election May 31 to vote on $1,500,000 bonds to build and improve highways.

Tex., Brownwood—Brown Co. plans to build 10.96 mi. Highway No. 10 from Brown Co. Court House to Comanche Co. line, 16 ft. wide, involving 105,000 sq.yd. concrete, 130,000 gal. bituminous surface treatment and 50,000 gal. asphalt, etc. About $45,000. R. A. Nichols, Brownwood, engr.

Tex., Decatur—Wise Co. plans to gravel surface 41.6 mi. State Highway No. 2 from north boundary line of Tarrant Co. to south boundary line Montague Co., 24 ft. wide. About $294,684. J. A. Simpson, Decatur, engr.

Tex., Ft. Worth—Tarrant Co. had plans prepared for gravel surfacing 9.928 mi. State Highway No. 2, involving 9,000 cu.yd. 5 and 8 in. concrete, 43,682 gal. bituminous material and 13,645 lb. steel. About $66,631. H. P. Hayes, 1515 Lincoln Ave., engr.

Tex., Odessa—Ector and Crane Counties plan to improve 9.753 mi. Highway No. 1, from Ward Co. line to Judkins, 23 ft. wide. Plans include 74.9 acres clearing and grubbing and 3.54 mi. gravel surfacing, etc. About $115,350. C. A. Vaughan, Odessa, engr.

Tex., Orange—Orange Co. plans to shell surface and drain 6.93 mi. Highway No. 3, from west line Road Dist. 3 to Orange Co. line, 24 ft. wide. About $42,242. C. R. Goodman, Orange, engr.

Tex., Roby—Fisher Co. plans to lay and gravel surface 8.59 mi. Rotan Rd. from Rotan to Stonewall Co. line. About $65,000. T. E. Hess, c/o Hess & Skinner, South Western Life Bldg., Dallas, engr.

Tex., Sherman—City election June 6 to vote on $50,000 bonds to improve streets.

Tex., Van Horn—Culberson Co. plans to build and grade 52.506 mi. State Highway No. 12, 24 ft. wide. Work involves 78 acres clearing and grubbing. 5584 sq.yd. concrete, 7211 cu.yd. earth and 220 cu.yd. rock excav. About $57,486. H. S. Wilder, c/o Wilder & O'Neil, Houston, engr.

Idaho, Idaho Falls—Bonneville Co. election June 3, to vote on $500,000 bonds to build highways. F. W. Jordan, clk.

Idaho, Rexburg—Madison Co. voted $150,000 bonds to build roads.

Idaho, Twin Falls—City election June 6, to vote on $115,000 bonds to pave streets and $40,000 bonds to extend sewers.

Utah, Provo—Utah Co. voted $600,000 bonds to build roads.

Streets and Roads (continued)

Wash., Charleston—City soon lets contract grading and paving Cambrian and various other streets. Work involves 40,445 sq.yd. 6-in. concrete, 13,900 cu.yd. grading, 26,520 ft. concrete curb and gutter and 1930 sq.yd. sidewalks, 5 and 6 ft. wide. About $160,000. Gardner, Gardner & Fischer, Lyon Bldg., Seattle, engrs.

Wash., Goldendale—Comrs. Klickitat Co. received no bids May 3, improving Goldendale-Maryhill Rd. Work will be readvertised.

Wash., Omak—City soon receives bids building cement sidewalks. About $22,000.

Wash., Ritzville—Comrs. Adams Co. received no bids grading, draining and surfacing 12½ mi. Donohue Rd. No. 3, 16 ft. wide, crushed rock and gravel. About $105,000. Work will be readvertised about September.

Wash., Wenatchee—City plans to pave North Wenatchee Ave. About $30,000.

Wash., Wenatchee—Chelan Co. plans to improve various roads. About $300,000.

Oregon—State Highway Comn., Portland, received no bids May 6, grading and macadamizing 6.7 mi. Roseburg-Dillard Rd., Douglas Co. and grading 6.8 mi. Pacific Highway, from Oswego to Oregon City, Clackamas Co. H. Nunn, Salem, state highway engr. Noted May 8.

Oregon—State Highway Comn., Portland, rejected bids received May 6 grading and macadamizing 2 mi. Pacific Highway, Roseburg-Winchester Sect., Douglas Co., estimated cost $22,210; 12.3 mi. Columbia River Highway, Arlington-Morrow Sect., Gilliam Co., $67,745. Noted May 8.

Ore., Enterprise—City soon lets contract hard surfacing 40,000 sq.yd. streets. O. J. Roe, city recdr.

Ore., St. Helens—Columbia Co. soon lets contract paving Smith Rd. Dist. No. 3 from Sta. 158 to 210, and Wallace Rd. Dist. No. 8, from Sta. 136 to 189. J. W. Hunt, clk.

Cal., Fresno—Fresno Co. voted $4,800,000 bonds to build 315 mi. highways involving grading, paving with concrete, corrugated iron and concrete culverts, bridges, etc. D. M. Barnwell, co. clk. L. Aldrich, 297 Blackstone St., engr. Noted Feb. 20.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co. having plans prepared grading and paving 7 mi. Lancaster-Redman Township Rd. near Lancaster, Rd. Dist. No. 1444, paving 5 mi. Lancaster-Redman Township Rd. which has already been graded and surfaced with disintegrated granite, Rd. Dist. No. 144, both 5 in. macadam, also improving 2 mi. Sunset Ave. between Merced Ave. and Pomona Blvd., Rd. Dist. No. 145. F. H. Joyner, co. rd. engr.

Cal., Merced—Comrs. Merced Co. having plans prepared grading and paving 3.06 mi. highway from Gustine to northwest county line, 3.29 mi. east to Thorpe Rd. via Kahl Rd., 2.29 mi. from Le Grand west via Jefferson Ave. et al, 2.70 mi. from Atwater to Winton, 2.40 mi. from Stevenson to Milliken bridge, 5.41 mi. from Stevenson to Fremont bridge and 5 mi. from Gustine to Fremont bridge, 16 ft. wide. County will furnish cement, sand and crushed rock. Work will be done under bond issue of $1,250,000 recently voted. A. E. Crowell, co. engr.

Cal., San Diego—A. H. Wright, clk., receives bids in June grading and paving 18,300 ft. Morena Blvd., et al, 20 and 30 ft. wide, concrete pavement with bitulithic surface. About $75,000. G. Cromwell, city engr. Noted May 15.

BIDS DESIRED

Mass., Gardner—Town receives bids about June 1, building 2 mi. concrete road around Crystal Lake, 12 ft. wide. Parker, Bateman & Chase, 14 Main St., engrs.

N. Y., Brooklyn—Until May 28, by E. Riegelmann, boro. pres., regulating, grading, curbing and laying sidewalks on East 4th St. from Ave. I to J, and excavating to sub-grade of 9 in. Ave. I from East 3rd to East 4th Sts.; regulating and paving with permanent asphalt on 6 in. concrete foundation, roadways of East 4th St. from Ave. I to J and Ave. I from East 3rd to East 4th Sts.; Dumont Ave. from Elton to Linwood Sts.; East 17th St. from Ave. K to L; East 67th St. from 13th to 14th Aves.

N. Y., Gilboa—Until June 10, by Bd. Water Supply, Municipal Bldg., New York City, clearing, grading, draining, building culverts and guard rails on 7.75 mi. road around Schoharie reservoir, in Gilboa and Conesville Twps., Schoharie Co.; Prattsville Twp., Greene Co. and Roxbury Twp., Delaware Co., Constr. 202. B. E. Einbigler, secy.; advertised in this issue.

N. Y., New York—Until May 27, by H. Bruckner, pres. Bronx Boro., repaving with granite blocks on concrete foundation, Southern Blvd. from Boston Rd. to East 182nd St.; East 153rd St. from Melrose to Morris Aves.; East 154th St. from Melrose to Courtlandt Aves.; Burnside Ave. from Anthony to Creston Aves.; Wilkins Ave. from Jennings St. to Boston Rd.; Cypress Ave. from East 132nd to East 138th Sts.; regulating, grading and setting curbs, laying sidewalks and crosswalks, building inlets, receiving basins, drains, culverts, approaches and guard rails, in Kinsella St. from Matthews to Bronxdale Aves.

N. Y., S. I., St. George—Until May 27, by C. D. Van Name, pres. Richmond Boro., regulating and repaving with bituminous concrete on present macadam foundation, roadway of Richmond Ave., from Richmond Hill Rd. to Arthur Kill Rd.

N. J., Burlington—Until June 4 (change of date), by Bd. Freeholders Burlington Co., improving Sect. No. 2 Moorestown-Camden Pike, Chester Twp., involving 5717 sq.yd. sheet asphalt surface on concrete foundation; advertised in this issue. Noted Apr. 24.

N. J., Jersey City—Until May 27, by city, paving Bond St. from Hudson Blvd. to Garrison Ave., asphalt on concrete foundation. About $10,000.

Pa., Braddock—Until May 26, by Boro. Council, Municipal Bldg., grading, paving and curbing Braddock Ave.

Pa., Butler—Until June 3, by City Clk., paving 1152 sq.yd. Oak St., 1365 sq.yd. Summit St., 6915 sq.yd. Jefferson St., 1917 sq.yd. Wayne St., 4175 sq.yd. Center Ave.; also building 1840 lin.ft. main sewer and 1150 lin.ft. laterals in Jefferson St., 550 lin. ft. main sewer and 324 lin.ft. laterals in Wayne St. H. O. Carson, city engr.; advertised in this issue.

Pa., Crafton (Pittsburgh P. O.)—Until May 27, by Boro. Council, grading, paving and curbing Barr Ave. from Keever to Willard St., Harris Ave. from Barr to Clearview Sts., and Chartiers St. from Woodlawn St. to R. R. bridge, involving 3190 sq.yd. vitr. brick, 2600 lin.ft. concrete curbing and guttering and 900 cu.yd. earth excav.

Pa., Ebensburg—Until May 28, by Supervs. Susquehanna Twp., c/o Comrs. Cambria Co., building 3.20 mi. Barnesboro-Hastings Rd., Susquehanna Twp., vitr. clay brick or shale paving brick on combination base and curb. C. E. Schlichter, Spangler, engr.

Pa., Ebensburg—Until May 28, by Supervs. Conemaugh Twp., c/o Controller Cambria Co., rebuilding 8600 ft. roadway leading from Franklin Boro. line east to Frankstown Rd. in Conemaugh Twp., vitr. brick paving block on concrete base and curb. Separate bids will also be received for 650,000 No. 1 repressed vitr. paving blocks, f.o.b. cars, nearest point of delivery. O. P. Thomas, Leader Bldg., Johnstown, engr.

Pa., Freeland—Until June 2, by O. Koch, boro. secy., paving Walnut and Front Sts. from Centre St. eastwardly to Birbeck St., Carbon St. from Centre St. eastwardly to boro. line, amiesite or sheet asphalt; new cement curbing, also laying vitr. clay pipes and building sewer drop inlets and catch basins and rebuilding present sewer inlets.

Pa., Pittsburgh—Until June 12, by Controller Allegheny Co., improving 5280 ft. McCoy Rd., 18 ft. wide, rein.-con. and brick; also grading and improving 3 mi. Bull Creek Rd., 16 ft. wide, brick and concrete. R. V. Warren, Court House, engr.

Pa., Pittsburgh—City Council receiving bids grading, paving and curbing Azalia St. from Chartiers Ave. to Crucible St., Alexis St. from Saline St. to Forward Ave., Boundary St. from Saline to Ivondale Sts., Howley St. from Main to Friendship Sts., Downing St. from 1st angle of Hancock St. to Hancock St., Faulkner St. from Chartiers Ave. to Allendale St., Methyl St. from Wentworth St. to Coast Ave.; also grading and paving Mulberry Way from Barbeau Way to Fancourt St. T. M. Reed, City County Bldg., engr. Noted Feb. 27.

Pa., Wilkes-Barre—Until May 29, by Comrs. Luzerne Co., excavating, and grading with concrete and macadam, 4301 ft. Stull Turnpike, 28 ft. wide, cost $5301; 20,230 ft. road in Bear Creek Twp., 28 ft. wide, $30,230; 11,409 ft. Butler Valley Cross Rd., 30 ft. wide, $12,409; 24,761 ft. Nescopeck Pass Turnpike, 30 ft. wide, $25,761; 6780 ft. Lehman Turnpike, 28 ft. wide, $7780; 46,100 ft. Harveys Lake Blvd., 28 ft. wide, $47,100; 25,707 ft. Harveys Lake Rd., 28 ft. wide, $26,707; 6070 ft. Sweet Valley Turnpike, 28 ft. wide, $7070; 3108 ft. Blythburn Blvd., $7108; 7923 ft. Nuangola Mt. Rd., 28 ft. wide, $8923. T. A. Boyle, co. engr.

W. Va., Harrisonville—Until June 20, by Comrs. Ritchie Co. building 5 mi. Northwestern Turnpike, 16 ft. wide, vitr. brick. About $120,000. R. O. Renshaw, Huntington, engr.

W. Va., Hinton—Until June 13, by Comrs. Summers Co. grading and draining 2 mi. Hinton-Beckley Rd., 20 ft. wide, involving 27,000 cu.yd. excav. About $30,000. J. D. French, Hinton, engr.

W. Va., Marlington—Until June 10, by Comrs. Pocohontas Co. building 2.3 mi. Lewisburg Marlins Bottom Turnpike, 16 ft. wide, involving 6,800 cu.yd. excav., and 19,500 sq.yd. waterbound macadam, cost, $35,000. Project includes 1 small bridge, $7,000. F. Baxter, Marlington, engr.

N. C., Gastonia—Until June 5, by O. B. Carpenter, clk. Gaston Co., grading and building 3 mi. road from here to Pleasant Ridge, 18 ft. wide.

S. C., Columbia—Until June 3, by city, paving Assembly St. from Gervais to Taylor Sts., involving 17,000 sq.yd. sheet asphalt, bitulithic vitr. brick or cement concrete pavement and 5000 lin.ft. of curb. T. K. Legare, city engr.; advertised in this issue.

O., Cuyahoga Falls—See "Sewers."

O., Cleveland—City receiving bids paving Alcoba Ave. from West 67th to 73rd Sts. and Conover Ave. from West 58th to 89th Sts., involving 1015 cu.yd. excav., 20,270 sq.ft. 5-in. brick paving and 110 ft. 5-in. stone curbing; Tecumseh Ave. from East 108th to 110th Sts. and Edith Ave. from East 115th to 116th Sts., 580 cu.yd. excav. and 17,758 sq.ft. 5-in. brick paving; Selma Ave. from East 65th to 67th Sts. and Tanner Ave. from East 103rd St. to west end, 760 cu.yd. excav., 15,550 sq.ft. 5-in. brick paving, 8310 sq.ft. 6-in. concrete foundation and 1605 ft. 5 in. stone curbing; Pennant Ave. from West 83rd to 85th Sts. and Remis Ave. from West 39th to 41st Sts., 590 cu.yd. excav. and 12,974 sq.ft. 5-in. brick paving; Olivet Ave. from East 108th St. to Hathaway Ave. and Mace Court from West 11th to 12th Sts., 495 cu.yd. excav. and 12,520 sq.ft. 5-in. brick paving; Independence Rd. from Fleet Ave. to city limits, 1400 cu.yd. excav., 25,500 sq.ft. 4-in. brick paving on 6-in. concrete foundation and 1850 ft. 5-in. stone curbing; Hodgeson Ave. from Fulton Rd. to West 44th St., 850 cu.yd. excav., 17,900 sq.ft. 4-in. brick paving on 6-in. concrete foundation and 1370 ft. 5-in. stone curbing; Dayton Court from East 37th to 38th Sts. and Gilbert Ave. from West 58th to 61st Sts., 775 cu.yd. excav., 15,405 sq.ft. 4-in. brick paving on 6-in. concrete foundation and 1330 ft. 5-in. stone curbing. R. Hoffman, city engr.

O., Cleveland—City received bids paving (a) Marsh Ave. from East 93rd to 102nd Sts., (b) Trent Ave. from Fulton Rd. to West 41st St., (c) Hamlen Ave. from East Blvd. to East 121st St., (d) West 58th St. from Bridge to Detroit Aves., (e) East 121st St. from Kinsman Rd. to point 1046 ft. north of Luke Rd., from Rieley Bros., 357 The Arcade, (a) $26,576, (c) $21,151, (e) $27,922; A. M. Pepsa, 2359 East 93rd St., (a) $27,085, (c) $21,088, (e) $27,678; Bentley Bros., Union Bldg., (a) $27,239; Roehl Bros., West 25th St. and Clark Ave., (b) $22,910, (d) $29,451; Freshwater Paving Co., 11712 Detroit Ave., (b) $23,212, (d) $29,213; McHugh Bros., Society for Savings Bldg., (b) $23,785, (d) $29,452; Baldwin Bros, 4500 Euclid Bldg., (c) $20,856, (e) $27,800. Noted May 8.

Indiana—Bd. Co. Comrs. building roads in following counties:

June 3, Hamilton Co., Noblesville, building 3 concrete roads in Noblesville and Adams Twps. H. O. Cottingham, aud.

Jefferson Co., Madison, improving certain road in Monroe Twp. C. S. Dibler, aud.

Lawrence Co., Bedford, building certain road in Shawswick Twp. W. M. Denniston, aud.

Monroe Co., Bloomington, stone road in Richland Twp. H. Blakely, aud.

Boone Co., Lebanon, 3 gravel roads in Clinton and Jackson Twps. C. Goodwin, aud.

Miam. Co., Peru, gravel road in Union Twp. C. Wolf, aud.

Dearborn Co., Lawrenceburg, broken stone road in Washington Twp. A. E. Jackson, aud.

Streets and Roads (continued)

Montgomery Co., Crawfordsville, brick road in Coal Creek Twp. W. F. Batman, aud.

Gibson Co., Princeton, 3 stone and gravel roads in Montgomery and White River Twps., 15,817 ft., 1890 ft. and 2456 ft. long. J. H. Armstrong, aud.

Starke Co., Knox, building certain roads in Center and Washington Twps. C. W. Weninger, aud.

Marshall Co., Plymouth, improving certain highways. O. H. Weber, aud.

Fountain Co., Covington, stone and gravel road in Mill Creek, Vanburen and Troy Twps. H. W. Newlin, aud.

Porter Co., Valparaiso, 4 gravel roads in Porter, Westchester and Pleasant Twps. B. H. Kinne, aud.

Lawrence Co., Bedford, building gravel or macadam roads in Indian Creek and Marion Twps. W. M. Denniston, aud.

Clay Co., Brazil, 2 stone roads on line between Sugar Ridge and Jackson Twp.; also on line between Posey and Perry Twps. W. E. Parrish, aud.

Mich., Saginaw—Until May 26, by Rd. Comrs., Saginaw Co., building South Washington Rd., in Bridgeport Twp., Assessment Dist. Rd. No. 22, 2.286 mi. long, 12 ft. wide, metal track Class "C" road. About $27,400. R. W. Roberts, 201 Schirmer Bldg., engr.

Wis., Kenosha—Until May 29, by city, paving North Ridge St. from Grand Ave. to Alberts St. Work involves 7745 sq.yd. type A standard sheet asphalt on 5 in. concrete base. B. C. Brennan, city engr.

Wis., Sheboygan—Until June 1, by E. A. Boley, city engr., grading, paving, curbing and building sidewalks on St. Clair Ave. from 5th to 24th Sts., 20 ft. wide, involving 15,780 sq. yd. concrete, 1500 lin.ft. concrete curb and 1000 lin.ft. gutter. About $15,000.

Ia., Emmetsburg—Until June 3, by city, for 73,000 sq.yd. brick, sheet asphalt, asphaltic concrete or bitulithic pavement, or 82,000 sq.yd. concrete pavement, together with necessary curb, gutter and grading, etc., also for 26,000 lin.ft. 10-30 in. storm water sewers, vitr. tile or concrete. Marr, Green & Co., 17 North La Salle St., Chicago, engrs.; advertised in this issue. Noted Apr. 17.

Minn., Albert Lea—Until June 2, by F. Tavis, aud. Freeborn Co., grading 11.5 mi. Federal Aid Project No. 65, State Rd. No. 6, 18 ft. wide, involving 10 acres clearing and grubbing, 70,000 cu.yd. grading, 28,000 ft. tiling, 14,375 cu.yd. gravel surfacing, etc. About $60,000. Above work to be divided into two divisions and separate bids will be received on each division for grading and work incidental thereto or for grading and surfacing and work incidental to each. E. V. H. Brown, Albert Lea, engr.

Minn., Austin—Until June 9, by Mower Co., grading and graveling 27 mi. Federal Aid Project No. 38, 18 ft. wide. About $100,000. A. C. White, Austin, engr. Noted Apr. 10.

Minn., Bemidji—Until June 13, by Beltrami Co., grading and graveling 16 mi. Federal Aid Project No. 76, 18 ft. wide, involving 19,200 cu.yd. graveling. About $80,000. S. D. Snyder, Bemidji, engr.

Minn., Brainerd—Until June 12, by Crow Wing Co., grading and graveling 23 mi. Federal Aid Project No. 51, 18 ft. wide, involving 27,600 cu.yd. graveling. About $115,000. C. L. Motl, Brainerd, engr.

Minn., Elbow Lake—Until June 17, by Grant Co., grading and graveling 6 mi. Federal Aid Project No. 28, 18 ft. wide, involving 7200 cu.yd. graveling. About $30,000. W. E. Burgess, Elbow Lake, engr.

Minn., Elk River—Until June 16, by Sherburne Co., paving 6.5 mi. Federal Aid Project No. 69, 18 ft. wide. About $162,500. F. W. Nickerson, Elk River, engr.

Minn., Grand Rapids—Until June 14, by Itasca Co., grading and graveling 10 mi. Federal Aid Project No. 52, 18 ft. wide, involving 12,000 cu.yd. graveling. About $50,000. O. J. Lidberg, Jackson, engr.

Minn., Hastings—Until June 9, by aud. Dakato Co., paving 6 mi. Federal Aid Project No. 23, State Rd. No. 1, 28 ft. wide, involving 71,071 sq.yd. pavement. About $150,000. C. L. Methven, Hastings, engr.

Minn., Little Falls—Until June 19, by Morrison Co., grading and graveling 24 mi. Federal Aid Project No. 24, 18 ft. wide, involving 28,800 cu.yd. graveling. About $120,000. A. J. Fenn, Little Falls, engr.

Minn., Luverne—Until June 17, by O. Skyberg, aud. Rock Co., graveling 6½ mi. Job No. 1902, State Rd. No. 2, involving 10,400 cu.yd. graveling; 2 mi. Job No. 1903, State Rd. No. 6, 3200 cu.yd. graveling; 11 mi. Job. No. 1904, State Rd. No. 5, 17,600 cu.yd. graveling. D. E Davison, Luverne, engr.

Minn., Mahnomen—Until May 28, by E. E. Johnson, aud. Mahnomen Co., building Rd. Job No. 1, involving 8438 cu.yd., Rd. Job No. 2, 9323 cu.yd., Rd. Job No. 3, 1575 cu.yd., Rd. Job No. 4, 940 cu.yd., also laying 2000 ft. tile ,7 ft. average depth. H. R. Chapin, Mahnomen, engr.

Minn, Minneapolis—Until May 26, by Hennepin Co., paving 5.5 mi. Federal Aid Project No. 130, 20 ft. wide. About $137,500. E. E. Terrell, Minneapolis, engr.

Minn., Montevideo—Until June 10, by J. J. Stennes, aud. Chippewa Co., building 15 mi. Federal Aid Project No. 49, State Rd. Nos. 1 and 4, involving 18,000 cu.yd. gravel, 120,000 cu.yd. excav. and one 20-ft. rein.-con. bridge. F. O. Nelson, Montevideo, engr.

Minn., Moorehead—Until June 18, by Clay Co., paving 5.5 mi. Federal Aid Project No. 60, 18 ft. wide. About $137,500. E. Martinson, Moorehead, engr.

Minn., Morris—Until June 11, by Stevens Co., paving 10 mi. Federal Aid Project No. 67, 18 ft. wide. About $250,000. W. A. Hunt, Morris, engr. Noted May 1.

Minn., Red Wing—Until June 6, by C. H. Meyer, aud. Goodhue Co., paving 5.4 mi. Federal Aid Project No. 19, State Rd. No. 2, Job No. 1902, 18 ft. wide, involving 55,120 sq.yd. pavement, 180 cu.yd. riprap, and 12,000 cu.yd. excav. About $130,000. J. A. Prior, Red Wing, engr.

Minn., St. Peter—Until May 24, by W. H. Holz, aud. Nicollet Co., building 3½ mi. State Rd. No. 2, Job No. 1808, Granby Twp. About $12,840. Work involves 46,921 cu.yd. overhaul and 38,387 cu.yd. excav.; also 4 rein.-con. bridges, culverts and retaining wall on State Rds. Nos. 4 and 6. H. W. Daniels, St. Peter, engr.

Minn., Worthington—Until June 3, by Nobles Co., grading and graveling 5.5 mi. Federal Aid Project No. 58, 18 ft. wide, involving 6600 cu.yd. graveling, cost, $137,500; 24 mi. Federal Aid Project No. 45, 28,800 cu.yd. graveling. J. R. Boemer, Worthington, engr. Noted May 1.

Kan., Emporia—Until May 27, by Bd. Comrs. for 23,500 sq.yd. concrete, brick or asphaltic concrete paving. A. J. Smith, city engr.

Kan., Junction City—Until June 19, by R. Moon, clk. Geary Co., building 7½ mi. highway, 18 ft. wide, 2 course concrete. B. Boyle, co. engr.

Neb., Fremont—Until June 3, by W. E. Barz, clk. Dodge Co., grading and paving 5.94 mi. Fremont-Ames Rd., grading 30 ft. wide, paving 18 ft. wide. Work involves 62,606 sq.yd. 6-8 in. concrete, 24,721 cu.yd. earth excav., 256 lin.ft. 18-in. concrete pipe and 18 cu.yd. concrete. About $135,000. G. E. Johnson, state highway engr.

Neb., Lyon—Until June 5, by H. S. White, city clk., paving 2½ blocks Main St., 64 ft. wide, involving 7010 sq.yd. vertical fibre, asphalt or concrete, on 5 in. concrete base, 580 lin.ft. concrete curbing, etc. About $30,000. Grant & Fulton, Lincoln, engrs. Noted May 15.

Neb., Ponca—Until June 5, by A. N. Porter, clk. Dixon Co., grading and building culverts on 16.9 mi. Allen-Ponce Rd., 24 ft. wide. Work involves 98,000 cu.yd. earth excav., 858 lin.ft. 18-60 in. concrete pipe, and 450 cu.yd. concrete. About $48,000. G. E. Johnson, state highway engr.

Neb., Seward—Until June 5, by U. H. Franklin, clk. Seward Co., grading and building culverts on 48.9 mi. Seward-Aurora Rd., 24 ft. wide, in Seward, York and Hamilton Counties. Work involves 272,256 cu.yd. earth excav., 1984 ft. 12-48 in. concrete pipe, 50 ft. corrugated pipe, and 280 cu.yd. concrete culverts. About $110,000. G. E. Johnson, state highway engr.

Arkansas—Until May 31, by State Highway Dept., Little Rock, building 22.27 mi. macadam road from Springdale to Madison Co. line. Hamilton & Shreve, Fayetteville, engrs.

Ark., Osceola—Until June 2, by Pride & Fairley, engrs., Osceola, grading 203½ mi. roads in Mississippi Co., involving 1,448,600 cu.yd. excav.; advertised in this issue.

Canada—Until May 29, by Deputy Minister, Dept. Interior, Ottawa, Ont., building Banff-Windermere Highway from Sta. No. 106 to 282, British Columbia, Castle-Laggan Highway from Sta. No. 355 to 960, Alberta, and Edith Cavell Highway from Sta. No. 308 to 864, Alberta. L. Percival, Ottawa, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Massachusetts—State Highway Comn., 212 State House, Boston, received bids May 13, resurfacing and draining 5200 ft. state highway, Wenham Twp., 18 ft. wide, involving 24,400 gal. bituminous macadam, 4100 cu.yd. earth excav., 3600 ton broken stone and 860 cu.yd. concrete masonry, from C. E. Whipple, Hamilton, $17,363; J. E. Watkins, Amesbury, $20,931; J. A. Gaffy, Medford, $23,730. Noted May 8.

★Mass., Boston—Comn. Waterways & Pub. Lands let contract paving 2900 ft. Drydock Ave., 70 ft. wide, to Coleman Bros., Chelsea, $149,103. Noted Apr. 24.

Mass., Boston—Park Comn. received bids May 13, building walks, drives and playgrounds in Franklin Park, involving 6000 sq.yd. macadam sidewalks, 5800 cu.yd. earth and 300 cu.yd. rock excav., 830 ft. 6-8 in. tile drain, from J. C. Coleman & Sons, 1620 Tremont St., Roxbury, $10,056; Coleman Bros., Chelsea, $12,399; F. H. Connelly, 110 Bower St., Roxbury, $12,595. Noted May 8.

★Mass., Pittsfield—Bd. Pub. Wks. let contracts building appurtenances and paving West Housatonic St. from Center to Hawthorne Sts., to Lindholm & Piscatelli, Pittsfield, cost $44,000; South St. from Bank Row to South Mountain Rd., to D. J. Walsh, 311 North St., $136,000; Pecks Rd. from Mahconah St. to Highland Ave., to Lane Constr. Co., 37 Colony St., Meriden, Conn., $35,000. Noted May 1.

★Mass., Pittsfield—City let contract paving Hurlburt, Union, Tyler and North Sts., to Lindholm & Piscatelli, Pittsfield. About $26,000. Noted Mar. 6.

New York—State Highway Comn., Albany, received lowest 3 bids May 15, completing roads in following counties: (a1) Cattaraugus Co., 6.88 mi. Rd. No. 5544, Hinsdale-Franklinville, Part 2; (a2) 4.73 mi. No. 5607, Franklinville-Machias; (a3) 2.17 mi. No. 5608, Machias-Delevan, Part 1;

(b) Delaware Co., 6.51 mi. No. 1439, Sidney-Masonville;

(c) Erie Co., 5.19 mi No. 5622, Holland-Yorkshire, Part 1;

(d1) Montgomery Co., 2.49 mi. No. 513, Amsterdam-Morris Corners; (d2) 1.61 mi. No. 515, Berryville-Sammonsville;

(e1) Nassau Co., 4.98 mi. No. 1342, Roslyn-Port Washington; (e2) 3.09 mi. No. 1343, Westbury-Hicksville; (e3) 3.38 mi. No. 1344, Green Corner-Francis Pond;

(f) Onondaga Co., 5.55 mi. No. 1354, Syracuse-Otisco, Part 1;

(g) Orange Co., 9.18 mi. No. 499, Middletown-Montgomery Co. Line;

(h) Ulster Co., 3.17 mi. No. 1419, Rosendale Village;

(i) Wayne Co., 3.97 mi. No. 1407, Newark-Sodus, Part 1;

(j) Rensselaer Co., No. 1426, Whitehouse Bridge-Vermont State Line; also repairing following:

(k) Columbus Co., Repair No. 1187, Rd. No. 4 and 615;

(l) Livingston Co., Repair No. 1214, Rd. 714;

(m) Montgomery Co., Repair No. 1171, Rd. 864;

(n) Niagara Co., Repair No. 1222, Rd. 749;

(o) St. Lawrence Co., Repair No. 1216, Rd. 521;

(p) Steuben Co., Repair No. 1223, Rd. 5204;

(q1) Westchester Co., Repair No. 1217, Rds. 657 and 1207; (q2) Repair No. 1218, Rd. 503; (q3) Repair No. 1220, Rds. 52 and 53; (q4) Repair No. 1221, Rd. 18;

(r1) Orange Co., Repair No. 1183, Rds. 42 and 157; (r2) Repair No. 1182, Rd. 282, from

Amer. Pipe & Constr. Co., 112 North Broad St., Phila., Pa., (a1) $130,748; (a2) $128,817.

H. C. Schroeder, Mercantile Bldg., Rochester, (a1) $131,448; (i) $43,064.

R. H. Gipp, Buffalo, (a1) $138,880;

Veeder Constr. Co., Delevan, (a2) $128,891; (a3) $39,487.

Serafini & Stento, Binghamton, (b) $154,917.

Rosoff Eng. Co., 15 Park Row, New York City, (b) $157,536.

T. H. Gill Co., Binghamton, (b) $160,885.

Cold Spring Constr. Co., Buffalo, (c) $184,924.

Streets and Roads (continued)

J. P. Dugan & Co., Inc., 32 James St., Amsterdam, (d1) $18,482; (d2) $24,947; (m) $4071.

H. A. Schaupp, Guilderland, (d1) $20,581; (d2) $26,985.

Oltarsh Eng. Co., New York City, (d2) $25,992.

J. W. Mitchell, Port Washington, (e1) $121,200.

T. F. Toohey Co., Inc., Flushing, (e1) $128,570; (e3) $73,296.

J. J. McDermott, Port Washington, (e1) $131,498.

Mallory & Walsh, Brooklyn, (e2) $80,003.

Gifford Constr. Co., Jamaica, (e2) $80,270.

H. J. Mullen Contg. Co., Inc., Fulton St., Jamaica, (e2) $82,647.

J. D. Cosgrove, Glen Cove, (e3) $81,070.

Peace Bros., 20 Main St., Flushing, (e3) $83,337.

M. H. Ripton, Livingston Bldg., Rochester, (f) $124,119; (l) $63,418.

Monda Constr. Co., Inc., Kirk Bldg., Syracuse, (f) $128,192.

Scott Bros., Arlington Blk., Rome, (f) $129,518.

S. B. Van Wagenen, Inc., Rondout, (g) $171,846.

Dale Eng. Co., Mann Bldg., Utica, (g) $178,045; (n) $56,842.

Schunnemunk Constr. Co., Highland Mills, (g) $179,006; (r1) $57,190; (r2) $33,353.

DeGraff & Hogeboom, Inc., Kingston, (h) $70,091; (r2) $33,333.

Ribstein-Holter Co., Inc., 16 State St., Rochester, (i) $42,557.

W. J. Semper, Watertown, (i) $42,586.

L. Mayersohn, Albany, (j) $83,977.

Troy Contg. Co., Troy, (j) $85,898.

M. Fitzgerald, Hoosick Falls, (j) $87,808.

Lane Constr. Co., 37 Colony St., Meriden, Conn., (k) $87,645.

S. Beskin, Beacon, (k) $92,533.

Belmar Contg. Co., Troy, (k) $94,778.

Harradine Bros. Co., Inc., Spencerport, (l) $64,608.

Greenfield Constr. Co., 89 Main St., Hornell, (l) $64,810; (p) $31,408.

H. Z. Wemple and R. Wemple, Fultonville, (m) $4001.

C. Welch & Co., Gloversville, (m) $4200.

McCarthy & Rock, Winthrop, (o) $26,993.

W. T. Thayer & Co., East Main St., Chateaugay, (o) $28,118.

A. F. McConville, Ogdensburg, (o) $28,320.

McGreevey, McGuigan & Baum Constr. Co., Robinson Bldg., Elmira, (p) $33,225.

J. M. Murray, Leroy, (p) $31,600.

Malloy & Murray Contg. Co., Yonkers, (q1) $30,978; (q4) $89,265.

Monticello Constr. Co., Inc., Monticello, (q1) $31,722.

J. L. Hayes Co., Yonkers, (q1) $33,722; (q4) $99,380.

L. Petrillo, Mt. Vernon, (q2) $39,341; (q3) $9299.

Good Rds. Eng. & Contg. Co., Portchester, (q2) $39,905; (q4) $92,297.

Greenwich Contg. Co., New York City, (q2) $43,080.

J. Dimendo, 382 Mamaroneck Ave., Mamaroneck, (q3) $9016.

Rainis & Schafmeister, Ossining, (q3) $9057.

L. Gross & Son, Newburgh, (r1) $63,470.

J. A. Jova, Inc., Roseton, (r2) $33,917. Noted May 1.

★**N. Y., Brooklyn**—E. Rieglmann, boro. pres., let contract regulating, curbing, grading and laying sidewalks on Atkins Ave., to C. A. Myers, foot of Stagg St., $4662; Bayard, Conway, Humboldt, North 5th and Ryerson Sts. and New York Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York City, $5109, $10,773, $7514, $7533, $8685 and $19,625 respectively; Gravesend Ave. and Sackman St., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $25,806 and $9256 respectively; 12th St. to Brooklyn Alcatraz Asphalt Co., 407 Hamburg Ave., $7007; 40th St., to Hastings Paving Co., 25 Broad St., New York City, $5292; Beard St., to Continental Constr. Co., $6898; Clymer St., to Reico Bros., $14,628; Congress and Canover Sts., to F. J. Gallagher, 490 Park Pl., $11,936 and $2621 respectively; Douglas and 59th Sts., to M. J. O'Hara, 1228 Park Ave., New York City, $6888 and $11,495 respectively; West 1st St., to Cranford Co., 52 9th St., $6680. Noted May 1.

★**N. Y., Harrietstown**—Town will improve 3 mi. Wawheek-Franklin Co. Highway. About $25,000. Work will be done by day labor under supervision of F. Better, Lake Placid, town superv.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received lowest 3 bids May 13, regulating and rcpaving with granite block on concrete foundation, (a) John St. from Nassau St. to Bway.; (b) 2nd Ave. from 23rd to 34th Sts.; (c) Lexington Ave. from 32nd to 35th Sts., from M. J. Sachs, (a) $7894; (c) $10,843; W. J. Fitzgerald, 547 West 45th St., (a) $8199; P. J. Kerns, (a) $8266; (b) $124,722; (c) $11,172; T. Crimmins, 444 East 69th St., (b) $120,021; (c) $9944; C. Helbrook, (b) $122,830; (c) $10,942.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received lowest 3 bids May 9, regulating and repaving with sheet asphalt, on concrete foundation, (a) William St.; (b) 7th Ave.; (c) 59th St.; (d) Amsterdam Ave.; (e) 120th St., from Sicilian Asphalt Paving Co., 41 Park Row, (a) $31,534; (b) $6996; (c) $45,717; (d) $83,028; (e) $24,721; Uvalde Asphalt Paving Co., 1 Bway., (a) $32,770; (b) $7453; (c) $46,699; (d) $78,978; (e) $25,121; Asphalt Constr. Co., 2197 Madison Ave., (a) $32,857; (b) $7783; (c) $44,463; (d) $79,987; (e) $20,317; Cleveland Trinidad Paving Co., Flushing, (a) $32,985; (b) $7767; (c) $41,874; (d) $81,824; (e) $24,721; Davney Constr. Co., foot Quinby Ave., (d) $80,539; (e) $22,362. Noted May 1.

★**N. Y., Ogdensburg**—City let contract paving Lake and Main Sts., concrete, to W. H. Riny, Ogdensburg, $10,482. Noted Mar. 20.

N. Y., S. I., St. George—C. D. Van Name, pres. Richmond Boro., received bids May 15, regulating and repaving with concrete, roadway Richmond Terrace from Jewett to Richmond Aves., from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $65,580; J. Johnson & Sons, $66,406; C. Vanderbilt, 24 Elizabeth St., West New Brighton, $67,437.

New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, received bids May 12 grading, paving with concrete, building gravel shoulders, on (a) 3.873 mi. State Highway Route No. 3, Elwood-DaCasta Sect., Atlantic Co., involving 40,900 sq.yd. concrete and 12,687 cu.yd. earth excav., (b) 5.867 mi. State Highway Route No. 3, Egg Harbor-Elwood Sect., Atlantic Co., 61,954 sq.yd. concrete and 18,748 cu.yd. excav., from J. M. Kelley Constr. Co., 507 Federal St., Camden, (a) $125,119, (b) $194.984; McNichol Paving Co., 1923 Cherry St., Phila., (a) $126,853; M. Staub, Woodbury, (a) $133,834, (b) $202,945; E. L. Bader, Tennessee and Thorfre Sts., Atlantic City, (b) $195,481. Noted Apr. 24.

New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, received bids building 4.418 mi. State Highway Route No. 3, Da Costa-Hammontown Sect., Atlantic Co., from M. Staub, Woodbury, $161,173; Hugh-Nawn Constr. Co., 1211 Chestnut St., Phila., $165,820; Langthorn Co., Inc., New York City, $169,524; 1400 sq. yd. State Highway Route No. 4, from Miles & Denniston Co., Asbury Park, $14,914; Monmouth Contg. Co., Red Bank, $16,429; L. H. Seiling, Red Bank, $17,202. Noted May 1.

N. J., Bayonne—City received lowest bid repairing 48th St., sheet asphalt, from W. T. S. Crichfield, 82 Washington St., Hoboken, $20,000.

N. J., Jersey City—City received lowest bid paving Hutton St. from Hudson Co. Blvd. to Liberty Ave., bituminous concrete, from W. T. S. Crichfield, 82 Washington St., Hoboken, $12,000. Noted May 8.

★**N. J., Mays Landing**—Bd. Supervs. Atlantic Co. let contract for 3½ mi. Warrenite pavement on Pleasantville and Mays Landing Rd., to Corson & Corson, Ocean City, $218,225.

★**N. J., Mt. Holly**—Bd. Supervs. Burlington Co. let contract paving with asphalt 9 mi. road between here and Moorestown and 5 mi. between Palmyra and Beverly, to Union Paving Co., 30th and Locust Sts., Phila., $279,010 and $133,634 respectively.

N. J., Trenton—City received bids paving (a) Ferry St., (b) Greenwood Ave., (c) Greenwood Ave., (d) Hamilton Ave., (e) Laclede Ave., (f) Lafayette St., (g) Market St., (h) Montgomery St., (i) Calhoun St., (1) natural asphalt, (2) residual asphalt, from J. J. Barrett Co., Trenton, (a1) $685, (a2) $675, (b1) $14,978, (b2) $14,346, (c1) $53,583, (c2) $52,620, (d1) $23,061, (d2) $22,686, (e1) $4131, (e2) $4079, (f1) $8330, (f2) $8228, (g1) $15,689, (g2) $15,524, (h1) $1849, (h2) $1801, (i1) $4703, (i2) $4653; H. B. Sproul Co., 105 South Davidson St., Peekskill, N. Y., (a1) $718, (a2) $708, (b1) $15,175, (b2) $14,540, (c1) $54,733, (c2) $52,808, (d1) $23,145, (d2) $22,824, (e1) $4268, (e2) $4233, (f1) $8410, (f2) $8325, (g1) $15,854, (g2) $15,689, (h1) $1894, (h2) $1830, (i1) $4778, (i2) $4735; Utility Constr. Co., 46 Paterson St., New Brunswick, (a1) $711, (a2) $701, (b1) $16,181, (b2) $15,454, (c1) $54,366, (c2) $53,541, (d1) $23,354, (d2) $22,925, (e1) $4183, (e2) $4139, (f1) $8461, (f2) $8376, (g1) $16,119, (g2) $16,001, (h1) $1865, (h2) $1917, (i1) $4812, (i2) $4770. Noted May 1.

★**Pa., Altoona**—City let contract for trench and street work, to W. W. Saupp & Co., Altoona. About $15,000.

★**Pa., Ebensburg**—Comrs. Cambria Co. let contract building 2 mi. brick road on concrete base, 18 ft. wide, extending from Spangler Boro. line to Kirsch cross roads, Barr Twp., to Bell-Bockel Co., Central Trust Bldg., Altoona, $116,158.

★**Pa., Ebensburg** — Supervs. Richland Twp., c/o Controller Cambria Co., let contract rebuilding 3 mi. vitr. brick road on concrete base, to Bell-Bockel Co. Inc., Central Trust Bldg., Altoona, $124,669. Noted May 1.

Pa., Gallitzin—Supervs. Gallatzin Twp., c/o Controller Cambria Co., let contract rebuilding 1.05 mi. road leading from Cupon to State Highway Route No. 221, fire clay paving brick on combination concrete base and curbing, to E. F. Dimond and J. T. Blair, Ebensburg, $57,851. Noted May 8.

Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, received lowest bid grading and paving 1 mi. road from Hancock to Pennsylvania State line, 15 ft. wide, 6-8-in. concrete, Washington Co., from I. G. Robinson, Hancock, $44,284.

★**N. C., Durham**—Durham Co. let contract building 7.48 mi. Durham-Raleigh Rd., 18 ft. wide, involving 78,900 sq.yd. 6-8½-in. concrete, to R. G. Lassiter Co., Oxford. $232,458.

★**Fla., Jacksonville**—Comrs. Duval Co. let contract paving 6500 sq.yd. Atlantic Blvd. from Kings Rd. to Hendix Ave., to F. W. Long Co., 434 East Bay St., $3.15 per sq.yd. Noted Apr. 10.

★**Ala., Bessemer**—City Council let contract paving 8 blocks of 19th St., granite asphalt on 5-in. concrete base, to H. N. Bowdry, Empire Bldg., Birmingham, $2.20 per sq.yd. Total cost, $73,000.

★**Ohio**—State Highway Comn., Columbus, let contracts building roads in counties as follows:

Clinton Co., Sect. "O" Cincinnati-Zanesville Rd., 2.37 mi., grading, constructing bridges and culverts and paving with waterbound macadam, Brewer & Brewer Sons, Chillicothe, $33,405.

Fairfield Co., Sect. "F" Lancaster-Newark Rd., 2.05 mi., grading, constructing bridges and culverts and paving with waterbound macadam, H. W. Curry, Eaton, $41,732.

Ottawa Co., Sect. "E-2" Oak Harbor-Genoa Rd., 1.59 mi., grading, constructing bridges and culverts and paving with concrete, Wise Bros. & Berman, Elmore, $44,521.

Tuscarawas Co., Sect. "O" Canal Dover-Wooster Rd., 2.52 mi. grading, constructing bridges and culverts and paving with concrete, Hahn Constr. Co., Canton, $76,686.

Wyandot Co., Sect. "B" Tiffin-Upper Sandusky Rd., 1.66 mi. grading, constructing bridges and culverts and paving with asphaltic concrete, Modern Constr. Co., Fremont, $61,666.

Lucas Co., Sect. "B," "C" and "D" of Rd. 56 and Sect. "A" and "B" of Rd. 58, surface treating with tar and covering, H. W. Curry, Eaton, $10,995.

Sect. "J-2" Rd. 51, Sect. "A" Rd. 56, and Sect. "E," "F," "G," "H" and "I," Rd. 21, surface treating with tar, H. W. Curry, Eaton, $17,145. Noted May 8.

★**Ohio**—State Highway Comn., Columbus, let contract grading, paving, building bridges and culverts on 4.18 mi. Columbus-Millersburg Rd., Sect. 1, waterbound macadam, to Gledhill & Rheinhart, Galion, $44,701. Noted May 15.

O., Cleveland—City received bids paving (a) Champion Ave. from West 101st Pl. to West Blvd., (b) East 125th St. from Kinsman Rd. to Union Ave., (c) West 24th St. from Franklin Ave. to Willeyville Allt., (d) West 24th St. from Moore Court to Willeyville Allt., (e) West 98th St. from Loretta Ave. to Walford Rd., (f) East 114th St. from Harvard to Miles Aves., (g) Kraus Ave. from East 20th to 26th Sts., (h) Ignatius Ave. from West Blvd. to West 105th St., from Freshwater Paving Co.,

Streets and Roads (continued)

11712 Detroit Ave., (a) $12,259, (c) $10,686, (d) $16,731, (e) $19,832, (h) $16,863; Roehl Bros., West 25th St. and Clark Ave., (a) $12,510, (c) $10,668, (d) $16,667, (e) $20,102, (h) $17,283; McHugh Bros., Society for Savings Bldg., (a) $12,777, (c) $10,746, (d) $16,965, (e) $20,228, (h) $17,448; A. M. Pepsa, 2359 East 93rd St., (b) $16,372; Baldwin Bros., 4500 Euclid Ave., (b) $16,452, (f) $17,204, (g) $10,253; Rieley Bros., 357 The Arcade, (b) $16,492, (f) $16,936, (g) $10,168; R. P. Burnett, 527 Society for Savings Bldg., (f) $17,994. Noted May 8.

★**O., Toledo**—Comrs. Lucas Co. let contract grading, draining, curbing and paving 3 mi. Westmoreland and Fairmont Park roads and streets, 24 ft. wide, involving 46,000 sq.yd. bituminous concrete, to Harris & Tansey, 221 Nasby Bldg., $167,840. Noted May 1.

★**Ind., Terre Haute**—Comrs. Vigo Co. let contracts, to Carpenter Constr. Co., Terre Haute, grading, paving and building culverts on 2 mi. Wm. E. Dinkle Rd., 18 ft. wide, involving 10,450 sq.yd. 7-in. vibrolithic concrete, cost $24,823; 2½ mi. J. L. Crawford Rd., 18 and 20 ft. wide, 23,400 sq.yd. 7-in. vibrolithic concrete, $58,446; to Premier Constr. Co., 1023 Lemcke Bldg., Indianapolis, 2¼ mi. J. L. Smith Rd., 20 ft. wide, 27,000 sq.yd. bituminous, $82,500.

★**Michigan**—State Highway Comn., Lansing, let contract to B. Fowler, Tawas City, grading, gravel surfacing and building drainage structures on 3 mi. Federal Aid Rd. No. 12, Sect. A2, 15 ft. wide, Iasco Co., cost, $32,000; I. Butzer, Hart, grading and building drainage structures on 4 mi. Federal Aid Rd. No. 1, Sect. A, 24 ft. wide, Montague Twp., Muskegon Co., $10,200; W. H. Friedrick & Co., Bronson, grading, paving with concrete and building drainage structures on 6.7 mi. Federal Aid Rd. No. 31, 16 ft. wide, involving 13,400 cu.yd. concrete, Berrien and Van Buren Counties, $181,000.

Mich., Detroit—Dept. Pub. Wks. received lowest 3 bids paving (a) Algonquin Ave. from Avondale to Essex Aves., 26 ft. wide, (b) Drexel Ave. from point 150 ft. south of Korte Ave. to Essex Ave., 26 ft. wide, (c) Ellsworth Court from Lenox to Newport Aves., 30 ft. wide, (d) Eastlawn Ave. from point 550 ft. south of Korte Ave. to Essex Ave., 26 ft. wide, (e) Lenox Ave. from Korte to Essex Ave., 26 ft. wide, (f) Navahoe Ave. from Avondale to Essex Aves., 24 ft. wide, (g) Newport Ave. from point 600 ft. south of Korte Ave. to Essex Ave., 26 ft. wide, (h) Piper Blvd. from point 400 ft. south of Korte Ave. to Freud Ave., 26 ft. wide, (i) Pasadena Ave. from Herman to 12th Sts., 24 ft. wide, (j) Ravenswood Ave. from Yosemite to Grand River Aves., 26 ft. wide, from Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $12,212, (b) $23,989, (c) $24,192, (d) $28,953, (e) $21,478, (f) $11,381, (g) $30,706, (h) $44,422, (i) $15,088, (j) $11,465; W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $12,644, (b) $24,849, (c) $25,067, (d) $29,979, (e) $22,245, (f) $11,765, (g) $31,902, (h) $46,515, (i) $15,220, (j) $11,370; Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $12,827, (b) $25,206, (c) $25,444, (d) $30,412, (e) $22,568, (f) $11,934, (g) $32,344, (h) $47,077, (i) $15,005, (j) $11,493. Noted Feb. 6.

★**Mich., Detroit**—City let contracts, to Detroit Asphalt Paving Co., 20 McGraw Bldg., paving Distel Ave., from Fort to Olivet Sts., cost, $8995, Gartner Ave. from Beard St. to Lawndale Ave., $54,052, Senator Ave. from Beard St. to Lawndale Ave., $52,817; E. Meredith Co., 145 Harper Ave., Alley No. 985 between Lawton, Linwood, Lothrop and Northwestern Aves., $4635, No. 986 between La Salle Blvd., 14th St., Grand Blvd. and Lothrop Ave., $4199, No. 987 between Elmwood, Moran, Medbury Aves. and Grand Blvd., $4257; Corrick Bros., 507 Owen Bldg., Alley No. 988 between Maxwell, Seminole, Canfield and Forest Aves., $3697, No. 990 between Field, Sheridan, Gratiot and Forest Aves., $4205; Talbor Co., Penobscot Bldg., Alley No. 989 parallel to Michigan Ave. between 24th and 25th Sts., $1793. Noted May 15.

★**Illinois**—State Highway Comn., Springfield, let contracts paving roads in following counties:

(a1) Schuyler Co., 2571 ft. Sect. F, Route 1, 10 ft. wide;

(a2) 2192 ft. Sect. G, Route 2, 10 ft. wide;

(b) Warren Co., 3741 ft. Sect. G, Route 11, 16 ft. wide;

(c) Carroll Co., 2825 ft. Sect. D, Route 8, 16 ft. wide;

(d, Will Co., 10,001 ft. Sect. G, Route 13, 18 ft. wide;

(e) Cumberland Co., 11,300 ft. Sect. E, Route 1, 10 ft. wide;

(f) Christian Co., 6.3 mi. Sect. I, J, K, L and M, 15 ft. wide;

(g1) Hancock Co., 13,000 ft. Sect. I, Route 1, 24 ft. wide;

(g2) 12,600 ft. Sect. J, Route 13, 24 ft. wide;

(h) Marshall Co., 22,810 ft. Sect. F, Route 9, 24 ft. wide;

(i) Pope Co., 9 concrete bridges, Sect. D, Route 1 and 3;

(j) Hamilton Co., 1 concrete bridge, Sect. C, Route 6;

(k) Scott Co., 1 concrete bridge, Sect. H, Route 1A;

(l) Massac Co., 5 concrete bridges, Sect. G, Route 3, to

H. C. Holmes, Macomb, (a1) $5074; (a2) $5576.

E. A. Lord Constr. Co., Monmouth, (b) $13,805; (c) $9725; (g1) $6986.

Powers Thompson Constr. Co., 221 South Chicago St., Joliet, (d) $29,067.

A. C. Loomis Co., Mattoon, (e) $17,945.

A. O. McCoy, Versailles, (f) $24,500.

Meckenson Bros., Hamilton, (g2) $8314.

J. Brogen, Eldred, (h) $17,548.

B. F. Clark & Son, 5052 Gates Ave., St. Louis, Mo. (i) $2300.

Parnham Constr. Co., 3029 Waverly Ave., East St. Louis (j) $4997.

T. Whitlock, Exeter, (k) $2400.

J. R. Sleeter, Metropolis, (1) $3900.

Noted May 15.

★**Illinois**—State Highway Comn., Springfield, let contracts building following sections Dixie Highway, brick and concrete: Sect. 1, 2 and G-15d, to Bates & Rogers, 37 West Van Buren St., Chicago, $310,000; Sect. 4 and H-15d, to Cameron, Joyce & Co., Keokuk, Ia., $84,192 and $21,633 respectively; Sect. 5, to Bates & Rogers, 37 West Van Buren St., Chicago, $210,000; Sect. 6, Chicago Heights Coal Co., Chicago Heights, $134,370; Sect. K-15d, to Federal Paving Co., Chicago, $46,491; Sect. 7, to Embankment Co., Joliet, $144,110. Noted Apr. 3.

★**Illinois**—State Highway Comn., Springfield, let contracts building following sections Lincoln Highway: Sect. 1, G and 2, to Calumet Constr. Co., 100 West 115th St., Chicago, $158,000; Sect. L and 3, to Illinois Hydraulic Stone Co., Elgin, $103,300; Sect. 4, 5, 6 and 7, to J. O. Heyworth Co., 606 South Michigan Ave., Chicago, $363,227; Sect. G, 8 and 18, to Hart & Page, Rockford, $83,362; Sect. 9, to A. E. Rutledge, Rockford, $103,838; Sect. 14, to C. E. Heaps, Moline, $137,437; Sect. 15, 17 and H, to J. J. Dunegan, Shenandoah, Ia., $277,500. Noted Apr. 3.

★**Illinois**—State Highway Comn., Springfield, let contracts paving roads in following counties: Clark Co., 2000 ft. Sect. E, Route 7, 10 ft. wide;

(b) Greene Co., 1.6 mi. Sect. F and H, 24 ft. wide;

(c) De Witt Co., 4.9 mi. Sect. F and G, 24 ft. wide;

(d) Knox Co., 9300 ft. Sect. J, Route 6, 24 ft. wide;

(e1) Clay Co., 4100 ft. Sect. F, Route 6, 24 ft. wide;

(e2) 2705 ft. Sect. G, Route 6, 24 ft. wide;

(f1) Cook Co., 5413 ft. Sect. 57, Route 1, 18 ft. wide;

(f2) 20,276 ft. Sect. 58, Route 11C and 6B, 18 ft. wide;

(g1) Cass Co., 1063 ft. Sect. I, Route 2, 10 ft. wide;

(g2) 2806 ft. Sect. J, Route 7, 10 ft. wide;

(h) White Co., 0.8 mi. Sect. D, 10 ft. wide;

(i1) Champaign Co., 3440 ft. Sect. K, Route 2, 10 ft. wide;

(i2) 5532 ft. Sect. L, Route 5, 10 ft. wide to

J. W. Etchinson, Casey, (a) $7735.

J. Bogan, Eldred, (b) $12,657.

W. C. Meneely, Frankford, Ind., (c) $11,200.

E. A. Lord Constr. Co., Monmouth, (d) $4286.

L. V. Chesrom, Olney, (e1) $2139.

White & Braley, Litchfield, (e2) $2912.

M. Foley Co., Evanston, (f1) $17,697.

Eclipse Constr. Co., Winnetka, (f2) $65,242.

E. C. Trowbridge, Chandlerville, (g1) $1900; (g2) $6190.

P. R. Blood, Grayville, (h) $6392.

Stipes & Pilcher, Champaign, (i1) $13,486; (i2) $20,501. Noted May 15.

★**Illinois**—State Highway Comn., Springfield, let contracts paving roads in following counties. Cook Co., 919.6 ft. Sect. 56, Route 15, to F. Lorenz, Oak Glen, $5092; Crawford Co., 1295 ft. Sect. E, Route 5, to J. W. Etchison, Casey, $8687; La Salle Co., 4400 ft. Sect. L, Route 11, to E. Berns & Co., 601 Lombard Bldg., Indianapolis, Ind., $17,071; McLean Co., 9800 ft. Sect. F, Route 7, to States Constr. Co., 79 West Monroe St., Chicago, $27,416 and 927 ft. Sect. E, Route 7, to R. N. Jenkins, Belleflower, $1080; Henry Co., 31,556 ft. Sect. E, Route 6 and 5200 ft. Sect. F, Route 8, to Cameron, Joyce & Co., $24,100; Rock Island Co., 19,984 ft. Sect. E, Route 8, to White & Braley, Litchfield, $9046; Piatt Co., 2900 ft. Sect. D, Route 5 and 2800 ft. Sect. E, Route 5, to W. F. Lodge, Monticello, $9455 and $9382 respectively. Noted May 1.

Ill., Chicago—Cook Co. received bids building (a) 21,304 lin.ft. road, in Northfield, Wheeling and Main Twps. extending south from Desplaines River Rd. and Milwaukee Ave., 18 ft. roadway, 6 ft. earth shoulders; (b) 27,960 lin.ft. in Main and Leyden Twps., extending south from Desplaines River Rd. at south limits of Desplaines Village, 18 ft. roadway, 6 ft. earth shoulders; (c) in combination; (1) Portland cement concrete; (2) asphalt on concrete base, from R. F. Conway Co., 133 West Washington St., (a1) $103,961; (a2) $124,417; (b1) $154,969; (b2) $179,045; (c1) $255,782; (c2) $300,563; Standard Paving Co., 29 South La Salle St., (a1) $110,042; (b1) $160,977; Ready & Gallaghan, 133 West Washington St., (a1) $108,542; Mellon-Stuart-Nelson Co., 208 South La Salle St., (c1) $254,055; J. A. Ross & Co., 4561 Armitage Ave., (c1) $260,441; Amer. Asphalt Paving Co., 133 West Washington St., (c2) $328,706. Noted May 8.

★**Ill., Chicago**—Cook Co. let contracts building 22,729 lin.ft. Chicago-Waukegan-Milwaukee Rd. extending north from Dempster St., Morton Grove Village, to Eclipse Constr. Co., Winnetka, $131,442; 10,241 lin.ft. Chicago-Waukegan-Milwaukee Rd. extending north from Milwaukee Ave., Niles Village and on 4 blocks Irving Park Blvd. from 60th to 64th Aves., to Blase & Gerken, Chicago, $47,949, and $11,723 respectively. Noted May 15.

★**Ill., Danville**—Vermilion Co. let contracts building bond roads, concrete and brick, 10 ft. wide, together with all grading, draining, shaping, rein.-con. work, etc., Sect. A-1 and A-3, to J. P. Casey Co., Chicago, $36,903 and $41,939 respectively; Sect. C-1, to M. H. Lewis, Hoopeston, $73,650; Sect. A-2 and B-3, to C. W. Clark, Clinton, Ind., $99,982 and $37,748 respectively; Sect. A-5, to H. C. Finley Constr. Co., Hoopeston, $81,565. Noted Apr. 10.

Ill., Danville—Vermilion Co. received bids May 1, building bond roads, concrete and brick, 10 ft. wide, together with all grading draining, shaping, rein.-con. work, etc., Sect. B-1, from C. W. Clark, Clinton, Ind., $53,926; Sect. B-1, B-2, C-2 and A-9, from J. P. Casey Co., Chicago, $73,796; $63,313; $66,291 and $92,503 respectively; Sect. B-1, from M. H. Lewis, Hoopeston, $77,868; Sect. B-2 and C-2, from H. C. Finley Constr. Co., Hoopeston, $56,194 and $60,947 respectively; Sect. A-7, from J. W. Etchison, Casey, $33,108; Sect. B-7 and C-7, from Goggin Constr. Co., Arcola, $52,676 and $42,582 respectively. Noted Apr. 10.

★**Ill., Rockford**—Winnebago Co. let contract building 1886 ft. Grant Highway, Sect. I, 18 ft. wide, to R. P. Beckstrom, 208 Trust Bldg. About $10,624. Work involves 3880 sq.yd. vitr. brick on concrete base and 990 cu.yd. earth excav.

Wis., Sheboygan—City received bids grading and paving with metropolitan brick also constructing sidewalks with combined curb and gutter on 1.7 mi. Wisconsin Ave., 20 ft. wide, from J. Brown Co., Pennsylvania Ave., $11,988; Pestier & Naumer, 1130 Ontario Ave., $10,855. Noted May 1.

Wis., Sheboygan—City received bids grading and paving with concrete also constructing sidewalks with combined curb and gutter on 1.1 mi. Lighthouse St. from North 2nd to Bayview Addition, 20 ft. wide, from J. Brown Co., Pennsylvania Ave., $10,890, Pestier & Naumer, 1130 Ontario Ave., $11,570. Noted May 1.

★**Wis., Sheboygan**—Sheboygan Co. let contract to Murphy Constr. Co., North 8th St., Manitowoc, grading and paving 25 mi. Plymouth-Sheboygan Falls Rd., 16 ft. wide, involving 20,988 sq.yd. concrete, 5,315 cu.yd. earth excav., and 171 cu.yd. concrete culverts, etc., total cost, $30,000.

Streets and Roads (continued)

bridges and 1 concrete deck girder bridge, $10,780; Pickus Eng. & Constr. Co., 414 Davidson Bldg., Sioux City, 4 concrete box culverts, $6216. Work involves 1366 cu.yd. rein.-con. 35 tons structural and 37 tons reinforcing steel and 2530 lin.ft. wooden piling.

★Ia., Clarion—Comrs. Wright Co. let contract grading and building culverts on 11⅜ mi. road, 24 ft. wide, to R. Condon, 3624 South 26 th St., Omaha, Neb., $19,485. Work involves placing and covering temporary culverts, $0.25 per lin.ft. and 42,489 cu.yd. excav., $0.46 per cu.yd.

★Ia., Hartley—Town let contract paving, curbing and guttering 5 mi. various streets, 24-80 ft. wide, to Ford Paving Co., 802 2nd Ave., Cedar Rapids, $292,035. Work involves 1348 sq.yd. 6 in. plain concrete, $2.69 per sq.yd., 78,000 sq.yd. 2 in. asphaltic concrete on 5 in. concrete base, $2.77, 54,000 lin.ft. integral curbing and guttering, $1.15 and 18,500 cu.yd. earth excav., $0.75.

★Ia., Marshalltown—Bd. Supervs. Marshall Co. let contract grading, clearing, grubbing, removing and resetting fences and hedges and placing tile and temporary culverts on 9½ mi. Lincoln Highway, 24 ft. wide, involving 102,641 cu.yd. excav. to P. E. Shugart, Nevada, earth at $0.41, loose rock $1.25 and solid rock at $2.50.

★Neb., Humphrey—City let contract paving various streets, to A. Dodson, 3140 Sheridan Blvd., Lincoln, $55,740. Work involves 13,653 sq.yd. brick block on 5 in. concrete base and 3800 ft. combination curb and gutter. Noted Apr. 24.

★Minn., Carlton—Comrs. Carlton Co. let contract grading and graveling 4½ mi. road, 20 ft. wide, to Grau & Sailo, Kettle River. About $10,000.

★Minn., Carlton—Comrs. Carlton Co. rejected only bid received May 5, grading and graveling 8 mi. Federal Aid Project No. 17, 24 ft. wide. About $38,000. Work will be done by day labor. Noted Apr. 24.

★Minn., Detroit—Comrs. Becker Co. let contract graveling 4 mi. and grading 2 mi. Job No. 59, to M. W. Barnard, Detroit, $24,030. Noted Apr. 24.

★Minn., Duluth—City let contract grading 3100 ft. Winona St. from Woodland Ave. to Erving St., 55 ft. wide with 18 ft. roadway of macadam, to C. R. McLean, c/o City Engr's. Office, $10,236. Noted May 15.

★Minn., Duluth—City let contract paving with 1 course concrete and laying storm sewers on 2529 ft. 26th Ave., E., from 1st to 8th Sts., 20 ft. wide, to D. H. Clough & Co., 914½ East 1st St., $36,950. Noted May 8.

★Minn., Eveleth—City let contract paving 24,000 sq.yd. various streets and avenues, to Lawrence & McCan Co., Eveleth, $107,890. Work involves 24,000 yd. bitulithic concrete, 3000 lin.ft. each of concrete curb, gutter and sidewalk, 300 ft. 12-in. and 1800 ft. 24-in. pipe., etc.

★Minn., Faribault—Comrs. Rice Co. let contract building Job No. 1901, State Rd. No. 17, to Peabody-Young Co., St. Paul, $27,811. Noted Apr. 17.

★Minn., Long Prairie—Comrs. Todd Co. let contract grading 4.8 mi. Job No. 26, State Rd. No. 6, 24 ft. wide, to H. Thursdale & Co., Long Prairie, $12,585. Noted Apr. 24.

Minn., Pipestone—Comrs. Pipestone Co. received only bid May 6, grading 13½ mi. Job No. 1901, State Rd. No. 5, from H. Eining, Jasper, $25,000. Noted May 1.

★Neb., Beatrice—Gage Co. let contract grading 29 mi. Federal-aid roads from here to Fairbury, involving 145,000 yd. grading, to Lamoreaux Bros., 805 Brandeis Theatre Bldg., Omaha, $49,875; culverts for work, to E. H. Knowland, Fairbury, $11,000.

★Neb., Fremont—Dodge Co. let contract grading 35 mi. Federal Aid Rd. from here to Cersco, involving 145,000 yd. grading, to Lamoreaux Bros., Brandeis Theatre Bldg., Omaha, about $53,000.

★Neb., Humphrey—City let contract paving various streets, to A. Dodson, 3140 Sheridan Blvd., Lincoln, $55,740. Work involves 13,653 sq.yd. brick block on 5 in. concrete base and 3800 ft. combination curb and gutter. Noted Apr. 24.

★Neb., Omaha—Douglas Co. let contract repaving 2000 ft. 24th St. from Spaulding to Ames Sts., 40 ft. wide, involving 6924 sq.yd. vitr. brick blocks, 770 cu.yd. of concrete for repairing base, also resetting 2500 lin.ft. of curbing, to C. Fanning, 16th and Dodge Sts., $19,020.

★Neb., Ralston—City let contract paving and curbing 1½ mi. streets with 6 in. granite concrete, to Bauer & Johnson, 201 Farnam Bldg., Omaha, $60,650. Plans include paving of 77th St. from Main to Highland Sts., Oakwood St. from 75th to 77th Sts., 75th St. from Main to Oakwood Sts.; Maywood St. from Main to 80th St., 78th St. from Oakwood to State Sts. and State St. from 79th St. to Miller Ave., 20-40 ft. wide. Work involves 20,000 sq.yd. 6 in. granite concrete and 15,000 lin.ft. granite concrete curbing.

★Mont., Billings—City let contract paving North 31st St., bitulithic, to Warren Constr. Co., Journal Bldg., Portland Ore., $42,161. Noted Apr. 24.

★Ark., Marion—Comrs. Crittenden Co. let contract to Roach and Stansell, North Main St., Memphis, Tenn., grading, draining and surfacing 28 mi. highway in Rd. Impvt. Dist. No. 5, 14 ft. wide, involving 26,400 sq.yd. bituminous macadam at $0.30 per sq.yd. and 102,000 cu.yd. earth excav. at $0.45 per cu.yd.

★Tex., Dallas—City let contract, to Texas Bitulithic Co., 1101 Praetorian Bldg., paving Throckmorton St. from Cedar Springs to Maple Ave., cost, $24,224; Reagan St. from Cedar Springs to Maple Ave., $23,585 and Knight St. from Cedar Springs to Brown Sts., $14,800. Noted May 1.

★Tex., Fairfield—Comrs. Freestone Co. let contract grading, macadamizing and building rein.-con. bridges and culverts on 2.79 mi. Highway No. 7, running northwest from Teague toward Fairfield, 16 ft. wide, to McElwrath & Rogers, Corsicana, $21,464. Noted May 1.

★Tex., San Antonio—City let contract paving Ave. D from 3rd to 10th Sts., to Uvalde Rock Asphalt Co., Swearingen Bldg., San Antonio, about $15,000.

★Wash., Colfax—Whitman Co. let contract hard surfacing 8.4 mi. highway from Oakesdale to Rosalia, to C. H. Green, North 517 Lincoln St., Spokane, $63,500; 9.25 mi. Highway No. 6-A, southwest of Colfax, to Ristvedt & Bragg, Colfax, $70,555; 7.75 mi. Miller Rd., 2 mi. south of Colfax to near Palouse, to Clifton, Applegate & Toole Co., Hutton Bldg., Spokane, $95,300. Noted Apr. 24.

★Wash., Dayton—Comrs. Columbia Co. let contract hard surfacing 1½ mi. permanent highway from Judson's Hollow to Gaines Place, to Wilson & O'Rourke, Walla Walla, $16,534.

★Wash., Everett—Comrs. Snohomish Co. let contract grading and paving 1.25 mi. Marysville-Pilchuck Rd., Permanent Highway No. 34, 18 ft. wide, and 1 mi. Lowell-Snohomish Rd., Permanent Highway No. 35, 18 ft. wide, to Kaiser Paving Co., Everett, $31,961 and $27,730 respectively; 1 mi. Lowell-Snohomish Rd., Permanent Highway No. 36, 18 ft. wide, to T. M. Morgan, 3202 Laurel Dr., Everett, $23,982; 1.7 mi. Three Lakes Rd., Permanent Highway No. 37, 16 ft. wide, to J. W. Hoover Co., 1607 Hoyt St., Everett, $35,225. Noted May 1.

★Wash., Mt. Vernon—City let contract paving and building sidewalks on 6 blocks of 6th and Lawrence Sts., 20 ft. wide, involving 27,100 sq.yd. concrete, to Skagit Constr. Co., Mt. Vernon, $15,221. Noted Apr. 3.

Wash., Seattle—Bd. Pub. Wks. received bids May 9, building sidewalks on (a) 29th Ave., et al, involving 8821 sq.yd. concrete; (b) 13th Ave. S., et al, 4120 sq.yd. concrete, 5000 ft. wood curbing and 1000 cu.yd. excav.; from Goetz & Brennan, Seattle, (a) $16,238; S. A. Moceri, 1212 South M. St., (a) $16,800; Coluccio & Niblett, Seattle, (a) $16,890, (b) $10,768; W. H. Smith, Builders Exch. Bldg., (b) $10,331; D. H. Traphagen, Seattle, (b) $10,988.

★Wash., Seattle—Bd. Pub. Wks. let contract filling, paving, building sewers and water mains in Holgate St., et al, involving 62,250 cu.yd. grading, 3490 sq.yd. concrete and 641 ft. 12 and 18 in. pipe, to Stillwell Bros., Boston Blk., $29,588.

★Wash., Seattle—Comrs. King Co. let contract grading and paving 1.303 mi. Seattle-Renton, Permanent Highway No. 23, 20 ft. wide, concrete, to Seaboard Constr. Co., Seattle, cost $34,725; 1.202 mi. Houghton-Bellevue Permanent Highway No. 2 "L," 20 ft. wide, concrete, to J. L. Smith, 1902 North Prospect St., $20,450; 1.988 mi. Auburn-Enumclaw, Permanent Highway No. 11D, 20 ft. wide, concrete, to T. M. Morgan, 3202 Laurel Dr., Everett, $59,857. Noted May 1.

★Wash., South Bend—Comrs. Pacific Co. let contract, to Philbrick & Stratton, Raymond, paving 1.8 mi. Natl. Park Highway from Nalpee to Stauffer's Bridge, 9 ft. wide concrete, cost $20,156; 1.76 mi. Natl. Park Highway from Menlo to Giesey's Crossing 9 and 18 ft. wide, concrete, $22,127; to K. L. Goulter, South Bend, surfacing 5 mi. Natl. Park Highway from Bear River Bridge to Nasel River, involving [illegible] cu.yd. grading, 7970 cu.yd. solid rock and 398,980 cu.yd. embankment, $38,990.

★Wash., Spokane—Comrs. Spokane Co. let contract building 2 mi. permanent highway from Spokane to Ft. George Wright, to C. M. Payne, East 724 Mission Ave., $13,990. Noted Apr. 10.

★Wash., Tacoma—Comrs. Pierce Co. let contract grading and paving 2 mi. Permanent Highway 5D, 16 ft. wide, involving 4332 cu.yd. grading and 18,198 sq.yd. 6¼-in. concrete, to J. Worter, Tacoma, $42,250; 1 mi. Permanent Highway 5E, 16 ft. wide, 9049 sq.yd. 6¼-in. concrete, to T. M. Morgan, 3202 Laurel Dr., Everett, $26,000.

★Wash., Wenatchee—Comrs. Chelan Co. let contract paving Columbia River and Wenatchee River bridges to Sengfelder & Burke, 1321 9th Ave., Spokane, $9732 and $2108 respectively. Noted May 8.

★Oregon—State Highway Comn., Salem, let contract improving 5.5 mi. road from Junction City to Benton Co. line, to Washburn & Hall, Lebanon, $45,254. Work involves 16,000 cu.yd. earth excav. and 11,500 cu.yd. rock surfacing.

★Oregon—State Highway Comn., Portland, let contracts grading and macadamizing 1 mi. Pacific Highway, Comstock-Pass Creek Sect., Douglas Co., broken stone, to A. Anderson, Grants Pass, $13,680; 1.2 mi. Oakland South Sect., Douglas Co., screened gravel, to J. Hakanson, North Bend, $26,365; 3.24 mi. Monroe-Lane Co. line, Benton Co., screened gravel, to Supervs. Benton Co., Corvalis, $33,080; paving 4.9 mi. Eugene-Goshen Sect., Lane Co., bitulithic "E" on gravel base, to G. F. Pyle, Eugene, $98,892; 14.8 mi. Greene Springs Mt. Rd.-California Line, Jackson Co. and 5.85 mi., Ashland-Green Springs Mt. Rd., Jackson Co., both bitulithic "F," to O. Huber, Portland, $286,214 and $185,340 respectively; grading and paving 12.2 mi. Gold Hill-Josephine Co. Line Sect., Jackson Co., bitulithic "E," to Shell-Calvert Co., Roseburg, $274,204; 6.5 mi. Old Oregon Trail, Island City-La Grande-Hot Lake Sect., Union Co., and 4.3 mi. West Side Highway, Hillsboro-Forest Grove Sect., Washington Co., both bitulithic "E," to Warren Constr. Co., Journal Bldg., Portland, $131,183 and $93,800 respectively. Noted May 8.

Oregon—State Highway Comn., Salem, received bids May 6, improving 7.6 mi. Pacific Highway, Sexton Mountain Sect., Josephine Co., involving 118,000 cu.yd. earth excav., from H. J. Hildeburn, Rosebury, $125,055; L. O. Herrold, Portland, $125,857; A. Giebisch, Portland, $132,918; 7.2 mi. Pacific Highway, from Jacques Pl. to Johns Pl., Douglas Co., involving 28,000 cu.yd. earth excav. and 11,200 cu.yd. rock surfacing, from J. T. Logan, Medford, screen gravel, $74,942; broken stone, $77,182. Noted May 8.

Ore., Portland—City received bids Apr. 30, improving (a) East 39th St.; (b) Francis Ave.; (c) East 29th St.; from Cochran Bros., Portland, (a and b) $17,211; (c) $15,485; S. Simonsen, Portland, (a and b) $17,520; (c) $14,633; Warren Constr. Co., Journal Bldg., (a and b) $17,423; (c) $14,160. Noted May 8.

★Cal., Lodi—City let contract paving with macadam and building concrete curbs on 1 mi. Locust Ave. and 5 blocks Lee Ave., to Clark & Henry Constr. Co., 38 South Sutter St., Stockton.

Cal., Manhattan Beach—City received bids improving Ocean Ave., from F. W. Young, Manhattan Beach, $20,062; R. S. Matthews, $20,732; A. L. Auen, $24,201. Plans include grading, paving, cement curbs and walks and building water system. Noted Apr. 24.

★Cal., Santa Barbara—City let contract improving Sola St. between De La Vina and Bath Sts., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $12,711. Plans include grading, 4 in. concrete paving with 1½ in. warrenite surface, cement curbs and gutters, etc. Noted Apr. 24.

★Ont., Orillia—Town let contract paving 43,000 sq.yd. bitulithic finish pavement on 5 or 6 in. base, with concrete curbs and gutters, to Warren Bituminous Paving Co., McKinnon Bldg., Toronto. About $180,000 Noted Mar. 13.

Streets and Roads (Continued)

★**Ont., Saul Ste Marie**—City let contract for 23,000 sq.yd. bitulithic finish pavement on 5 or 6 in. base, with concrete curbs and gutters, to Warren Bituminous Paving Co., McKinnon Bldg., Toronto. About $126,000.

Railways

PROPOSED WORK

Ohio—Mahoning & Shenango Ry. & Light Co., Boardman and Champion Sts., Youngstown, plans to build single track railway on sections of Rigby, Garland and Shelby Sts. Work involves 103 lb. girder rail, steel ties on 7 in. concrete base, welded rail joints and steel poles and 1 passing siding. About $76,610. J. B. Stewart, supt.

Excavation and Dredging

PROPOSED WORK

O., Kenton—Excavation—Upper Scioto River Drainage and Conservancy Dist., soon receives bids improving channel and building levee along Scioto River through here. Work involves 2,250,000 cu.yd. earth and 10,000 cu.yd. rock excav., dipper dredge and drag line work. S. K. Young, c/o Miami Conservancy Dist., Monument and Jefferson Sts., Dayton, engr.

Mich., Buena Vista—Drain—Comrs. Saginaw Co. plan to build Kohler Drain in Buena Vista Twp., 5¾ mi. long, average cut 5 ft., bottom widths 6, 8 and 10 ft. About $25,000.

Mich., Saginaw—Drain—Comrs. Saginaw Co. (Saginaw), Bay Co. (Bay City) and Tuscola Co. (Caro), plan to build 5½ mi. drain, bottom width 20 ft., average cut 5-13 ft., to be known as Quarter Line Drain. About $50,000. G. R. Endert, Saginaw, engr.

Ia., Ft. Dodge—Excavation—See "Streets and Roads."

Ore., Heppner—Irrigation—Morrow Co. having preliminary plans prepared for system to irrigate 122,000 acres in northern part of county to be known as John Day Irrigation Project. About $20,000,000. Federal Government and State will be asked to appropriate toward cost.

Cal., Oakdale—Irrigation—South San Joaquin Irrigation Dist. plans election to vote on $500,000 bonds to complete irrigation system and replace Hilts Sagwood flume with concrete.

BIDS DESIRED

N. Y., New York—Dredging—Until May 28, by M. Hulburt, comr. docks, Pier "A," Battery Pl., furnishing all labor and material for dredging in West 46th St., North River, Contr. 1614.

Pa., New Castle—Excavation—Until June 3, at office of C. E. Brown, city clk., for change, alteration and relocation of course of channel of Neshannock Creek within city; also widening same and re-establishing line on west or right bank of said creek, between Rosena Furnace Dam and point on bridge over creek, also building cement wall along right bank of same; advertised in this issue. Noted Feb. 13.

Fla., Sanford—Ditch—Until June 3, by Comrs. Seminole Co., building 9.18 mi. ditches, involving 58,660 cu.yd. excav., in Jessup D. D. E. A. Douglass, clk.

Miss., Marks—Dredging—Until June 5, by Comrs. Newsum Lake D. D., for floating dredge work and levee with automatic sluiceways in Quitman and Tallahatchie Counties. L. W. Mashburn, Clarksdale, engr. H. D. Glass, pres. Noted Apr. 17.

Ia., Wapello—Dredging—Until June 10, by Muscatine-Louisa D. D. No. 13, at office of Aud. Louis Co., for steam driven pumping plant containing one 36 in. and one 24 in. double suction centrifugal pump. Bids will also be received for building to house this plant. Elliott & Harman Eng. Co., Peoria, Ill., engrs.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Union Hill—Excavation—Bd. Educ. received lowest 3 bids for excavation work for school No. 2 on Hudson Ave. and 2nd St., from E. Hornung, West Hoboken, $5000, extra work, $5.00 per cu.yd.; R. Mazzoni, West New York, $8300, extra work $3.70 per cu.yd.; A. Caponi, West Hoboken, $8400, extra work $1.50 per cu. yd. Noted Mar. 13 under "Buildings."

★**Ia., Marshalltown** — Excavation — See "Streets & Roads."

★**Kan., Marion**—Excavation—Cottonwood Valley D. D. let contract improving Cottonwood River, to Yale-Reagen Co., 111 West Washington St., Chicago, $253,273. Noted Apr. 17.

★**Mont., Three Forks**—Drain and Dike—Madison Drain & Dike Dist. let contract building drain and dike, involving 135,000 cu.yd. earth excav., to N. Story, Jr. Bozeman, $45,929.

Industrial Works

PROPOSED WORK

Mass., Attleboro—W. R. Walker & Son, archts., 17 Custom House St., Providence, R. I., soon receive bids building 1-story, 60 x 140 ft. brick and mill construction machine shop, rein.-con. flooring, concrete foundation, for F. Mossberg Co., c/o architects. About $25,000.

Mass., Fall River—Fall River Dairy Co. plans to build dairy on Bedford and Quarry Sts. About $50,000. C. P. Doris, pres. Architect not selected.

Conn., Bridgeport — City appropriated $150,000 to build garage on Washington Ave. J. A. McElroy, city engr.

Conn., Bridgeport — Fletcher-Thompson, Inc., engrs., 1089 Broad St., soon receive bids building 1-story, 65 x 100 ft. and 1-story, 60 x 65 ft. brick ice plants; also 1-story, 100 x 150 ft., rein.-con. cold storage building, rein.-con. flooring, concrete foundation, on Seaview Ave., for Peoples Ice Co., c/o F. E. Ballard, 44 Wood Ave. About $150,000.

Conn., Bridgeport — Fletcher-Thompson, Inc., engrs., 1089 Broad St., soon receive bids building 2 story, 65 x 190 ft. steel, and 1 story, 26 x 26 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, on Benham Ave., for Nichols Underwear Corp., James St. and Linen Ave. About $100,000.

Conn., Bridgeport—Maloney & Krokstedt, archts., 925 Main St., soon receive bids building 2-story triangular shape rein.-con. garage, rein.-con. flooring, concrete foundation, on Fairfield Ave. About $50,000. Owners name withheld.

Conn., Hartford—L. Herrup, 1052 Main St., purchased site at 90 Pearl St. and plans to erect furniture building. Cost to exceed $50,000. Architect not selected.

Conn., New Haven—Triangle Garage Co., Inc., c/o C. A. White, 1024 Chapel St., having plans prepared for 1-story, 51 x 56 x 43 x 58 ft. service station and garage and 20 x 28 ft. office, brick and steel, rein.-con. flooring, concrete foundation, on Middletown Ave. and Ferry St.

Conn., New London—Sidney Mfg. Co., 420 Bank St., purchased site on Shapeley St. and plans to build 4-story factory. About $60,000.

N. Y., Binghamton—Bd. Pub. Wks. plans to build shops, sheds, barns and trestle on upper Court St. About $65,000. J. A. Giles, comr.

N. Y., Border City—Empire Gas & Electric Co., 103 Castle St., Geneva, purchased 100 acre site adjacent to plant here and bordering on Cayuga and Seneca Canals, and plans to build terminal and pumping station with 2 motor driven pumps, 2,500,000 gal. daily capacity, and 10-in. pipe line in excess of 1 mi. in length.

N. Y., Long Island City—S. Blickman, 199 Lafayette St., New York City, having revised plans prepared by H. Balcom, archt., 10 East 47th St., New York City, for 6 story, 132 x 200 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Nott, Manly, Anable and Mount Sts., here. Noted Dec. 5.

N. Y., New York—Fifteenth St. Garage Corp., 412 5th Ave., soon lets contract building 2 story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 534 West 39th St. through to 535 West 38th St. About $75,000. J. S. Maher, 431 West 14th St., archt.

N. Y., New York—Morania Realty Co., 427 West 14th St., soon lets contract building 2-story, 92 x 200 ft. brick and steel garage, rein.-con. flooring, brick foundation, on 18th St., near 10th Ave. About $100,000. J. S. Maher, 431 West 14th St., archt.

N. Y., Watertown—Northern Oil & Fuel Co., 469 Coffeen St., plans extensive additions to plant, to include 2-story, 100 x 375 ft. mill construction warehouse, cost between $20,000 and $30,000; installation of two 50,000 gal. oil and gasoline tanks and completely equipped testing laboratory for handling tests of gasoline, oils and greases. Address G. W. Lane, genl. mgr.

Pa., Blairville—See "Buildings."

Md., Baltimore—M. & S. Shoe Co., 500-16 East Lombard St., plans to build 3-story, 75 x 180 ft., concrete and brick factory, brick and concrete foundation, on Oliver St., near Guilford Ave. About $75,000. Architect not selected.

Md., Baltimore—Zell Motor Car Co., 11-15 East Mt. Royal Ave., soon receives bids building 3-story, 60 x 70 ft., rein.-con. and brick, auto storage and repair shop, brick and concrete foundation, on Mt. Royal Ave. About $50,000. E. H. Glidden and T. W. Pietsch, 1210 Amer. Bldg., archts.

Md., Ellicott City—C. A. Gambrill Mfg. Co., 109 Commerce St., Baltimore, having plans prepared by A. E. Baxter Eng. & Appraisal Co., engrs., Ellicott Sq., Buffalo, for 2-story rein.-con. warehouse, wheel-pit and machine shop, rock foundation, here. Cost between $55,000 and $60,000.

Ky., Louisville—O'Conner Estate, c/o J. J. Gaffney, archt., having plans prepared for 3 story, 64 x 204 ft. steel garage on 3rd and Liberty Sts. About $50,000. N. Bosler, c/o Tyler Hotel, 3rd and Jefferson Sts., lessee.

O., Cleveland—Leonard Electric Mfg Co., 433 Champlain Ave., had plans prepared by G. S. Rider Co., archts., 601 Century Bldg., for 2-story, 86 x 115 ft., concrete, steel and brick factory, at 3907 Perkins Ave. About $60,000.

Ind., Ft. Wayne—Wayne Knitting Mills Co., having plans prepared by Lockwood, Green & Co., engrs., 38 South Dearborn St., Chicago, Ill. for 4-story, 85 x 150 ft. brick and rein.-con. knitting mill, rein.-con. flooring. About $120,000.

Ind., Indianapolis—G. & J. Tire Co., 549 East Georgia St., having plans prepared by Lockwood, Green & Co., engrs., 38 South Dearborn St., Chicago, Ill., for 5-story, 100 x 400 ft. factory and 45 x 60 ft. boiler house, rein.-con., rein.-con. flooring, concrete foundation. About $950,000.

Mich., Detroit—Detroit Seamless Steel Tube Co., Jefferson Ave. W. and 19th St., had plans prepared by A. Kahn, archt., Marquette Bldg., for concrete, brick and steel plant. Plans include three 20 x 90 x 550 ft., manufacturing units, 70 x 100 ft. heating plant and 2 story administration building, concrete foundation. About $3,000,000.

Mich., Highland Park (Detroit P. O.)—Ford Motor Co. soon lets contract constructing 4 story, 80 x 260 ft., rein.-con., brick and steel service station, rein.-con. flooring, concrete foundation on Woodward Ave. A. Kahn, Marquette Bldg., Detroit, archt.

Mich., Jackson—Amer. Oil Corp., Belden Rd., had plans prepared by H. R. Graf, archt., Jackson, for 1-story, 74 x 120 ft., rein.-con. steel and brick plant, and 30 x 40 ft. concrete boiler house, rein.-con. flooring, concrete foundation.

Mich., Mt. Pleasant—Transport Truck Co. had plans prepared by J. J. Bachman, archt., Flint, for 40 x 50 ft. power plant and 150 x 300 ft. assembly plant, brick and steel, concrete foundation. About $80,000. Noted. Aug. 15.

Ill., Chicago—Bunte Bros., 730 West Monroe St., having plans prepared by Schmidt, Garden & Martin, archts., 104 South Michigan Ave., for 2-story, 75 x 125 ft. rein.-con. garage, rein.-con. flooring, concrete foundation, at 700 West Monroe St. About $75,000.

Ill., Chicago—J. L. Kraft Bros. Cheese Co., 359 River St., plans to build 6 story, 120 x 275 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Oak and Crosby Sts. About $500,000. Architect not selected.

Ill., Chicago—Natl. Tea Co., 2715 West North Ave., having plans prepared by J. B. Rohm & Son, archts., 138 North La Salle St., for 6 story, 120 x 125 ft. mill construction warehouse, rein.-con. flooring, concrete foundation, on Oak and Crosby Sts. About $275,000.

Ill., Chicago—Peacock Estate having plans prepared by Mundie & Jensen, archts., 39 South La Salle St., for 2 story, 250 x 325 ft. rein.-con. and brick factory and auto service station, rein.-con. flooring, concrete foundation, on 37th and Princeton Sts. About $650,000. Packard Motor Car Co., 2357 South Michigan Ave., lessee.

Ill., Chicago—See "Industrial Works."

Wis., Racine—Hamilton Beach Mfg. Co., Rapids Dr., having revised plans prepared for 2-story, 40 x 90 ft., brick warehouse. About $40,000. A. F. Flegel, 223 6th St., archt.

Wis., Superior—H. Lurye & Sons, 527 Tower Ave., soon lets contract building 3-story, 40 x 150 ft. concrete and brick factory. E. S. Radcliffe, U. S. Natl. Bank Bldg., archt.

Wis., Wausau—Peth Candy Co., had plans prepared for 4-story, 60 x 70 ft. brick and mill construction factory. About $50,000. Oppenhainer & Speer, Wausau, archts.

Industrial Works (Continued)

Wis., West Bend—West Bend Woolen Mills plans to build 3 story, 60 x 380 ft. rein.-con. and brick mill, rein.-con. flooring, concrete foundation. About $100,000. Lockwood, Greene & Co., 28 South Dearborn St., Chicago, engrs.

Kan., Hiawatha—Wolfley Automobile Co. plans to build 1-story, 55 x 140 ft., brick addition to garage, concrete foundation. About $50,000.

Kan., St. John—See "Water Works."

Mo., St. Joseph—Conser Laundry Co., 908 Francis St., having plans prepared by R. Meier, archt., 203 Lincoln Bldg., for 2 story, 122 x 153 ft., rein.-con. and brick laundry, rein.-con. flooring, concrete foundation, on 17th and Buchanan Sts. About $40,000.

Mo., St. Louis—National Barium & Chemical Co., 7338 Arlington Ave., plans to build chemical plant near Union St. and National bridge. Cost to exceed $50,000. O. Virden, pres.

Mo., St. Louis—Weber Automobile Co., 1900 Locust St., receives bids about June 1, building 3 story 150 x 250 ft., concrete factory, rein.-con. flooring, rock and concrete foundation, on 19th and Locust Sts. About $350,000. Architect not selected.

Okla., Newkirk—City election soon to vote on $110,000 bonds to build electric light plant and service lines.

Colo., Grand Junction—Miller & Smith, having plans prepared by E. G. Groves, archt., 222 Foster Bldg., Denver, for 100 x 125 ft. garage.

Ariz., Mesa—City plans election to vote on $60,000 bonds to build addition to gas plant and improve water system.

Cal., El Centro—Channel Commercial Co., 900 East 1st St., Los Angeles, purchased site on Commercial St. and plans to build 3-story, 140 x 150 ft., rein.-con. warehouse. About $75,000. Architect not selected.

Cal., Fresno—San Joaquin Baking Co., San Benito and P Sts., plans to build 2 story, 145 x 240 ft., concrete, plant on Land and Los Angeles Sts. F. D. Bradford, mgr.

Cal., La Verne (Mill Valley P. O.)—La Verne Orange & Lemon Growers Assn. plans to build packing house here. About $30,000.

Cal., Los Angeles—Anheuser-Busch Co., 9th and Pestalozzi Sts., St. Louis, Mo., plans to convert bottling plant on Main and Albion Sts., here, into ice factory and cold storage plant and build ice cream factory adjoining same. G. E. Wells, Alexandria Hotel, engr.

Cal., Stockton—J. Kroyer Mfg. Co. having plans prepared by F. V. Mayo, archt., 512 Farmers & Merchants Bank Bldg., for group of fireproof factories and 50 x 90 ft. office on Cherokee Lane. About $100,000.

Ont., Welland—Imperial Oil Co., 56 Church St., Toronto, purchased 3-acre site here and plans to build plant. About $40,000.

BIDS DESIRED

Mass., Gardner—Until May 28, by Lee & Hewett, archts., 1123 Bway., New York City, altering present 6 story factory here and building 4 story, 60 x 260 ft. and 3 story, 44 x 150 ft. brick, concrete and steel additions, rein.-con. flooring, concrete foundation, for Heywood Bros. and Wakefield Co.

N. J., Freehold—See "Buildings."

Pa., Pittsburgh—T. Hannah, archt., 209 9th St., receiving bids for 5 story, 80 x 100 ft. fireproof garage, rein.-con. flooring, concrete foundation, on Penn Ave. and 17th St., for 17th St. Garage Co.

Fla., Sarasota—Until June 9 by City Council, for all labor and material necessary for water and electric lighting plant and system. E. J. Messer, comr. pub. wks.

La., New Orleans—Until June 16, by Times-Picayune Publishing Co., 314 Camp St., building 4-story, 85 x 150 ft. steel and concrete plant, rein.-con. flooring, concrete foundation, on Camp and North Sts. M. H. Goldstein, Perrin Bldg., archt. Noted Apr. 17.

Wis., Lake Mills—Until July 1, by W. L. Fritz, Columbus, building 2-story, 60 x 200 ft. rein.-con. and brick, canning factory, brick foundation, on Main St., here. Cost between $50,000 and $60,000.

Wis., Lake Mills—Until June 15, by Wolfram Shoe Co., Watertown, building 2 story, 50 x 115 ft. rein.-con. and brick, shoe factory. About $60,000. Architect not selected.

DAM—GILBOA, N. Y.

Bids were received by Bd. Water Supply, Municipal Bldg., New York City, May 14, for constructing Gilboa dam, from (A) Winston & Co., 290 Bway.; (B) Hardaway Contg. Co., Columbus, Ga.; (C) P. McGovern, 50 East 42nd St.; (D) Warren, Moore & Co., Colonial Trust Bldg., Phila., Pa., $7,619,575; (E) MacArthur Bros., 120 Bway., $7,769,150. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
Stream control Schoharie Creek (lump sum)	$250,000.00	$150,000.00	$54,727.75
Stream control Steen Kill (lump sum)	30,000.00	35,000.00	10,575.00
Erecting maintaining and removing highway bridge (lump sum)	20,000.00	20,000.00	54,280.00
275,000 cu.yd. earth excavation for dam and spillway channel	1.10	1.10	2.15
21,000 cu.yd. earth excavation for core-wall and other trenches	4.00	2.00	2.50
100,000 cu.yd. earth excavation for highways and miscellaneous purposes	1.75	1.25	2.50
60,000 cu.yd. rock excavation for dam and spillway channel	4.00	4.00	5.45
2,500 cu.yd. rock excavation for highways and miscellaneous purposes	4.00	5.00	5.75
30,000 cu.yd. rock excavation from cut-off trench and when blasting is not permitted	7.00	9.00	11.50
500,000 cu.yd. refilling and embanking in 4-in. layers	1.00	1.40	1.25
70,000 cu.yd. refilling and embanking deposited through water	.70	1.00	1.04
12,000 cu.yd. refilling and embanking with clean rock fragments	1.00	3.00	2.88
20,000 cu.yd. refilling and embanking by sluicing	.80	1.00	.58
15,000 cu.yd. refilling and embanking in bulk	.80	1.00	.46
480,000 bbl. Portland cement	3.00	3.15	2.60
370,000 cu.yd. cyclopean masonry	7.00	6.75	6.79
15,000 cu.yd. concrete masonry	10.00	9.00	9.78
25 cu.yd. reinforced concrete	30.00	20.00	20.70
20,000 cu.yd. rubble stone facing	17.00	15.00	17.25
6,000 cu.yd. edge stones for facing	24.00	35.00	23.00
50,000 sq.ft. face dressing of masonry	.60	.50	.17
10,000 lin.ft. chisel drafts	.50	.50	.04
300 sq.ft. flagging	1.00	.75	.29
500 cu.yd. rubble masonry in mortar	6.00	8.00	11.50
25,000 cu.yd. rubble paving in mortar or grouted	6.50	8.00	11.50
2,000 cu.yd. dry rubble masonry	5.00	7.00	12.65
16,000 cu.yd. slope paving	5.00	7.00	4.60
2,000 cu.yd. gutter paving	6.00	9.00	13.80
7,000 cu.yd. crushed stone and gravel	2.00	3.25	2.30
1,000 cu.yd. grout	15.00	8.00	17.25
3,500 lin.ft. drilling core borings	6.00	5.00	4.60
5,000 lin.ft. drilling small holes in rock or masonry	1.00	1.50	.19
30 tons cast-iron pipes and special pipe castings	150.00	160.00	115.00
3,000 lb. reinforcing steel	.07	.07	.08
140,000 lb. iron and steel	.10	.10	.12
6,000 lb. miscellaneous bronze brass and copper	.75	1.50	1.15
35,000 lb. furnishing and placing small steel pipes	.25	.10	.12
100,000 lb. caring for and setting metal-work furnished by city	.04	.04	.015
10,000 lb. galvanizing	.04	.06	.60
50 sq.yd. bituminous waterproofing	.30	2.00	1.15
5,000 lin.ft. tile pipes 6 in. and less in diameter	.50	.40	.46
1,000 lin.ft. tile pipes 8 in. to 12 in. in diameter	1.00	.80	1.04
500 lin.ft. tile pipes larger than 12 in. and not exceeding 18 in. in diameter	1.50	1.50	1.84
11,000 lin.ft. bituminous macadam highway	3.00	5.00	7.00
15,000 lin.ft. wooden fences and guard-rails	.65	1.50	1.15
1 500 lin.ft. stone guard walls	2.50	3.00	4.60
500 M.ft.b.m. timber and lumber	90.00	150.00	85.00
100 prac. months medical and surgical practitioners	500.00	500.00	300.00
78 months sanitary services	1,000.00	700.00	700.00
Cleaning up (lump sum)	10,000.00	15,000.00	11,500.00
Extended totals	$7,203,175	$74,43,335	$7,597,979

PAVING—MIDLAND, MICH.

Bids were received by city for street paving from, (A) Globe Constr. Co., Kalamazoo; (B) Municipal Contg. & Supply Co., 1736 Jackson St., Gary, Ind.; (C) Seaman & Green, Grand Rapids. The unit bids were as follows:

	A	B	C
5,740 cu.yd. grading	$0.65	$1.00	$0.70
1,695 lin.ft. 10-in. P. S	1.05	1.82	1.00
5 manholes	50.00	72.00	65.00
29 catch basins	60.00	48.00	65.00
3 inlets	25.00	36.00	35.00
6,165 lin.ft. straight stone curb		1.25	
486 lin.ft. circular stone curb		2.00	
6,165 lin.ft. straight concrete curb	.65	.88	
486 lin.ft. circular concrete curb	.90	.98	
6,165 lin.ft. straight concrete curb and gutter	.85	1.25	.80
486 lin.ft. circular concrete curb and gutter	1.10	1.50	.80
579 lin.ft. marginal concrete curb	.50	.50	.40
6,620 lin.ft. 4-in. D.T.	.06	.07	.12
50 cu.yd. extra concrete	14.00	15.00	10.00
13,792 sq.yd. asphaltic concrete paving old foundation	(*a*) 1.49	(*b*) 1.65	(*c*) 1.65
11,921 sq.yd. asphaltic concrete paving new foundation	2.64	2.90	2.15
11,921 sq.yd. vitrified block paving new foundation			3.25
11,921 sq.yd. Metropolitan block paving foundation		4.00	
11,921 Townsend block paving foundation		3.98	
11,921 Townsend block paving, 3-in. block		3.73	
11,921 sq.yd. cement filler		.20	
11,921 sq.yd. mastic filler		.35	.20
Extended totals stone curb asphaltic concrete pavement		$78,194	
Extended totals concrete curb asphaltic concrete pavement	$65,488	$75,417	
Extended totals concrete curb and gutter asphalt c concrete pavement	$64,544	$75,457	
Extended totals concrete curb and gutter tarvia macadam pavement			$61,408

(*a*) Trinidad or Bermudez.

(*b*) Texaco.

(*c*) Tarvia-macadam, contractors specifications.

Industrial Works (Continued)

Minn., **Minneapolis**—Cedar Lake Ice Co., 1224 Plymouth Bldg., receiving tentative bids building 5-story, 140 x 160 ft. rein.-con. and brick ice storage plant, rein.-con. flooring, brick foundation. About $150,000.

Ont., **London**—Lockwood, Greene & Co., engrs., 38 South Dearborn St., Chicago, Ill., receiving bids building 4 story, 85 x 150 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Bathurst St., for Holeproof Hosiery Co., 186 King St. About $200,000. Noted Mar. 13.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., **Campello** (Brockton P. O.)—G. E. Keith Co., Station St., Brockton, let contract building 2-story, 60 x 70 ft. power plant and 6 x 7 x 40 ft. rein.-con. tunnel, here, to Westcott & Mapes, 207 Orange St., New Haven, Conn. About $100,000. Noted Apr. 24.

★Mass., **Holyoke**—Goetz Silk Mfg. Co., 642 South Summer St., let contract building 2 story, brick and steel addition to factory, rein.-con. flooring, concrete foundation, to Casper Ranger Constr. Co., 20 Bond St. About $60,000. Noted May 15.

★Mass., **Springfield** — Natl. Equipment Co., 662 North Main St., let contract building 3-story, 100 x 372 and 35 x 162 ft. rein.con. addition, to A. E. Stephens Co., 128 Chestnut St. About $100,000. Noted May 15.

★Mass., **Worcester** — Royal Worcester Corset Co., 30 Wyman St., let contract building 5-story, 71 x 240 ft. brick addition to plant, concrete foundation, on Grand St., to E. D. Ward Co., 82 Foster St. About $130,000.

★R. I., **Providence**—Graham Mfg. Co., 94 Point St., let contract building 2-story, 43 x 100 ft. brick and timber addition to machine shop, concrete foundation, on Willard Ave., to O. D. Purington & Co., 624 Industrial Trust Bldg. About $30,000.

★R. I., **Providence**—B. B. Knight Estate, Broad St., let contract building, 1-story, 80 x 140 ft., brick, steel and concrete garage, concrete foundation, on Dorrance and Eddy Sts., to H. Cummings, 397 Massasoit Ave., East Providence. About $50,000. Noted Apr. 24.

★R. I., **Woonsocket**—Guerin Spinning Co., Social St., let contract building 3-story, 85 x 265 ft. brick and timber addition, concrete foundation, to W. Aubin, 1103 Diamond Hill Rd. About $110,000.

★N. Y., **Brooklyn**—Rivestone Impvt. Co., 620 Saratoga Ave., will build 1-story, 100 x 188 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Kosciusko St. and Bedford Ave. About $25,000. Work will be done by day labor.

★N. Y., **Buffalo**—Beale & Sons, 7375 Park St., let contract building 2 story, 20 x 80 ft. steel and concrete plant, concrete foundation, on Mesner St., to G. H. Schickler & Son, Buffalo. About $25,000. Noted May 1.

★N. Y., **Buffalo**—H. Hayman Co., 856 East Ferry St., let contract building 1 story, 80 x 100 ft. steel foundry, concrete foundation, to Ferguson Steel & Iron Co., 1399 Bailey Ave. About $25,000. Noted Apr. 24.

★N. Y., **Buffalo**—Johnston-Kurtz Co., 151 Franklin St., let contract building 3-story, 31 x 100 ft. addition, at 153 Franklin St., to C. Berricks Sons, 1151 Main St. About $25,000.

★N. Y., **Long Island City**—A. Cohen, 212 5th Ave., New York City, let contract building 3-story, 83 x 183 ft. brick and steel mill, rein.-con. flooring, brick foundation, on William and Freeman Aves., to J. W. Bishop, 103 Park Ave., New York City. About $60,000. Noted Apr. 3.

★N. Y., **New York**—W. Zinsser & Co., 195 William St., let contract building 2 story, 50 x 100 ft. rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, on 59th St. and 10th Ave., to Rugles-Robinson, 331 Madison Ave. About $35,000. Noted Apr. 3.

★N. Y., **Syracuse**—Kallfelz Bros., 215 Magnolia St., let contract building 2-story, 95 x 150 ft. bakery on Shonnard and South Geddes St., to R. F. Burns, Syracuse. About $70,000.

★N. Y., **Utica**—Utica Suspender Co., Cox Bldg., let contract building 2-story, 16 x 90 x 149 ft. brick factory, concrete foundation, on Sunset Ave., to Hopp & Down, Utica. About $25,000, cost plus percentage.

★N. Y., **Watertown**—D. E. Guilfoyle, Stone St., let contract building 2-story, 100 x 100 ft. concrete block fireproof garage, to L. Carpenter. About $28,000.

★N. J., **Newark**—O. Heineman Co., Inc., 145 Jackson St., let contract building 4-story, 80 x 400 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Thomas St., to Amer. Concrete Steel Co., 27 Clinton St. About $500,000. Noted Apr. 24.

N. J., **Trenton**—Atlas Tire & Rubber Co. let masonry contract building 1 story, 90 x 360 ft. and 82 x 92 ft., concrete, brick and steel plant, to J. H. Morris Co., 615 Broad St. Bank Bldg.; carpentry, to C. Y. Barlow, 255 Bellevue Ave., concrete work, to Rees-Taylor Co., Mechanic Bldg., steel work, to N. K. Bugbee Co., 106 East Hanover St. Total cost, $250,000. Noted May 15.

★Pa., **Hershey**—Hershey Chocolate Co. will build 5 story, 180 x 240 ft. candy factory, concrete foundation. Work will be done by day labor.

★Pa., **Phila.**—Baxter, Kelly & Faust, Tioga and C Sts., let contract building 4 story, 56 x172 ft. brick factory, to H. H. Burrell, 206 Quince St.

★W. Va., **Clarksburg**—Lafayette Glass Co. let contract building 1 story, steel factory, to Memphis Steel Constr. Co., Pennsylvania Magee Bldg., Pittsburgh, Pa. About $70,000. Noted May 15.

★O., **Cleveland**—City Auto Tire & Supply Co., 2415 Chester Ave., let contract building 1 story, 40 x 137 ft., concrete, steel and brick factory addition, to S. W. Emerson Co., 1900 Euclid Ave. About $25,000. Noted May 15.

★O., **Cleveland**—Warner & Swasey Co., 5701 Carnegie Ave., let contract building 1 story, 90 x 176 ft., steel addition to factory at 5815 Cedar Ave., to United Erecting Co., Amer. Trust Bldg. About $30,000. Noted May 15.

★O., **Ivorydale**—Proctor & Gamble Co., Gwynne Bldg., Cincinnati, let contract building 2-story 100 x 400 ft., concrete, steel and brick warehouse, here, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland.

★O., **Plymouth**—Root-Heath Mfg. Co., let contract building concrete, steel and brick plant, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland. Plans include cleaning, sanding, office and shipping buildings and foundry.

★Ind., **Bloomington**—Showers Bros. let contract building brick, steel and rein.-con. plant to H. K. Ferguson, 6523 Euclid Ave., Cleveland. Plans to include machine shop, assembly building, cabinet shop, tin shop, welfare buildng, dry kiln, power house, etc.

★Mich., **Lansing**—See "Buildings."

★Mich., **Pontiac**—Briscoe Mfg. Co., Woodward Ave., Detroit, let contract building 1 story, 60 x 200 ft., rein.-con. and steel factory, concrete foundation, on Paddock and Jessie Sts., to Slater Constr. Co., Pontiac.

★Ill., **Chicago**—Morris & Co., Union Stock Yards, let contract building 9-story, 150 x 350 ft. rein.-con. cold-storage warehouse, rein.-con. flooring, concrete foundation, on 44th and Loomis Sts., to R. C. Wieboldt, 1534 West Van Buren St. About $1,000,000. Noted Mar. 13.

★Wis., **Janesville**—Samson Tractor Co., let contract building 2nd unit of plant, 200 x 500 ft., to J. P. Cullen, Jacksonville. About $500,000. Noted Feb. 20.

★Wis., **Two Rivers**—Eggers Veneer Seating Co. let contract building 4 story, 60 x 220 ft. brick and steel factory, concrete foundation, to W. Oeflein, 136 Hanover St., Milwaukee. About $100,000.

★Wis., **Two Rivers**—Hamilton Mfg. Co. let contract building 1-story, 50 x 150 ft., mill construction factory and 5-story, 100 x 150 ft., mill construction factory with steel frame, concrete foundation, to W. Oeflein, 136 Hanover St., Milwaukee. About $130,000.

★Mo., **St. Joseph**—Swift & Co., Union Stock Yards, Chicago, let contract building 2-story, 42 x 110 ft., rein.-con., steel and brick addition to cold storage plant, rein.-con. flooring, concrete foundation, on Packers Ave., here, to Lehr Constr. Co., 1712 Frederick Ave., $30,500.

★Mo., **St. Louis**—Bemis Bag Co., 607 South 4th St., let contract building rein.-con. and brick warehouse and office, rein.-con. flooring, rock foundation, at 2402 South 2nd St., to Fruin-Colnon Constr. Co., Merchants Laclede Bldg., $60,000.

★Tex., **Dallas**—Dallas Transfer Co. let contract building 10-story, rein.-con. storage and warehouse, to W. C. Hedrick Constr. Co., South Western Life Bldg. About $300,000.

★Cal., **Los Angeles**—Central Business Properties, Inc., Investment Bldg., let contract building 3 story, concrete and brick bakery, concrete foundation, on Flower St., to Milwaukee Bldg. Co., 317 Wright & Callender Bldg. About $55,000. Elite Catering Co., 825 West 7th St., lessee.

★Cal., **San Francisco**—Master Refinery Co., Sharon Bldg., will build oil refinery to include warehouse, laboratory, twenty 12,500 gal. steel tanks, etc. Work will be done by day labor under supervision of N. R. West, supt.

★Cal., **San Francisco**—Sherman Estate, c/o J. L. Stewart, archt., Claus Spreckels Bldg., let contract building 5 story, 100 x 160 ft., rein. con. warehouse, rein.-con. flooring, concrete foundation, on 2nd and Brannan Sts., to C. Stockholm & Son, Monadnock Bldg., $119,750. Noted May 1.

★Que., **Quebec**—Duchaine & Perkins, 195 De la Couronne St., let contract building 4 story, 80 x 190 ft. concrete, steel and brick shoe factory, concrete foundation, on Crown St., to M. Cauchon, Quebec. About $35,000.

★Ont., **Guelph**—Patridge Rubber Co., Metcalf St., let contract building 3-story, 60 x 100 ft. rein.-con. and brick addition to plant, rein.-con flooring, concrete foundation, to P. H. Secord & Sons, 133 Nelson St., Brantford, $44,200. Noted Apr. 3.

★Man., **Winnipeg**—Dept. Pub. Wks., Ottawa, let contract for extension to power house and laundry, at Tuxedo Military Hospital, here, to Carter-Halls-Aldinger Co., Ltd., 1010 Union Bank Bldg., $145,529. Noted Mar. 27.

Buildings

PROPOSED WORK

Mass., **Framingham**—School—Town appropriated $170,000 to build 2-story, 16-room brick, on Hollis St. E. E. Bowers, clk.

Mass., **Holyoke**—Theatre and Business—Goldstein Bros. Amusement Co., Bridge St., Springfield, plans to construct theatre and business building on Suffolk and Chestnut Sts. About $225,000.

Mass., **Wellesley** (Boston P. O.)—Dormitory—Wellesley College, having plans prepared by J. A. Schweinfurth, archt., 53 State St., Boston, for 3-story fireproof construction on college campus. About $300,000.

Conn., **Bridgeport**—Police Station—City appropriated $75,000 to build new 2nd precinct police station, on Barnum Ave. and Caroline St. J. Shultz, clk.

Conn., **Bridgeport**—School—City appropriated $155,000 to build additions to McKinley School on Kelsey St, and Madison School on Wayne St. J. Shultz, clk.

Conn., **Hartford**—Business—I. A. Allen, Jr., archt., 904 Main St., soon receives bids altering 5-story building, on High and Allyn Sts., for G. F. Heublein, 196 Trumbull St. About $50,000.

Conn., **New Haven**—Hospital and Chapel—W. F. O'Neill, archt., 172 Farmington Ave., Hartford, soon receives bids building 4-story, 40 x 140 ft. brick and steel addition, rein.-con. flooring, concrete foundation, on Chapel St., for St. Raphael Hospital, 1442 Chapel St. About $65,000.

N. Y., **Brooklyn**—Asylum—Jewish Orphan Asylum, Dumont Ave., having plans prepared by E. M. Adelsohn, archt., 1778 Pitkin Ave., for 3-story, 65 x 95 ft. brick, steel and rein.-con., brick foundation, on Dumont Ave. between Elton and Linwood Sts. About $115,000. P. J. Polansky, pres.

N. Y., **Brooklyn**—Synagogue and School—New Hebrew School, 505 Ashford St., having revised plans prepared by E. M. Adelsohn, archt., 1778 Pitkin Ave., for 3-story, 46 x 70 ft. brick and steel, brick foundation, on Ashford St. and Sutter Ave. About $60,000.

N. Y., **New York**—Auditorium—Mount Sinai Hospital, 100th St. and Madison Ave., having plans prepared by A. W. Brunner, archt., 101 Park Ave., for 2 story, 100 x 120 ft. brick, stone, and steel, brick foundation, on 99th St. east of 5th Ave. About $150,000.

N. Y., **New York**—Allerton House Corp., 143 East 39th St., plans to build 16 story, 100 x 200 ft. brick, stone and steel, brick foundation, at 551-553 Madison Ave. About $1,000,000. Architect not selected.

Buildings (Continued)

N. Y., New York—Bank—National Park Bank, 214 Bway, having plans prepared by D. Barber, archt., 101 Park Ave., for 3-story, 50 x 100 ft. brick and steel addition, brick foundation, at 149 Fulton St., through to 20 Ann St. R. Delafield, pres.

N. Y., New York—Office and Loft—Sohmer & Co., 315 5th Ave., soon receives bids building 6-story, 27 x 100 ft. brick and steel, brick foundation, at 31 West 57th St. About $75,000. R. H. Almiroty, 220 5th Ave., archt.

N. Y., New York—Store—F. Rogers & Son, 143rd St. and 3rd Ave., having plans prepared by Townsend, Steinle & Haskell, archts., 47 West 34th St., for 5-story, 158 x 178 ft. brick and steel, brick foundation, on Fordham Rd. near Park Ave. About $53,000.

N. Y., Niagara Falls—Church—St. Paul's Methodist Episcopal congregation having plans prepared for new church on 7th St. near Cedar Ave. Cost between $70,000 and $80,000.

N. J., Trenton—Bank—Colonial Trust Co., South Broad St., plans to build bank. About $100,000. Address H. A. Smith, 1387 Brunswick Ave. Architect not selected.

Pa., Altoona—Business and Office—I. H. Fishbone, 1005 10th St., and R. D. Elder, Juniata, purchased 50 x 120 ft. site on Main St. here, and plan to build 4-story. About $80,000.

Pa., Altoona—Hotel—Altoona Hotel Assn., c/o Chamber Commerce, plans to build hotel. About $200,000.

Pa., Blairsville—Hospital, etc.—Western State Hospital for Insane, Altoona, having plans prepared by Crooks & Cooley, archts., Jones Law Bldg., Pittsburgh, for hospital and group of institutional buildings near here, to consist of administration building, power house, laundry, 4 ward buildings, sewage disposal plant, reservoir, auditorium, nurse's home and morgue, to be 1, 2 and 3 story, various dimensions. About $2,000,000. G. S. Idell, 34 South 16th St., Philadelphia, consult. archts. Noted Feb. 20.

Pa., Braddock—Church, etc.—St. Michael Slavonic congregation plans to build 150 x 400 ft. brick and stone church, parish house and school, rock foundation, on Verona St. and Bell Ave.

Pa., Phila.—Bank—Republic Trust Co., 1429 Chestnut St., plans to build 4-story, 20 x 95 ft. concrete and steel. About $60,000. Stuckert Co., Crozer Bldg., archts.

Pa., Pittsburgh—Bank—Homewood Peoples Bank, 618 Homewood Ave., having estimates made and sketches prepared for extension to bank. About $100,000.

Pa., Pittsburgh—Educational—Carnegie Institute of Technology, Schenley Park, plans to build rein.-con., steel and brick extension to central building, concrete foundation. About $100,000. H. Hornbostel, 63 William St., New York City, archt.

Pa., Sunbury—Church—Zion Lutheran congregation plans to build church on Market and 5th Sts. About $150,000. C. R. Bowers, pastor.

Md., Crisfield—Church—Asbury Methodist Episcopal congregation, c/o W. F. Cochran, pastor, plans to build 1- and 2-story, stone, concrete and stone foundation. About $75,000. Architect not selected.

Md., Hagerstown—Schools—Bd. Educ. Washington Co. rejected bids received building 4-room school at Halfway (suburb) and 2-room school on Ridge Ave. Plans will be revised and work readvertised. A. J. Klinkhart, 27 West Washington St., archt. Noted Feb. 13.

La., New Orleans—Church, etc.—S. C. Stone, archt., Liverpool & London & Globe Insurance Co. Bldg., soon receives bids building brick and stone church, auditorium and school, on South Rampart St., between Canal and Marais St., for Grace Episcopal congregation. About $75,000.

Ind., South Bend—Bank—Amer. Trust Co., Michigan and Washington Sts., having plans prepared by Freyermuth & Maurer, archts., Farmers' Trust Bldg., for 3-story, 25 x 85 ft. steel and rein.-con. About $60,000.

Mich., Alpena—Armory—City having plans prepared by A. Gould, archt., 611 Empire Bldg., Detroit, for 1-story, 118 x 180 ft., rein.-con. and steel, rock foundation, on Main St. About $75,000.

Mich., Detroit—Club—Detroit Athletic Club, John R. St. and Madison Ave., plans to build 4-story, brick, steel and stone addition, to contain 120 rooms, large auditorium, reception room, etc., on Randolph and Cross Sts. About $700,000.

Mich., Detroit—Commercial—Harley-Buick Sales Co., 670 Cass Ave., having plans prepared by Williams Bros., archts., 1111 Kresge Bldg., for 1-story, 45 x 156 ft., brick and steel, rein.-con. flooring, concrete foundation. About $50,000.

Mich., Oakwood (Oxford P. O.)—High School—Village having plans prepared by Van Leyen, Schilling & Keough, archts., Union Trust Bldg., Detroit, for 2-story, rein.-con., brick and steel, concrete foundation. About $230,000.

Ill., Chicago—Exchange—Central Film Exch., c/o Berlin & Severn, archts., 19 South La Salle St., having plans prepared for 12-story, 95 x 165 ft., on Wabash Ave. and 9th St. About $200,000.

Ill., Chicago—Hotel—C. R. Gleason, c/o Schmidt, Garden & Martin, archts., 104 South Michigan Ave., having plans prepared for 10-story, 100 x 140 ft. fireproof, on Sheridan Rd. and Surf St. About $1,500,000.

Ill., Chicago—Library and Office—John Crerar Library, Marshall Field Bldg., receives bids about June 1, building 14 story, 128 x 135 ft., steel, concrete foundation, on Randolph St. and Michigan Blvd. About $1,500,000. Holabird & Roche, 104 South Michigan Ave., archts. Noted Feb. 6.

Ill., Chicago—Mercantile—Chicago Title & Trust Co., 69 West Washington St., having plans prepared by J. Hunt, archt., 30 North Michigan Ave., for 6 story, 70 x 80 ft. brick and steel, concrete foundation, on Michigan and Lake Sts. About $200,000.

Ill., Pontiac—Hospital—St. James Hospital Assn. plans to rebuild hospital recently destroyed by fire. About $150,000.

Wis., Eau Claire—Church—First Congregational Church had plans prepared for church to replace one destroyed by fire. About $95,000.

Wis., Superior—School—Bd. Educ. rejected bids, building 3 story, 94 x 188 ft. brick and rein.-con., rein. flooring, concrete foundation. About $200,000. F. E. Johnson, Superior, archt. Noted Dec. 12.

Ia., Waverly—High School—Bd. Educ. having plans prepared by G. L. Lockhart, archt., 391 Endicott Bldg., St. Paul, for 2-story, 160 x 200 ft. rein.-con. and brick, brick foundation. About $225,000.

Minn., Duluth—School—Bd. Educ. rejected bids received May 7, building 2 story, 64 x 180 ft. with wing 1½ story, 40 x 60 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Riverside Townsite. About $90,000. Croft & Boerner, 712 Palace Bldg., Minneapolis, archts. Noted May 1.

Minn., Holloway—School—Bd. Educ. soon receives bids building 2-story grade and high school. About $50,000. Foss & Foss, St. Cloud, archts.

Minn., Marney—School—Independent School Dist. No. 1 soon lets contract building 2-story, 90 x 100 ft. brick and timber, rein.-con. flooring, concrete foundation. About $50,000. E. F. Broomhall, 710 Alworth Bldg., Duluth, archt.

S. D., Humboldt—School—Bd. Educ. Independent School Dist., voted $85,000 bonds to build school. Noted May 15.

S. D., Mitchell—Hospital—Methodist State Hospital plans to build additions. About $60,000. J. Chapman, 313 Paulton Blk., Sioux Falls, archt.

S. D., Watertown—Schools—City voted $300,000 bonds to build junior high and vocational schools. Tyre & Chapman, 320 Auditorium Bldg., Minneapolis, Minn., archts.

Mont., Harlowton—School—Bd. Educ., School Dist. No. 16, soon receives bids building school. About $50,000. E. C. Teague, Harlowton, archt.

Mont., Havre—Store and Lodge—B. P. O. E. plans to build 3 story 60 x 140 ft. brick. About $100,000. W. B. Pyper, secy. Architect not selected.

Mont., Roundup—Temple—Masonic Temple Assn. plans to build 3-story, 65 x 140 ft. About $100,000. N. R. McDonald, pres. Architect not selected.

Mo., Kansas City—Store—S. S. Kresge Co., 1117 Main St., having plans prepared by F. E. McIlvain, archt., Orear-Leslie Bldg., for 7 story, rein.-con. and steel, on 12th and Main Sts. About $500,000.

Mo., St. Joseph—Hotel—C. Otten, 1224 South 6th St., having plans prepared by R. Meier, archt., Lincoln Bldg., for 3-story, 56 x 75 ft., brick and stone, brick foundation, on 6th and Mitchell Sts. About $[illegible].

Mo., St. Joseph—Infirmary—Buchanan Co. having plans prepared by W. Boschen, R. Arnold and R. Meier, archts., Tootle-Lacy Bank Bldg., for 3-story, rein.-con. and brick, rein.-con. flooring, brick and concrete foundation, near here. Bonds for $225,000 voted for project.

Mo., St. Louis—Laboratory—Washington University Corp., Skinker and Lindell St., plans to build 2-story on campus. About $70,000. Architect not selected.

Tex., Houston—Church and School—Holy Name congregation plans to build church and school on Marion and James Sts. About $100,000.

Tex., San Antonio—Cathedral—Scottish Rite Masons plan to build new cathedral. Cost between $200,000 and $500,000. P. D. Mathis, 615 North St. Marys St., secy.

Tex., Waco—Church and Parsonage—Methodist congregation, Morrow St., plans to build. About $79,000.

Idaho, Boise—State Legislature having plans prepared by Tourtellotte & Hummel, archts., McKay Bldg., Portland, Ore., for two rein.-con. and steel wings to Capitol. About $900,000.

Idaho, Rexburg—Court House—Madison Co. voted $100,000 bonds to build a new court house.

Utah, Provo—Court House—Utah Co. voted $200,000 bonds and Provo City $100,000 bonds to built joint courthouse and city hall. Noted Mar. 27.

Utah, Salt Lake City—School—City voted $2,130,000 bonds to build new schools, including high school costing $750,000.

Ariz., Phoenix—Bank and Office—Natl. Bank of Arizona, Washington St. and Central Ave., having plans prepared by Lescher & Kibbey, archts., Bank of Arizona Bldg., for 4-story, 23 x 137 ft., brick addition, concrete foundation. About $75,000.

Cal., Antioch—Hall—Town voted $55,000 bonds to build hall on 3rd and H Sts. Architect not selected.

Cal., Fresno—School—Oil King School Dist. having plans prepared by E. J. Kump, archt., 227 Rowell Bldg., for 1-story, concrete and frame, concrete foundation. About $50,000.

Cal., Imperial—School—Imperial School Dist. voted $90,000 bonds to build school. D. C. Gale, trustee. Architect not selected. Noted May 8.

Cal., Pittsburg—Church, Rectory and Hall—St. Peter's congregation having plans prepared by Smith-O'Brien, archts., Bankers Investment Bldg., San Francisco, for timber and stucco church, rectory and hall, concrete foundation. About $60,000.

Cal., Sacramento—Bank and Office—Capitol Natl. Bank, 700 J St., having plans prepared by Weeks & Day, archts., 223 California Fruit Exch. Bldg., for 18-story, concrete, brick, steel and terra cotta, concrete foundation, on 6th and J Sts. About $750,000.

Cal., San Francisco—Bank—Union Trust Co., Grant and Market Sts., having plans prepared by F. H. Meyer, archt., Bankers' Investment Bldg., for 3 story, 80 x 120 ft., concrete and steel addition. About $200,000.

Cal., San Francisco—Club—Francisco Club, 560 Sutter St., having plans prepared by E. E. Young, archt., 251 Kearny St., for 5 story club to contain swimming pool, dormitories, etc., on Sutter and Mason Sts. About $100,000.

Cal., San Francisco—Offices—Bd. Supervs. Health Dept. having plans prepared by J. Reid, Jr., archt., 1st Natl. Bank Bldg., for 4 story concrete and steel, concrete foundation, on Rock and Grove Sts. About $400,000.

Cal., San Francisco—Office and Loft—Wellman Estate Co., c/o Julius Krafft & Sons, archts., Phelan Bldg., having plans prepared for 5 story, 40 x 60 ft., brick and steel, on Jackson St. About $60,000.

Cal., Selma—High School—Selma Union High School Dist. plans to double size of present school and build frame and stucco gymnasium. Election will be held to vote on $175,000 bonds for project. Architect not selected.

Buildings (Continued)

Cal., Stockton—Church—First Christian congregation purchased 100 x 100 ft. site on Sutter and Lindsay Sts. and plans to build church. About $75,000.

Cal., Stockton—Office—See "Industrial Works."

Cal., Visalia—Bank and Office—Visalia Natl. Bank & Trust Co. having plans prepared by E. J. Kump, archt., 227 Rowell Bldg., Fresno, for 4 story, 83 x 116 ft., rein.-con., steel and terra cotta, rein.-con. flooring, concrete foundation, on Main and Church Sts. About $200,000.

Ont., Barrie—School—School Bd. having plans prepared by R. J. Edwards & Edwards, archts., 18 Toronto St., Toronto, building 2-story, brick. About $55,000.

Ont., Ottawa—Theatre—Loew's Circuit, Ltd., soon receives bids building theatre. About $200,000. Noted Feb. 13.

Ont., Peterborough—School—School Bd. having plans prepared by W. Blackwell, archt., Peterborough, building collegiate institution and auditorium. About $225,000. Noted Mar. 20.

Ont., Toronto—Club—Argonaut Rowing Club, Lake St., purchased site at foot of Bathurst St. and plans to build. About $200,000.

BIDS DESIRED

Mass., Roxbury (Boston P. O.)—School—Until May 27, by Boston School Bd., building 3-story, 60 x 141 ft. brick school with 4 work shops, concrete foundation, on Dearborn St., here. About $150,000. J. McLaughlin, 88 Tremont St., Boston, archt.

N. Y., Ossining—Hall, etc.—Until June 17, by C. F. Rattigan, supt. state prisons, Hall Records Bldg., New York City, building mess hall and kitchen building No. 4, detention building No. 5, outside cell building No. 7, clinic building No. 8, pump house and reservoir, also for sanitary, heating and electric work for same. L. F. Pilcher, Capitol, Albany, state archt.; advertised in this issue. Noted May 1.

N. J., Freehold—Hospital—Until June 4, by Bd. Supervs. Monmouth Co., building hospital including power house and laundry, water supply system, drainage and sewerage disposal system, near Allenwood, Wall Twp. W. M. Bergen, dir.

N. J., New Brunswick—School—Until June 4, by Bd. Educ., Bayard School, building school on Livingston Ave. E. H. Webb, chn. Noted Jan. 9.

Pa., Phila.—Bank—Until May 28, by Heacock & Hokanson, archts., Bailey Bldg., for 1 story, 54 x 78 ft., concrete and brick bank, with 15 x 54 ft. addition, for Kensington Trust Co., Kensington and Allegheny Aves. About $50,000. Noted May 15.

Pa., Phila.—Loft—L. B. Rothchild, archt., 1225 Sansom St., is receiving bids building 7-story, 100 x 150 ft., rein.-con. and brick. About $200,000. Owner's name withheld.

Md., Aberdeen—Bank—Until May 28, by H. P. Hopkins, archt., 211 Union Trust Bldg., Baltimore, building 2½-story, 50 x 75 ft. rein.-con. and brick, concrete and brick foundation, for 1st Natl. Bank. About $50,000.

Md., Baltimore—College—Trustees Morgan College, c/o J. O. Spencer, pres., 2106 St. Paul St., receiving bids for 3½-story, 85 x 200 ft., brick and stone, brick and concrete foundation, on Hillen Rd. About $85,000. E. L. Tilton and A. M. Githens, 52 Vanderbilt Ave., archts.

Md., Tracy's Landing — School — Until May 27, by Bd. Educ. Anne Arundel Co., Annapolis, building 2-story, 75 x 130 ft., brick, concrete and brick foundation, here. About $60,000. H. P. Hopkins, 211 Union Trust Bldg., Baltimore, archt.

La., New Orleans—Trade Schol—Until June 2, by Dept. Pub. Finances, building Isaac Delgado Central Trades School, on City Park and Orleans Aves. A. G. Ricks, comr. Noted Apr. 10.

O., Staunton—Schools—Until June 12, by Bd. Educ., building 2-story, 5 mi. west of here, cost $50,000; 2-story, brick in Fayette Co., $50,000. A. L. Rhodes, Washington C. H., archt.

SEWER—NEWARK, N. J.

Bids were received by Passaic Valley Sewerage Comrs., Newark, May 13, for constructing intercepting sewerage system, part of Sect. No. 19, Garfield River crossing, from (A) Henry E. Fox Constr. Co., Inc., 81 East 125th St., New York City; (B) Cenedella & Co., 136 Bloomfield Ave., Passaic; (C) Conners Bros. Co., Inc., 15 West 91st St., New York City. The unit bids were as follows:

	A	B	C
Earth excavation, dredging and refilling for 30 in. c. i. pipe line crossing Passaic River, etc., and all appurtenant work (lump sum)	$30,000	$75,000	$140,000
Laying 30 in. c. i. pipe line across Passaic River, furnishing of joint materials, etc., and all appurtenant work (lump sum)	9,000	6,500	7,000
20 cu.yd. rock excaZation in dredged and open excavations	10.00	15.00	65.00
130 cu.yd. concrete masonry, in place, with Portland cement mortar	25.00	20.00	40.00
60 cu.yd. brick masonry and appurtenant work, in manholes, laid with Portland cement mortar	12.00	30.00	55.00
10,000 lb. steel for concrete reinforcement and other purposes	.10	.12	.15
500 long ton rip rap, in place, including gravel backing	3.00	7.00	8.00
5,000 lin.ft. timber piles, in place	.40	2.00	3.00
60 pile bents timber caps, blocks, wedges, etc	6.00	20.00	30.00
Furnishing earth material and grading about inlet siphon chamber and elsewhere	.75	3.00	4.00
Extended totals	$48,255	$103,000	$180,300

HIGHWAY—WASHINGTON

Bids were received by State Highway Bd., Olympia, for constructing Pacific Highway in Lewis Co. from Sta. 0 + 30 to Sta. 18 + 80, from (A) Pacific Iron Wks., East 29th and Clackamas Sts., Portland, Ore. (awarded contract); (B) J. R. Wood, Seattle, Wash.; (C) R. E. Meith, Portland, Ore.; (D) Illinois Steel Bridge Co., Spokane, $139,734; (E) Union Bridge Co., Seattle, $145,854. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
8,500 cu.yd. common excavation, including overhaul, 400 ft.	$0.70	$1.00	$0.90
552 cu.yd. gravel surfacing	1.50	1.50	2.00
4 lamp posts	50.00	150.00	150.00
1,540 sq.yd. asphaltic concrete pavement	2.25	3.00	2.00
Lb. steel reinforcing bars	.10	.08	.07
10 cu.yd. concrete, 1st class	22.80	25.00	24.00
Cu.yd. concrete, 2nd class	22.80	21.00	24.00
4 180 ft. steel spans in place, complete, lump sum	73,955	79,800	76,800
1,890 cu.yd. concrete in piers and abutments, 1:3:5	22.80	21.00	24.00
2,800 lb. reinforcing bars, anchor bolts, etc	.10	.08	.07
1,540 lin.ft. fir piling under piers	.60	.30	.50
Extra metal, (per lb.)	.08	.10	.09
Extended totals	$128,922	$134,974	$135,900

Mich., Detroit—School—Until June 12, by Bd. Educ., 50 Bway., building 2-story, 59 x 211 ft. with wing 43 x 62 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation on Georgia Ave. between Helen and Concord Aves., to be known as Theodore Roosevelt School, also for 133 x 211 ft. standard design school No. 1088 on Georgia Ave. Malcolmson & Higginbotham, 404 Moffat Bldg., archt. Noted Dec. 26.

Ill., Alton—Orphanage—Until May 30, by Wesselbecker & Hillebrand, archts., 805 Pontiac Bldg., St. Louis, Mo., building 3-story, 144 x 150 ft. brick, steel and rein.-con., rock foundation, near here, for Alton Orphanage Asylum. About $65,000.

Ill., Chicago—Sales—P. Gerhardt, archt., 64 West Randolph St., receiving bids building 1 and 2-story, 60 x 160 ft. mill construction, concrete foundation, on Washington Blvd. and Kilpatrick St., for L. F. Sullivan, c/o archt. About $60,000.

Ill., East St. Louis—Theatre—Until June 1, by J. Erber, building 2-story, 82 x 220 ft., rein.-con., rein.-con. flooring, concrete foundation, at 309 Collinsville Ave. About $100,000.

Wis., Eau Claire—Church—Until June 1, by 1st Congregational Church, building 1 story, stone. About $85,000. Holmes & Flynn, 8 South Dearborn St., Chicago, archts. Noted May 22.

Wis., Sheboygan—Theatre—Until June 15, by Majestic Theatre, c/o E. Bowler, Sheboygan, building 2 story, 40 x 150 ft. rein.-con. and brick, brick foundation, on Center and 8th Sts. Cost between $45,000 and $55,000. Architect not selected.

Ia., Britt—High School—Until May 26, by O. C. Patterson, secy. bd. educ., building 2 story, 104 x 242 ft., rein.-con. and brick, brick foundation. About $175,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt.

Minn., Austin—High School—Until July 1, by Bd. Educ. building 3 story, 160 x 232 ft., rein.-con. and brick, brick foundation. About $400,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt.

Minn., Fergus Falls—Hospital—Until June 5 (change of date), by State Bd. Control, St. Paul, building 2 story, 45 x 120 ft., rein.-con. and brick. About $50,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. Noted May 8.

Minn., Hibbing—Hospital—Until June 2, by S. S. Rumsey, archt., Wolvin Bldg., Duluth, building 3-story, 45 x 150 ft., rein.-con. brick and steel, rein.-con. flooring, concrete foundation, on 4th Ave. and Mesaba St., for Oliver Mining Co., Wolvin Bldg., Duluth. About $250,000.

Minn., Hibbing—Mercantile—Until June 12, by S. S. Rumsey, engr., Wolvin Bldg., Duluth, building 2-story, 106 x 125 ft., brick and steel, rein.-con. flooring, concrete foundation, on Mesaba St., here, for Oliver Mining Co., Wolvin Bldg., Duluth. About $125,000.

Minn., Moose Lake—School—Until June 1, by C. F. Mahlke, clk. bd. educ., building 2-story, 62 x 90 ft., brick and timber, brick foundation, in Dist. No. 3. About $50,000. F. A. Schweiger, Moose Lake, archt.

Kan., Beloit—School—Until May 26, by Bd. Educ., for 3-story, 100 x 137 ft., rein.-con. and brick, rein.-con. flooring, brick and concrete foundation. About $125,000. W. H. Saylor, Reliance Bldg., Kansas City, archt.

Mo., Joplin—Cathedral—Until June 15, by Hubbell & Green, archts., Dallas, Tex., for 2-story, 125 x 150 ft., glazed terra cotta, rein.-con. flooring, concrete foundation, on 5th Ave., for Scottish Rites F. & A. M. T. L. Brown, 603 North Pearl St., secy.

Cal., Los Angeles—Hotel—Wilshire Blvd. Hotel Co. receiving bids building 5 story, rein.-con. and brick, on Wilshire Blvd., 8th, Fedora and Catalina Sts., main building to be "H" shaped with wings 500 ft. long. About $1,250,000. M. Hunt, 1017 Hibernian Bldg., archt. Noted Apr. 24.

Que., East Broughton—School—Until May 26, by W. Eafranco, secy. school bd., building 3 story, 50 x 80 ft., steel and brick, concrete foundation, on Broughton Rd. About $55,000.

Ont., Ottawa—School—Until May 28, by D. C. Scott, c/o Dept. Indian Affairs, building 3-story, 40 x 60 ft., steel and brick, concrete foundation, on Whitefish Indian Reservation. About $50,000.

Alta., Medicine Hat—Court House—Until May 30, by L. C. Charlesworth, deputy minister pub. wks., Edmonton, building brick court house here. About $150,000. Noted Apr. 3.

Buildings (continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Blackstone—High School—Town let contract building 2-story, brick and steel, concrete foundation, to Eastern Constr. Co., 660 Winter St., Woonsocket, R. I. About $60,000.

★Mass., Holyoke—Church—Second Congregational Church Society, Appleton St., let contract building 80 x 120 x 175 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Appleton and Maple Sts., to Casper Ranger Constr. Co., 20 Bond St. About $500,000. Noted May 8.

★Conn., Bridgeport—Home-Baptist Christian Union, Inc., 25 Thomas St., let contract building 4-story, 80 x 100 ft. brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and Thomas Sts., to Casey & Hurley, 120 Pequannock St. About $100,000. Noted Apr. 24.

★Conn., Bristol—Business—Malone & Phelan, 2 Riverside Ave., let contract building 2-story, 65 x 92 ft., brick and steel, rein.-con. flooring, concrete foundation, on Main and School Sts., to B. H. Hibbard Co., 140 Main St. About $60,000.

★Conn., Greenwich—Hotel—R. A. Cowles, c/o F. F. French Co., archts., 299 Madison Ave., New York City, let contract building 12 or 15 story, brick and steel, stone flooring, brick foundation, on Boston Rd. and Greenwich Ave., to F. F. French Co., 299 Madison Ave., New York City. About $1,000,000, cost plus percentage basis.

★Conn., New London—Dormitory—Connecticut College for Women, Mohegan Ave., let contract building 2-story, 60 x 138 ft. concrete, steel and granite, rein.-con. flooring, concrete foundation, to E. F. Miner Bldg. Co., 25 Foster St., Worcester, Mass. About $125,000. Noted Mar. 13.

★N. Y., Brooklyn—Church—St. Brendans congregation, 1525 East 12th St., will build 86 x 140 ft. brick and limestone addition, brick foundation, on Ave. O and East 12th St. About $100,000. Work will be done by day labor.

★N. Y., Brooklyn—Hospital—Beth Moses Hospital, 404 Hart St., will build 5-story, 90 x 100 ft., brick and steel addition, brick foundation, on Hart St. and Stuyvesant Ave. About $350,000. Work will be done by day labor. Noted May 8.

★N. Y., Lake Placid—Hotel—Bowman Hotel Co., Hotel Biltmore, 43rd St. and Madison Ave., New York City, let contract building 10-story, brick and steel, brick foundation, here, to Hegeman-Harris Co., Inc., 33 West 42nd St., New York City. About $300,000. Noted Feb. 27.

★N. Y., Long Island City—High School—C. B. J. Snyder, supt. school bldgs., Municipal Bldg., New York City, let contract building 3 story, 100 x 100 ft. brick and steel addition to Bryant High School, rein.-con. flooring, concrete foundation, on Wilbur Ave., to T. A. Clarke Co., 122 Livingston St., Brooklyn. About $533,300. Noted May 15.

★N. Y., New York—Hotel—Seven Hundred West End Corp., 280 Madison Ave., will build 14-story, 44 x 100 ft., brick, steel and stone, brick foundation, on West End Ave. and 94th St. About $250,000. Work will be done by day labor.

★N. Y., New York—Store and Office—Hudson Motor Co., of New York, 1842 Bway., let contract building 10-story, 100 x 100 ft. brick and steel, brick foundation, on 62nd St. and Amsterdam Ave., to J. F. Berger, 315 West 68th St. About $550,000. Noted May 15.

N. Y., Salisbury Center—Hospital—G. W. Boyle, purch. agt., Herkimer Co., Herkimer, received lowest bid May 8 (general contract) building brick and concrete tuberculosis hospital on Heller Farm, here, from E. Bedford, Ilion, $96,588. Noted Apr. 24.

N. Y., Syracuse—School—H. C. Allen, city engr., received lowest 3 bids, building Prescott School, (a) Indiana Limestone, (b) Onondaga Litholite, general contract, from Schaefer Constr. Co., 5 West 31st St., New York City, (a) $271,020, (b) $270,820; T. H. McHale & Son, Cahill Bldg., (a) $297,000, (b) $297,000; Jenks & Venton Co., Syracuse, (a) $304,984; heating and ventilating, from J. R. Sheehan Co., 16 South Center St., Schenectady, $43,213; W. B. Goldie, 274 James St., $45,915; E. Joy & Co., 133 Market St., $53,934. Noted Mar. 6.

★N. Y., Troy—Market—Monican Co., 280 Bway., New York City, let contract building 3 story, 56 x 100 ft. brick and steel, rein.-con. flooring, concrete foundation, to C. P. Boland & Co., 30 4th St. About $65,000. Noted May 1.

★Md., Hagerstown—School—Bd. Educ. Washington Co. let contract remodeling and building brick and concrete addition to Antietam St. School, rein.-con. flooring, stone and concrete foundation, to G. B. McWolf, Hagerstown, $77,999. Noted Feb. 13.

★Md., Hamilton—School, etc.—St. Dominic's Catholic congregation, c/o J. B. Manly, pastor, let contract building 3-story, 60 x 110 ft., school, gymnasium and parish house, brick and stone, rock foundation, on Harford Rd., to J. J. O'Connor, 52 Knickerbocker Bldg., Baltimore. About $55,000.

★W. Va., Montgomery—High School—Bd. Educ. let contract building 3 story, brick and rein.-con., to Charleston Concrete Steel Co., Charleston. About $92,000. Noted May 15.

★Ala., Ramer—High School—Montgomery Co. School Bd. let contract building 1-story, brick, to I. O. Anderson, 207 Dexter St., Montgomery, $68,769.

Mich., Highland Park (Detroit P. O.)—Hospital—City received lowest 3 bids building 4 story hospital, 2 story power house and laundry and connecting tunnel, rein.-con., brick and steel, concrete foundation, from Rosenthal Constr. Co., Chicago, $241,600; Bryant & Detwiler, 2336 Dime Bank Bldg., $260,985; Culvertson & Kelley, 814 Ford Bldg., $261,708. Noted May 1.

★Mich., Lansing—Office and Library—Bd. State Auditors let contract building 6 story brick and rein.-con. library, office and steam heating plant, concrete foundation, to W. E. Wood Co., 1805 Ford Bldg., Detroit, $682,643. Noted Apr. 24.

★Minn., Campbell—School—Bd. Educ. let contract building 2 story, rein.-con and brick addition, to J. A. McDonald Constr. Co., 723 1st Natl. Soo Line Bldg., Minneapolis, $70,864. Noted May 1.

★Minn., Duluth—School—Bd Educ. let contract building 2 story, 55 x 64 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Liberty St., to H. Fawcett, Mesaba Blk., $53,397. Noted Apr. 24.

★Minn., Faribault—Dormitory—State Bd. Control, St. Paul, let contract building 2 story, 45 x 150 ft., rein.-con. and brick at State School for Feeble-Minded, to W. O'Neil, Faribault. About $50,000.

★Minn., St. Paul—Dispensary—A. H. Wilder, 404 Wilder Bldg., let contract building 3 story, 51 x 96 ft., concrete, brick and stone, on Rice St. between College and Summit Aves., to G. J. Grant Constr. Co., 902 New York Life Bldg. About $100,000. Noted Apr. 10.

★Mont., Bozeman—Theatre—Gem Theatre Co. let contract building 2-story, 54 x 100 ft., brick, terra cotta and steel, rein.-con. flooring, concrete foundation, to H. J. Hamill, 401 South Bozeman St. Noted Mar. 20.

Wash., Medical Lake—School—State Bd. Control received lowest 3 bids building custodial school from S. G. Morin, Hutton Bldg., Spokane, $169,445; F. Phair, 416 2nd Ave., Spokane, $171,883; Colonial Bldg. Co., Hutton Bldg., Spokane, $173,387.

★Cal., Los Angeles—Gymnasium—Bd. Educ., Security Bldg., let contract building 2 story, 103 x 113 ft., brick, concrete foundation, at Polytechnic High School, to J. B. Harris, 218 South Gramercy Pl., $61,737. Noted May 8.

★Cal., Oakland—Office—East Bay Water Co., 9th St. and B'way, will build 4 story, 75 x 105 ft., rein.-con., concrete foundation, on 16th St. and San Pablo Ave. About $60,000. Work will be done by day labor.

Cal., Quincy—Courthouse and Jail—Bd. Supervs. Plumas Co. received bids building 3 story, rein.-con., from E. W. Book, 13th and S Sts., Sacramento, $145,647; J. L. McLaughlin, 244 Kearney St., San Francisco, $150,000; H. Williams, Hearst Bldg., San Francisco, $151,786. Noted Apr. 3.

★Cal., San Francisco—Loft—Dalziel Estate, 558 Mission St., let contract building 6 story, 82 x 187 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on 1st and Mission Sts., to Palmer & Peterson, Monadnock Bldg. About $185,000; cost plus percentage basis.

★N. S., Halifax—Hospital—Dept. Pub. Wks., Ottawa, let contract for new ward buildings, and altering and building additions to present building, at Bellvue Military Hospital here, to M. E. Keefe Constr. Co., Halifax, $76,100. Noted Apr. 17.

Federal Government Work

PROPOSED WORK

R. I., Newport—Marine Railway—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3904. About $15,000. Bids will be received at local yard.

N. Y., South Brooklyn—Boat Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3899. About $85,000.

N. Y., South Brooklyn—Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 2 electric traveling cranes in boat storage building; Spec. 3900. About $40,000.

D. C., Anacostia—Buildings, Hangars, Roads and Distributing Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to construct miscellaneous frame, rein.-con., brick and steel buildings, wooden hangars, concrete roads and heating and electric distributing systems, here; Spec. 3905.

D. C., Anacostia—Earth Fill—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans; Spec. 3897. About $10,000.

Va., Hampton Roads—Electric Distributing System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install, here; Spec. 3901. About $60,000.

Va., Quantico—Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build elevated steel tank, here; Spec. 3906. About $5000.

S. C., Port Royal—Dredge—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 12-in. hydraulic dredge; Spec. 3898. About $71,000.

Mont., Dillon—Road Work—Bureau Pub. Rds., Missoula, plans to grade Grasshopper Creek-Elkhorn Springs Rd., Beaverhead National Forest, Beaverhead Co. G. Lautz, dist. engr.

Idaho, Leonia (Lenia P. O.)—Bridge—Bureau Pub. Rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., Portland, Ore., plans to build steel bridge over Kootenai River, here, connecting Lincoln Co., Mont., with Boundary Co. Idaho and Montana will appropriate $10,000 each; Boundary and Lincoln Counties, $2500 each. Total cost, $50,000. C. H. Purcell, dist. engr.

Idaho, Sand Point—Road Work—Bureau Pub. Rds., Missoula, plans to grade 3 mi. West Branch Rd., Kaniksu National Forest, leading to Priest Lake. About $10,000. G. Lautz, dist. engr.

Idaho, Wallace—Road Work—Bureau Pub. Rds., U. S. Dept. Agriculture, Post Office Bldg., Portland, Ore., plans to grade 3 mi. Lookout Pass Natl. Forest Rd., 16 ft. wide, Shostone Co. C. H. Purcell, dist. engr.

Cal., Mare Island — Cranes — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install 3 electric traveling cranes in structural shop, here; Spec. 3903. About $250,000.

P. R., Cayey—Radio Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to construct 3 radio buildings, here; Spec. 3902. About $27,000.

BIDS DESIRED

N. H., Portsmouth—Laundry—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Marine Barracks, here; Spec. 3877. About $7000; $10 deposit required for plans and spec. Noted May 1.

Mass., Boston—Repairing Pier Walls—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairing walls of Pier No. 1; Spec. 3815. About $39,000; $10 deposit required for plans and spec.

Mass., Hingham—Dredging—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging at Naval Ammunition Depot, here; Spec. 3548. About $30,000; $10 deposit required for plans and spec. Noted Nov. 14.

Mass., Hingham—Fire Protection System—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3808. About $200,000; $10 deposit required for plans and spec. Noted Feb. 20.

N. Y., Montauk—Power House—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3889. About $4000; $10 deposit required for plans and spec. Noted May 15.

N. Y., New York—Dredging—Until June 16, by U. S. Engr. Office, 39 Whitehall St., dredging in East River; advertised in this issue. Noted Apr. 10.

Federal Government Work (Continued)

Fla., Key West—Oil Burning Equipment—Until June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing oil burning equipment for boilers; Spec. 3847. About $6500; $10 deposit required for plans and spec. Noted Apr. 3.

Tenn., Memphis—Boilers—Until June 20, by Dist. Engr., Mississippi River Dredging Dist., P. O. Box 1017, furnishing and delivering 3 watertube boilers for U. S. Dredge Kappa; advertised in this issue.

Mo., St. Louis—Levee Work—Until June 19, by Secy. Mississippi River Comn., 1311 International Life Bldg., for 200,000 cu.yd. earthwork by hydraulic method in Muscatine-Louisa Island Levee Dist., Ia.; advertised in this issue. Noted Apr. 3.

Tex., Camp Travis—Buildings, Sewers, Water Mains, etc.—Until June 2, by Constr. Quartermaster, Mexican Border Project, Camp Travis, building 997 brick, adobe and frame buildings, water mains, sewers, wiring, etc., at 30 posts and camps along Mexican border, in Texas, New Mexico and Arizona; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Sand and Gravel—U. S. Engr. Office, 11 Barristers Hall, let contract furnishing sand and gravel at Nahant, to Boston Sand & Gravel Co., 88 Broad St., sand $1.36 per cu.yd., gravel $2.40 per cu.yd.

★Mass., Chelsea—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Naval Hospital Reservation, here, to Coleman Bros., 1 Marginal St., $8900 (30 days). Noted Apr. 10.

★R. I., Newport—Torpedo Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building, here, to Faillace Bros., 7 East 42nd St., New York City, (1) $167,273 (150 days), prices on (2), (3) and (4) also accepted. Noted May 15.

★N. Y., New York—Barracks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building receiving ship barracks, here, to Northeastern Constr. Co., 101 Park Ave., New York City, $2975, (15 days). Noted May 15.

Pa., Phila.—Elevator and Shafts—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 19, installing elevator and shafts in heavy machine shops, here, (1) work complete, from M. H. McCloskey, Jr., 1620 Thompson St., (1) $15,409 (120 days); F. G. Fearon Co., 280 Madison Ave., New York City, (1) $19,400 (120 days); (3) $4000 (135 days); Mansfield & Savage, 135 William St., New York City, (1) $21,999 (120 days); (2) $19,990 (120 days); (3) $7150 (30 days); A. B. See Elevator Co., 220 Bway., New York City, (2) $8800; Albro-Clem Elevator Co., Erie Ave. and D Sts., (2) $14,648 (165 days). Noted May 1.

D. C., Wash.—Grading—Dist. Comrs., Dist. Bldg., received bids May 15, grading (1) Whittier St., N. W. from Georgia Ave. to Piney Branch Rd.; (2) Douglas and Polk Sts., N. E. from Olive to 44th Sts., from G. Hyman, 1116 Morse St., N. E., (1) $.58 per cu.yd.; (2) $.74 per cu.yd. Vinson Contg. & Excavating Co., Baltimore, Md., (1) $.61 per cu.yd.; (2) $.85 per cu.yd. W. F. Cush, 201 S St., N. E., (1) $.80 per cu.yd.; (2) $.75 per cu.yd. Noted May 8.

★Va., Quantico—Officers' Quarters and Administration Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building, here, to J. K. Turton Corp., 101 Park Ave., New York City, $270,595 (100 days). Noted May 8.

★W. Va., Wheeling—Rip Rap—U. S. Engr. Office, Cincinnati, O., let contract furnishing 4000 tons rip rap stone for Ohio River Dams Nos. 12-16, to Cresap & Armstrong, Wellsburg, $19,200. Noted May 1.

S. C., Charleston—Dry Dock—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 19, building dry dock No. 2, here (1) work complete, from D. L. Taylor & Co., Inc., 409 Finance Bldg., Phila., Pa., based on actual cost of work, plus fixed fee of $300,000 to (1) with certain deductions should cost of work exceed certain fixed limits. (1) (900 days); (5) $150; (6) $.67; (7) $.60; (8) $200; (9) $200; (10) $1.50; (11) $30; (12) $30. G. Leary Constr. Co., 17 State St., New York City, did not submit straight bid, but sent in letter saying he would do work on a cost plus basis, similar to contract for work now being done for them by Emergency Fleet Corp.

★S. C., Paris Island—Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing 2 barracks, crew house, 6 out buildings, 2 storehouses, double officers quarters, wash house, cell house, bakery and work shop at Marine Barracks and Prison Camp, here, to Newport Contg. & Eng. Co., Law Bldg., Newport News, Va., $134,406 (100 days). Noted May 15.

Fla., Pensacola—Crane—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids May 19, installing one 20 ton electric traveling bridge crane, in wet basin boat shed, here, (1) work complete; (2) work complete in accordance with bidder's drawings and spec., from

Chesapeake Iron Wks., Westport, Ind., (1) $9460, (150 days).

Bedford Fdry. & Machine Co., Bedford, Ind., (2) $9775, (120 days).

Manning, Maxwell & Moore, 119 West 40th St., New York City, (2) $9855, (85 days).

Northern Eng. Wks., 2 Chene St., Detroit, (1) $10,430, (90 days).

Pawling & Harnishbaker, 38th and National Aves., Milwaukee, (2) $10,475, (150 days). Noted May 1.

★Fla., Pensacola—Sewer Discharge Pipe—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract extending 8-in. submerged discharge pipe, at Naval Air Sta., here, to Carroll Electric Co., 714 12th St., N. W., Wash., D. C., $11,490 (120 days). Noted May 8.

★O., Cincinnati—Bear Trap Leaves—U. S. Engr. Office, 1st Dist., let contract delivering and erecting bear trap leaves, for Dam No. 39, Ohio River, to Frandsen Constr. Co., 54 West Randolph St., Chicago, Ill., $31,200. Noted Mar. 6.

★Ill., Great Lakes—Machine Gun Range—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building, here, to Paschen Bros., 111 West Washington St., Chicago, $3900 (30 days). Noted Apr. 17.

★Mo., St. Louis—Levee Work—Secy. Mississippi River Comn., 1311 International Life Bldg., let contract for 290,000 cu.yd. earth work, in Lima Lake D. D., Ill., to H. Merritt, Duluth, Minn., $87,000. Noted Apr. 10.

★Cal., San Francisco—Dredging—U. S. Engr. Office, 401 Custom House, let contract dredging in Oakland Harbor, to San Francisco Bridge Co., Nevada Bank Bldg., $87,480. Noted Apr. 3.

Miscellaneous

PROPOSED WORK

Dam—Springfield, Mass.—Hampden Co. plans to build rein.-con. dam in Peconsic Brook in Forest Park. W. H. Brainard, Palmer, engr.

Trestle, etc.—Binghamton, N. Y.—See "Industrial Works."

Rubbish Incinerator—Syracuse, N. Y.—City having plans prepared for modern rubbish incinerator, to be operated in connection with new garbage disposal plant, to consist of sorting sheds and furnaces. About $100,000. H. C. Allen, city engr.

Transmission System—Coatesville, Pa.—Chester Valley Electric Co. plans to build transmission system from here to Downington. About $80,000.

Retaining Wall — Detroit, Mich. — City having plans prepared by Dept. Pub. Wks., for 1 mi. concrete retaining wall or dyke along water front in Fairview Sect. and for extensive system of sheet piling to protect low land subject to overflow. C. W. Hubbell, city engr.

Road Machinery—Clintonville, Wis.—City plans to purchase 1 road grader, 4 wheel scrapers, 3 dump wagons and 1 road plow. J. J. Waite, street comr.

Pumps—Winona, Wis.—City soon receives bids for 4 air lift pumps, capacity from 200 to 400 gal. each., and miscellaneous appurtenances. S. S. Strouse, secy. Alvord & Burdick, 8 South Dearborn St., Chicago, engrs.

Harbor Improvements—Los Angeles, Cal.—City voted $4,500,000 bonds to improve Los Angeles Harbor (San Pedro). J. W. Ludlow, harbor engr. Noted May 1.

BIDS DESIRED

Castings, etc.—Quincy (Boston P. O.) **Mass.**—Until May 28, by city, furnishing f.o.b. Quincy, castings, 168 tons pipe, 28 gates, 30 gate houses, 25 hydrants and 41 special castings. M. L. Brown, city engr.

Bituminous Material—St. George, S. I., N. Y.—Until May 29, by C. D. Van Name, pres. Richmond Boro., furnishing and delivering in tank cars at any railroad station in borough, 65,000 gal. bituminous material for road surfacing.

Flooring—Clearfield, Pa.—Until June 6, by Comrs. Clearfield Co., placing rein.-con. flooring on 205 ft. truss bridge over Susquehanna River, at Humphrey's Farm; also creosoted wood block flooring on 210-ft. truss bridge over Susquehanna River, known as Bloom Bridge. J. E. Dale, comr.

Crushed Stone, etc.—Pittsburgh, Pa.—Comrs. Allegheny Co. receiving bids furnishing 50,000 tons crushed stone, 2 mechanical unloaders and 2 street sweepers for Rd. Dept. C. G. Chalfont, 301 Court House, engr.

Pumps—Wheeling, W. Va.—Until May 31, by S. G. Smith, receiver, Benwood-McMechen Consolidated Water Co. furnishing 2 motor driven centrifugal pumps. L. Hudson, 801 House Bldg., Pittsburgh, Pa., engr.; advertised in this issue.

Culverts—Warren, Minn.—Until May 27, by A. G. Lundgren, aud. Marshall Co., furnishing portable culverts to be used on different state road construction jobs during year, f.o.b. Marshall Co. About $10,000.

Flusher and Sprinkler—Lewiston, Mont.—Until June 9, by city, furnishing auto mounted power flusher and sprinkler on 900 and 1200 gal. type. H. L. Fitton, clk.

Breakwater—Souris, P. E. I.—Until June 12, by Dept. Pub. Wks., Ottawa, Ont., delivering and placing of about 6000 cu.yd. rough stone on portions of breakwater. About $20,000. Noted Apr. 10 under "Canada."

Ice Breakers—Richmond, Que.—Until June 5, by Dept. Pub. Wks., Ottawa, Ont., rebuilding 3 ice breakers, close faced stone and filled crib, 54 x 127 ft. x 120 ft., shaped, 10 to 15 ft. wide. Noted Apr. 10 under "Canada."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Bricks—Boston, Mass.—Dept. Pub. Wks. received bids May 15 furnishing (a) paving brick, (b) sewer brick, from J. P. O'Connell Co., 73 Tremont St., (a) $18.50 per M, (b) $20.50; Starrett-Field Co., 161 Devonshire St., (a) $18; (b) $22; Boston Bldg. Co., 10 Tremont St., (a) $19; (b) $21.

★Sand and Gravel—Boston, Mass.—Dept. Pub. Wks. let contract furnishing sand and gravel, to J. C. Coleman & Sons, 1620 Tremont St., $1.24 per cu.yd.

★Tank—Esmond, R. I.—Esmond Mills let contract building rein.-con. tank, with 100,000 gal. capacity, to T. I. Ellis, 171 Westminster St., Providence.

Oil—Brooklyn, N. Y.—E. Riegelmann, boro. pres., received lowest 3 bids May 14, furnishing and delivering (a) 2,000,000 gal. asphalt road oil; (b) 150,000 gal. tar road oil; (c) trap rock; (d) 2000 cu.yd. sand; (e) 14,174,000 and 5,260,000 lbs. anthracite coal, from Standard Oil Co., 26 Bway., New York City, (a) $8115; Texas Co., 17 Battery Pl., New York City, (a) $8500; Warner-Quinlan Asphalt Co., 17 Battery Pl., New York City, (a) $9170; Barrett Co., 17 Battery Pl., New York City, (b) $15,125; New York Trap Rock Co., 101 Park Ave., New York City, (c) $25,465; J. J. Guinan, 2314 Gravesend Ave., (c) $25,465; (d) $6500; Wyoming Valley Coal Co., (e) $79,334; Bacon Coal Co., Reid and DeKalb Aves., (e) $88,428.

★Transmission Line—Detroit, Mich.—Detroit Edison Co., David Whitney Bldg., will build 55 mi. transmission line between here and Port Huron, involving 60 ft. poles set 40 to mile, supporting copper cable transmitting 66,000 volts. Work will be done by day labor.

★Paving Material—Springfield, Ill.—Dept. Pub. Wks. let contract furnishing 310,000 bbl. portland cement for state and Federal Aid road and bridge work, to Lehigh Portland Cement Co., 111 West Washington St., Chicago; 392,700 bbls. to Universal Portland Cement Co., 210 South La Salle St., Chicago; 215,100 bbl., to Atlas Portland Cement Co., 134 South La Salle St., Chicago; 239,000 bbl., to Missouri Portland Cement Co., International Life Bldg., St. Louis, Mo.; 347,200 bbl., to Continental Portland Cement Co., Wright Bldg., St. Louis, Mo.; 224,400 bbl., to Marquette Portland Cement Co.; 161,000 bbl., to Sandusky Portland Cement Co., Columbus, O. Noted Apr. 17.

★Breakwater — Milwaukee, Wis. — Park Bd. let contract building 600 ft. breakwater along lake shore, south of South Shore Park, to E. E. Gillen Constr. Co., $2.37 per ton.

★Swimming Pool—Missoula, Mont.—City let contract building swimming pool to H. Settergren, 543 Brooks St., $12,380. Noted Apr. 10.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Tuesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 8, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 5, 1919, for the construction of the United States post office at Denton, Texas. Drawings and specifications may be obtained from the Custodian of the site at Denton, Texas, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: May 26.

Highway Work

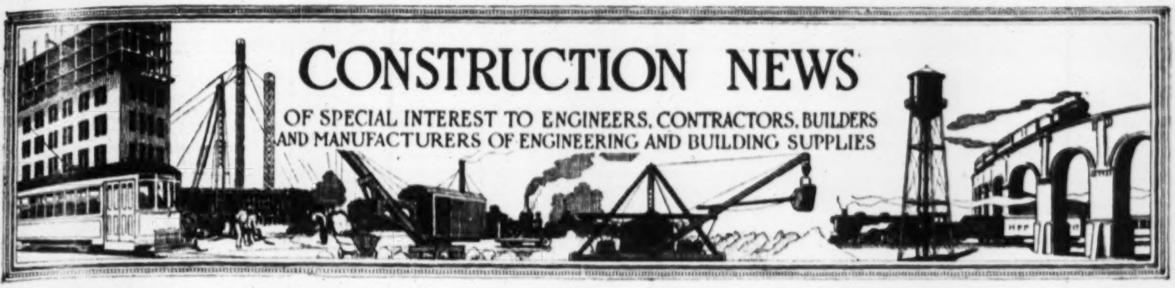
Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., May 26, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 13,623 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Blair County: 32,229 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Butler County: 11,065 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Cameron County; 26,648 ft. of Reinforced Concrete and Hillside Vitrified Brick in Clarion County; 4984 ft. of Reinforced Concrete in Clinton County; 16,552 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Crawford County; 33,917 feet of Bituminous Concrete Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Dauphin County; 53,372 ft. of Reinforced Concrete in McKean County; 17,891 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 10,554 ft. of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 13,464 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Union County; 9550 ft. of Reinforced Concrete in Venango County; 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren County; 27,688 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Wayne County and 2085 ft. of Reinforced Concrete in Westmoreland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

U. S. ENGINEER OFFICE, New London, Conn.—Sealed proposals for dredging in Greenwich Harbor, Conn., will be received here until 2 o'clock p. m., May 28, 1919, and then opened. Information on application.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 2	Newark, N. Y. Adv. May 15, 22 and 29.	May 15
June 3	Hartford, Conn.	May 29
June 4	Poughkeepsie, N. Y. Adv. May 22 and 29.	May 22
June 5	Bellevue, O.	May 22
June 6	Salem, Mass.	May 29
June 11	Baltimore, Md. Adv. May 22.	May 22
June 15	Duluth, Minn.	May 29

SEWERS

Bids Close		See Eng. News-Record
June 2	Hollidaysburg, Pa	May 29
June 4	Garner, Ia.	May 15
June 4	Weston, W. Va.	May 22
June 4	Cuyahoga Falls, O.	May 22
June 4	Freehold, N. J.	May 22
June 4	Ann Harbor, Mich. Adv. May 29.	May 29
June 4	La Crosse, Wis.	May 29
June 5	Scotland, S. D.	May 29
June 5	Lansing, Mich.	May 29
June 6	Parkston, S. D.	May 29
June 9	Pontiac, Mich. Adv. May 22.	May 22
June 9	Stratford, Conn. Adv. May 15.	May 15
June 9	Osgood, Ont.	May 22
June 10	Saginaw, Mich. Adv. May 29.	May 29
June 12	Westerly, R. I. Adv. May 29.	May 29
June 14	Brookhaven, N. Y.	May 29

BRIDGES

Bids Close		See Eng. News-Record
June 2	Lyons, Kan.	May 29
June 3	Ada, Minn.	May 29
June 4	Charleston, W. Va.	May 15
June 4	Swainsboro, Ga.	May 15
June 4	Boonville, Mo.	May 29
June 5	Stratford, Conn.	May 8
June 5	Philadelphia, Pa. Adv. May 29.	May 29
June 6	Monroe, Ga.	May 8
June 6	Danville, W. Va.	May 22
June 6	Madison, W. Va.	May 22
June 9	Montgomery, Ala. Adv. May 8.	May 8
June 10	Peninsula, O.	May 29
June 10	Akron, O.	May 29
June 16	Manitowoc, Wis.	May 29
June 16	Valdosta, Ga. Adv. May 22 and 29.	May 22
June 19	Harrisburg, Pa. Adv. May 29.	May 29
June 23	Osceola, Mo.	May 29

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 2	Osceola, Ark. Adv. May 22 and 29.	May 22
June 2	Saginaw, Mich.	May 29
June 2	Wilkes-Barre, Pa.	May 29
June 2	Aberdeen, Miss.	May 29
June 3	Massachusetts	May 29
June 3	Burlington, N. J.	May 22
June 3	Minot, N. B.	May 15
June 3	Griffin, Ga. Adv. May 22 and 29.	May 8
June 3	New York, N. Y. Adv. May 8.	May 8
June 3	Blair, Neb.	May 15
June 3	Indianapolis, Ind.	May 22
June 3	Butler, Pa. Adv. May 22 and 29.	May 22
June 3	Sanford, Fla.	May 22
June 3	Fremont, Neb.	May 22
June 3	Toledo, O.	May 29
June 3	Maryland	May 29
June 3	Buffalo, N. Y.	May 29
June 3	Jersey City, N. J.	May 29
June 3	Beytheville, Ark.	May 29
June 3	New York, N. Y.	May 29
June 3	Griffin, Ga.	May 29
June 3	Bellevue, Pa.	May 29
June 3	Auburn, N. Y. Adv. May 29.	May 29
June 3	Hayfield, Minn.	May 29
June 4	Indianapolis, Ind.	May 29
June 4	New Rockford, N. D.	May 15
June 4	Albion, Neb.	May 15
June 4	Bradford, O.	May 15
June 4	Burlington, N. J. Adv. May 22.	May 22
June 4	Ebensburg, Pa.	May 29
June 5	Ft. Edward, N. D.	May 29
June 5	South Dakota	May 29
June 5	New York, N. Y.	May 29
June 5	Santa Barbara, Cal.	May 29
June 5	Mt. Clemens, Mich.	May 29
June 5	Fayetteville, W. Va. Adv. June 5.	May 29
June 5	Metter, Ga.	May 15
June 5	Glenwood, Minn.	May 15
June 5	Seward, Neb.	May 22
June 5	Ponca, Neb.	May 22
June 5	Lyon, Neb.	May 22
June 5	Gastonia, N. C.	May 22
June 6	Rockford, Ill. Adv. May 29.	May 29
June 6	Red Wing, Minn.	May 22
June 6	Centersburg, O.	May 15
June 7	Vancouver, Wash.	May 29
June 7	Indianapolis, Ind.	May 29
June 9	Austin, Minn.	May 22
June 9	Hastings, Minn.	May 22
June 9	Bunnell, Fla.	May 29
June 9	Millersburg, Mo.	May 29
June 9	Daytona Beach, Fla.	May 29
June 10	Wilmington, Del.	May 29
June 10	Montivideo, Minn.	May 22
June 10	Marlington, W. Va.	May 22
June 10	Clarksville, Pa.	Apr. 3
June 10	Oregon	May 29
June 11	Morris, Minn.	May 22
June 11	Ann Arbor, Mich. Adv. May 29.	May 29
June 12	Brainerd, Minn.	May 22
June 12	Metter, Pa.	May 29
June 12	Pittsburgh, Pa.	May 22
June 12	Olean, N. Y. Adv. May 29.	May 29
June 13	Hinton, W. Va.	May 22
June 13	Bemedji, Minn.	May 22
June 14	Grand Rapids, Mich.	May 22
June 14	Indianapolis, Ind.	May 29
June 15	Beaver Crossing, Neb.	May 29
June 16	Elk River, Minn.	May 22
June 16	Fayetteville, Ark.	May 29
June 17	Henderson, N. C.	May 29
June 17	New York	May 29
June 17	Pennsylvania	May 29
June 17	Elbow Lake, Minn.	May 22
June 17	Luzerne, Minn.	May 22
June 17	Plymouth, Wis.	May 29
June 18	Moorehead, Minn.	May 22
June 18	New Mexico	May 29
June 19	Little Falls, Minn.	May 22
June 19	Junction City, Kan.	May 22
June 19	Brainerd, Minn.	May 29
June 20	Harrisonville, W. Va.	May 22
June 20	Indianapolis, Ind.	May 29
June 21	Indianapolis, Ind.	May 29
June 24	New Mexico	May 29
July 1	Marshall, Ark.	May 22

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
June 3	Sanford, Fla. Adv. May 29.	May 29
June 3	Henderson, Minn.	May 15
June 3	New Castle, Pa. Adv. May 2.	May 22
June 5	Marks, Miss.	May 22
June 6	St. George, S. I., N. Y.	May 29
June 10	Wapello, Ia. Adv. May 22 and 29.	May 22
July 1	Edwardsville, Ill.	May 15

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
May 31	Hartford, Conn.	May 29
June 9	Sarasota, Fla.	May 22
June 15	Manitowoc, Wis.	May 29
June 15	Sheboygan, Wis.	May 29
June 16	New Orleans, La.	May 22
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
June 2	Omaha, Neb.	May 29
June 4	New Brunswick, N. J.	May 22
June 4	Central Islip, N. Y.	May 15
June 5	Fergus Falls, Minn.	May 22
June 9	Wichita, Kan.	May 29
June 10	Bessemer, Ala.	May 15
June 10	Ashland, Ky.	May 29
June 11	Los Angeles, Cal.	May 29
June 12	Staunton, O.	May 22
June 12	Detroit, Mich.	May 22
June 14	Hubbard, O.	May 22
June 15	Anoka, Minn.	May 8
June 17	Ossining, N. Y. Adv. May 22 and 29.	May 22
June 17	Union Hill, N. J.	May 29
July 1	Austin, Minn.	May 22
July 2	Huntington, W. Va.	May 29
Aug. 1	Kenosha, Wis.	May 15

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
May 31	Boilers—Ft. Slocum, N. Y.	May 29
June 2	Buildings, Sewer, Water Mains, Etc.—Camp Travis, Tex. Adv. May 22 and 29.	May 22
June 4	Air Station—Spec. 3864—Galveston, Tex.	May 8
June 4	Bath House—Spec. 3786—Newport, R. I.	May 15
June 4	Repairing Pier Walls — Spec. 3815—Boston, Mass.	May 22
June 4	Revolving Platform—Spec. 3880—Hampton Roads, Va.	May 15
June 4	Storage Tanks—Spec. 3721 Cape May, N. J.	May 15
June 4	Fence — Spec. 3848 — Ft. Mifflin, Pa.	May 15
June 4	Roads — Spec. 3884 — Chatham, Mass.	May 15
June 4	Heating and Humidifying Apparatus—Spec. 3854—Philadelphia, Pa.	May 15
June 4	Oil Burning Equipment — Spec. 3847—Key West, Fla.	May 22
June 5	Post Office—Denton, Tex. Adv. May 15.	May 15
June 6	Post Office—Bellefourche, S. D. Adv. May 1.	May 1
June 9	Boilers—Denver, Colo.	May 29
June 9	Boiler—Monmouth, Ill.	May 29
June 9	Water Main and Sewer System — Washington, D. C. Adv. May 29.	May 29
June 11	Dredging — Spec. 3548 — Hingham, Mass.	May 22
June 11	Fire Protection System — Spec. 3808 — Hingham, Mass.	May 22
June 11	Power House—Spec. 3889—Montauk, N. Y.	May 22
June 11	Laundry — Spec. 3887 — Portsmouth, N. H.	May 22
June 11	T. N. T. Plant—Spec. 3866—Ft. Mifflin, Pa.	May 29
June 11	Boiler and Superheaters — Spec. 3707 — Charleston, W. Va.	May 29
June 11	Earth Fill—Spec. 3897—Anacosta, D. C.	May 29
June 11	Electric Distributing System—Spec. 3901—Hampton Rds., Va.	May 29
June 12	Rip Rap—Baltimore, Md.	May 29
June 16	Dredging — New York, N. Y. Adv. May 22 and 29.	May 22
June 16	Boiler—Cairo, Ill.	May 29
June 16	Boiler—Cincinnati, O.	May 29
June 18	Jetty Repairs—Galveston, Tex.	May 29

Bids Close		See Eng. News-Record
June 18	Radio Building—Spec. 3902 —Cayey, P. R.	May 29
June 18	Post Office—Clinton, S. C. Adv. May 29.	May 29
June 19	Levee Work—St. Louis, Mo. Adv. May 22 and 29.	May 22
June 20	Boilers—Memphis, Tenn. Adv. May 22 and 29.	May 22
June 23	Steel, Forgings, Castings, etc.—Wheeling, W. Va. Adv. May 29.	May 29
June 23	Dredging—New York, N. Y. Adv. May 29.	May 29
June 24	Dredging—Portland, Me. Adv. May 29.	May 29
June 25	Piles and Lumber—New Orleans, La.	May 29
June 25	Bulkhead — New Orleans, La.	May 29
June 27	Air Compressors—Florence, Ala.	May 29
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La.	May 29

MISCELLANEOUS

June 2	Wharf—Berthier, Que.	May 29
June 2	Retaining Wall — Wilkes-Barre, Pa.	May 29
June 2	Fireproofing—Trenton	May 29
June 2	Pipe, Etc.—Detroit, Mich.	May 29
June 3	Capstans and Hoists—Albany, N. Y.	May 15
June 3	Coal Handling Equipment——Toledo, O.	May 8
June 3	Paving Bricks — Saranac Lake, N. Y. Adv. May 8.	May 8
June 5	Ice Breakers, Richmond, Que.	May 22
June 5	Breakwater—Ft. William, Ont.	May 29
June 5	Road Material — Swarthmore, Pa. Adv. May 29.	May 29
June 5	Road Machinery — Two Rivers, Minn.	May 29
June 6	Flooring—Clearfield, Pa.	May 22
June 6	Paving Material—New York, N. Y.	May 29
June 9	Flusher and Sprinkler — Lewiston, Mont.	May 22
June 10	Road Roller — Saginaw, Mich. Adv. May 29.	May 29
June 10	Valves, etc.—Los Angeles, Cal.	May 29
June 12	Breakwater — Louis, P. E. I.	May 22
June 18	Pier, etc.—Chaumont, N. Y.	May 29

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

S. C., Eau Claire—Town plans election to vote on $40,000 bonds to build waterworks system to include pumping station, filter, etc. Engineer not selected.

Fla., Okeechobee—City election, June 20, to vote on $45,000 bonds to build waterworks.

Wis., Durand—See "Sewers."

Minn., Annandale—See "Sewers."

Minn., Harmony—City having plans prepared by Druar & Smith, engrs., 513 Globe Bldg., St. Paul, for improving waterworks and sewerage systems.

Minn., Walnut Grove—See "Sewers."

Mont., Roundup—City voted $15,000 bonds to build 500,000 gal. concrete reservoir. F. Quinnell, Roundup, engr. Noted **Mar. 27.**

N. M., Albuquerque—City receives bids in June, laying 12,000 ft. water mains. A. R. Hebenstreit, city mgr.

Cal., Calexico—See "Excavation and Dredging."

Cal., Los Angeles—Bd. Pub. Serv. plans election June 24 in Impvt. Dist. No. 9, San Fernando Valley to vote on $150,000 bonds to build system to distribute water from aqueduct for irrigation and domestic uses. W. Mulholland, 645 South Olive St., engr.

Cal., Oakland—East Bay Water Co., 9th St. and Bway., preparing plans for 20,000,000 gal. reservoir on upper 39th Ave., Fruitvale Dist. About $100,000.

BIDS DESIRED

Mass., Salem—Until June 6, by H. K. Barrows, city engr., 6 Beacon St., Boston, laying 1200 ft. 36-in. water main under North River. All diver work, 2-12 ft. deep. About $50,000.

Conn., Hartford—Until June 3, by Bd. Contr. and Supply, Municipal Bldg., building portion of Gully Brook Conduit, from point near Pliny St. to near Greenfield St., consisting of 306 ft. 8 ft. 8 in. x 8 ft. 6 in. and 910 ft. 8 x 8 ft. rein.-con. conduit. R. N. Clark, city engr.

Minn., Duluth—Until June 15, by F. G Phillips, comr. water and light dept., building 200,000 gal. rein.-con. cistern, at foot of Commonwealth Ave., involving 450 cu.yd. earth excav., 325 cu.yd. rein.-con. and 26 tons steel reinforcement.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Miss., Hollandale**—Comrs. Black Bayou D. D., Greenville, let contract building 1-story, pumping plant, sluiceways and foundations for machinery here, to Delta Cement Tile Co., Greenville, $24,600. Noted Apr. 17.

Sewers

PROPOSED WORK

N. Y., Rochester—See "Streets and Roads."

Pa., Pittsburgh—Cty soon lets contract building sewers in Harbor, Hillsdale, Hetzell, Asylum, Bader, Admiral Sts., Fall Way and private property from Miles Way to existing sewer on Firth St. T. M. Reed, City County Bldg., engr. Noted **May 8.**

W. Va., Ceredo—City having estimates made and preliminary plans prepared building 12,000 ft. sanitary sewers, in various streets. About $30,000. Eng. Serv. Co., Huntington, engrs.

W. Va., Warwood—City plans to issue $17,000 bonds to build sewers in various streets. W. F. Bartels, recdr.

Ky., Greenup—City having preliminary plans prepared and estimates made for building sanitary sewerage system on Main, Washington and Harrison Sts. About $20,000. Eng. Serv. Co., Charleston, W. Va., engrs.

O., Barberton—City soon receives bids building West Side Lateral Sewerage System. R. W. Pratt, Hippodrome Bldg., Cleveland, engr.

Wis., Durand—City having plans prepared by Druar & Smith, engrs., 513 Globe Bldg., St. Paul, for sewerage and waterworks systems.

Wis., Plymouth—City soon lets contract laying 1200 ft. 10-12 in. vitr. sewer in Main and Plymouth Sts. Cost between $15,000 and $16,000. J. Donohue, York Bldg., Sheboygan, engr.

Minn., Annandale—City having plans prepared by Druar & Smith, engrs., 513 Globe Bldg., St. Paul, for sewerage and waterworks systems.

Minn., Harmony—See "Waterworks."

Minn., St. Paul—Bd. Pub. Wks. having tentative plans prepared building sewers in St. Anthony Hill Project between Hamline, Summit and Western Aves. and Front St., cost, $1,000,000; Kittsondale System between Hamline and Dayton Aves., Mississippi River and Great Northern Ry., $600,000; Arundel-Kent System between Atwater, Dale and Maryland Sts. and Western Ave., $100,000. This is part of $5,000,000 expenditure contemplated by city. M. N. Goss, comr.

Minn., St. Paul—City soon receives bids building 70 x 120 ft. septic tank for sewage disposal at Field and Sheridan Aves., 17 ft. below grade, walls 3 ft. 6 in. thick at bottom, 16 in. thick at grade. C. A. Hausler, city engr.

Minn., Walnut Grove—Village having plans prepared by Druar & Smith, engrs., 513 Globe Bldg., St. Paul, for sewerage and waterworks systems.

Mont., Butte—Silver Bow Co. plans to build sewers in East Butte and McQueen additions, involving 5500 ft. 8-in. and 3000 ft. 12-in. pipe. About $18,000. M. J. Laughrin, co. engr.

Mont., Cut Bank—City Council soon lets contract building sewerage system, to include 2 sewage disposal plants, 5190 lin.ft. 12-20 in. pipe, 7300 cu.yd. earth and 3100 cu.yd. rock trenching, septic tank, etc. About $48,000. H. P. Walter, Minot Bldg., Great Falls, engr. Noted May 8.

Mo., Macon—City rejected bids received May 5, building sewage disposal plant. F L. Wilcox, Syndicate Trust Bldg., St. Louis, engr. Noted Apr. 17.

N. M., Albuquerque—City receives bids in June, laying 6000 ft. storm sewer. A. R. Hebenstreit, city mgr.

Ore., Astoria—City soon lets contract building sewer and drainage system in Dist. No. 5, involving 120 lin.ft. 12-16-in. vitr. and 4798 lin.ft. 30-48-in. rein.-con. pipe, 9060 cu.yd. embankment, etc.; Dist. No. 9, 1845 lin.ft. 6-15-in. vitr. pipe, etc.; 2nd St., 400 lin.ft. 8-in. vitr. pipe, etc. G. T. McClean, city engr Noted May 1.

Ore., Portland — City received no bids building sewers in East 63rd and Halsey Sts. About $343,519. A. Laurgaard, city engr. Noted May 15.

Ont., Belleville—Town plans to build sewers. About $25,000.

BIDS DESIRED

R. I., Westerly—Until June 12, by Bd. Water Comrs., furnishing material and labor to complete about 8 mi. 6-24-in. pipe sewers with manholes complete; also building 1 main pumping station and 1 sub-pumping station. L. W. Arnold, chn.; advertised in this issue.

N. Y., Brookhaven—Until June 14, by Comrs. Port Jefferson Sewer Dist., building sewers, sedimentation tank and screen chamber; advertised in this issue.

Pa., Holidaysburg—Until June 2, by H. L. Stutz, chn. sewer com., trenching and laying 600 ft. 8 in. terra-cotta sewer pipe in Gerber St. About $10,000. J. L. Henry, Walsh Bldg., engr.

Pa., Penns Sta.—Until June 2, by boro., building sanitary sewerage system and pumping station. Work involves 10,000 lin. ft. 8-in. t.c. sewer, 1500 lin.ft. 10-in. sewer, pumping station and equipment. J. B. Smith, Harrison Ave., secy.

O., Cleveland—City receiving bids building sewer in Russell Rd. from Ware Park to Superior Ave., involving 1160 ft. 7 ft. 10 in. and 40 ft. 6 ft. 9 in. brick sewers, 30 ft. 12 in. vitr. pipe, etc. R. Hoffman, city engr.

Mich., Ann Arbor—Until June 4, by Bd. Pub. Wks., building storm sewers in Detroit St. from Kingsley St. to 5th Ave.; Catherine St. from Main St. to 5th Ave.; South University Ave from Linden St. to Oxford Rd., East University Ave. from South University to North University Aves.; Bway from Huron River southwesterly about 300 ft. Work involves 4700 lin.ft. 12 and 15-in. vitr. pipe, 1800 cu.yd. excav., 47 inlets and 18 manholes. I. G. Reynolds, city clk.; advertised in this issue.

Mich., Lansing—Until June 5, by J. A. Parsons, city clk., building sewer in Francis and Fernwood Aves. E. G. Eddy, city engr.

Mich., Saginaw—Until June 10, by R. F. Johnson, comr. of light, water and sewers, building rein.-con. or segment block sewer in Florence St. from point 100 ft. east of center line Queen St., to Salt St. and Salt St. from Florence to Holmes Sts.; advertised in this issue.

S. D., Parkston—Until June 6, by city building 6½ mi. 8-18 in. sewers. Dakota Eng. Co., Mitchell, engrs.

S. D., Scotland—Until June 5, by city, building 3 mi. 8-18 in. sewers. Dakota Eng. Co., Mitchell, engrs.

Cal., Santa Barbara—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Brooklyn—E. Riegelmann, boro. pres., received lowest 3 bids May 21, furnishing all labor and material for building sewers in Ave. U, from C. W. MacDonald, 1910 Webster Ave., New York City, $195,801; J. C. Sheridan, $195,869; J. F. Cogan, 233 Bway., New York City, $249,600. Noted May 15.

★**N. Y., Brooklyn**—E. Riegelmann, boro. pres., let contract furnishing all labor and material for building sewers in Rutland Rd. from Remsen to Nostrand Aves., to Rosenthan Eng. Co., 228 Jackson St., $242,511. Incorrectly noted in our issue of May 22.

★**N. Y., Buffalo**—City let contract excavating and laying sewer in Ogden St., to drain 1000 acres outside of city and relieve flood conditions of East Buffalo, to Graham & Henderson, Cleveland, $347,917. Work involves 11,000 ft. 96 in. segmental block sewer, 78,500 cu.yd. earth and 6000 cu.yd. rock trenching.

Sewers (Continued)

★O., Barberton—City let contract building North End Lateral Sewerage System, to W. J. Irwin & Son, Greenville, $75,000. Noted May 8.

O., Cleveland—City received bids building sewer in (a) East 19th St. from Prospect to Central Aves., involving 630 ft. No. 2 and 3 C brick sewers and 340 ft .12 and 20 ft. vitr. pipe; (b) Euclid Ave. from London Rd. to Wayside Ave., 765 ft. No. 3 and 4 C brick sewers and 30 ft. 12 in. vitr. pipe, from Amata Constr. Co., 343 The Arcade, (a) $11,120; P. W. Graham, 1274 West 108th St., (a) $11,249, (b) $13,774; W. P. Gibbons, 340 Leader-News Bldg., (a) $12,783; Gould & Maybach, 823 East 150th St., (b) $11,959; N. Iafornaro, 3218 Murray Hill Rd., (b) $12,917.

★O., Cleveland—City let contract building sewer in Miles Ave. from East 133rd St. to city limits, to Manson Co., 345 The Arcade, cost $20,978; Bellaire Rd. from Jasper Ave. to Big Creek, to Brookside Constr. Co., 3905 West 20th St., $10,310; Superior Ave. from East 12th to 22nd Sts., to P. Ciraci, 11811 Browning Ave., $31,916. Noted May 15.

O., Cleveland—Dept. Pub. Serv. received lowest 3 bids building sewage treatment works, at westerly site, from Minnick-Gibbons Co., 5309 Prospect Ave., $640,926; Masters & Mullen Co., Electric Bldg., $678,001; Great Lakes Dredge & Dock Co., Williamson Bldg., $798,456. Noted May 1.

Mich., Detroit—Dept. Pub. Wks. received bids laying 2458 ft. 20-in. vitr. crock sewer in Hart Ave., from Charlevoix to Mack Aves., from J. M. Affeld, 1208 Ford Bldg., $17,252; Detroit Contg. Co., Penobscot Bldg., $17,879; Lennane & McIlvenna, Union Trust Bldg., $24,459. Noted May 15.

★Neb., Geneva—City let contract building sewerage system, to S. A. Canaglia & Co., Omaha, $30,225. Noted May 15.

★Wash., Seattle—Bd. Pub. Wks. let contract building Firland Sanitorium Sewer, involving 10,710 lin.ft. clay pipe, to Coluccio & Niblett, Seattle, $29,372. Noted May 22.

Bridges

PROPOSED WORK

N. Y., Watertown—City defeated $60,000 bond issue to build new concrete bridge over Black River, on Pearl St., and $125,000 bond issue for bridge over Black River on Diamond Island. E. W. Sayles, city engr. Noted Mar. 6.

S. C., Gaffney—Cherokee Co. plans to build 80-ft. rein.-con. arch bridge and approaches over Little Thickety Creek on Natl. Highway, 16 ft. wide. Federal Government asked to appropriate toward cost. N. C. Hughes, co. engr.

Ga., Canton—Comr. Rds. and Revenues of Cherokee Co., soon lets contract building rein.-con. bridge over Little River 2 mi. from Woodstock, to consist of 2 concrete abutments, 3 concrete piers, 5 concrete pile bents, two 44 ft. and seven 20 ft. spans of beam type floor system. Work involves 445 cu.yd. concrete and 67,745 lbs. steel; also building 2 culverts, each to consist of 2 abutments and involving 210 cu.yd. concrete and 4565 lbs. steel. Separate bids will be accepted on bridge and culverts. Johnson & Morgan, 500 Forsythe Bldg., Atlanta, project engrs.

Mich., Mt. Clemens—Comrs. Macomb Co. having plans prepared by C. V. Dewart, engr., c/o State Highway Dept., Lansing, for 230 ft. rein.-con. or steel bridge over Clinton River on Gratiot Ave., 60 ft. wide, 45 ft. roadway with walk on either side.

Wis., Menasha—Bd. Pub. Wks. will readvertise for bids for 430 lin.ft. rein.-con. bridge over Fox River. Former bids not opened. Parsons & Obert, Milwaukee, engrs. Noted Apr. 17.

Ia., Anamosa—Comrs. Jones Co. soon receive bids building 80 ft. pony truss bridge, 20 ft. wide, 4 ft. sidewalks, concrete flooring. About $12,000. J. F. Whalen, co. engr.

Ia., Grundy Center—Grundy Co. soon receives bids building concrete and pony truss bridges with concrete floors and abutments in various townships. Plans being prepared by Iowa Highway Comn., Ames. About $35,000. E. A. Cra[illegible] co. engr.

Ia., Leon—Decatur Co. receives bids in June building 28 box culverts and 200 ft. high steel truss bridge, 20 ft. wide, with concrete floor and abutments. About $45,000. O. Sjolander, co. engr.

Ia., Sigourney—Bd. Supervs. Keokuk Co. receives bids in June building 26 box culverts and 80 ft. pony truss bridge, 20 ft. wide, concrete floor and abutments. About $25,000. R. Johnson, co. engr.

Ia., Wapello—Louisa Co. soon receives bids building 130 ft. high steel truss bridge with concrete floor and abutments, 18 ft. wide. Plans being prepared by Iowa Highway Comn., Ames. About $14,000. V. Thompson, co. engr.

Minn., Minneapolis—Comrs. Hennepin Co. receive bids in August building 840 ft., concrete and steel bridge over Minnesota River, 10 mi. from here. About $160,000. E. E. Tirrell, co. surv.

Kan., Hutchinson—City rejected bids received May 9, building 2 concrete bridges over Cow Creek. About $20,000. R. B. Lee, city engr.

Tex., Jasper—See "Streets and Roads."

Ore., Astoria—Port of Astoria Comn. having plans prepared by H. Nunn, state highway engr., Salem, for bridge over Young's Bay. About $240,000. Cost to be borne by Clatsop Co., State and Federal Government.

Ore., Portland—State Highway Comn., Portland, soon lets contract building 6 rein.-con. bridges over Columbia River Highway between Scappoose and Deer Island; one 50 ft. steel and concrete I beam bridge, on Pacific Highway between Jefferson and Albany, Linn Co.; one rein.-con. bridge on Columbia River Highway, near Globe, Columbia Co., also 850 lin.ft. timber trestle on Pacific Highway between Jefferson and Albany, Linn Co. H. Nunn, Salem, state highway engr.

Que., Yamachiche—J. Meunier, secy. municipal council, soon lets contract building rein.-con. bridge. About $15,000. Noted May 8.

Man., Winnipeg—City voted $150,000 bonds to replace Maryland Bridge over Assinboine River. A. Brereton, city engr.

BIDS DESIRED

Pa., Harrisburg—Until June 19, by State Highway Comn., building 43 rein.-con. bridges with 24 ft. roadways in Huntington, Clinton, Centre, Lebanon, Dauphin, Perry, Juniata, Snyder, Lancaster, Cumberland and Adams Counties. L. S. Sadler, state highway engr.; advertised in this issue.

Pa., Philadelphia—Until June 5, by G. E. Datesman, dir. Dept. Pub. Wks., building concrete arch. bridge, 86-ft. span., 78 ft. wide; also flat slab construction bridge incased in concrete with 32 ft. clear span, 82 ft. wide; advertised in this issue.

Fla., Bunnell—See "Streets and Roads."

O., Akron—Until June 10, by Comrs. Summit Co., building 48 ft. rein.-con., slab girder bridge over old Ohio Canal on Ash St., 42 ft. wide; also repairing bridge over Ohio Canal. C. Costigan, co. engr. Noted May 8.

Wis., Manitowoc—Until June 16, by Klug & Smith, engrs., 69 Wisconsin St., Milwaukee, building 396 ft. double leaf bascule steel bridge, with 100 ft. draw, concrete abutments, etc., 25 ft. wide on 9th St. About $60,000. Noted Feb. 6.

Minn., Ada—Until June 3, by D. E. Fulton, aud. Norman Co. building 3 concrete and steel bridges over Judicial Ditch No. 56, Norman and Clay Counties.

Minn., Brainerd — See "Streets and Roads."

Kan., Lyons—Until June 2, at office of E. H. Sledd, clk. Rice Co., for constructing Sterling Bridge, in Sterling Twp., on new Santa Fe Trail Rd. 2½ mi. from Sterling, consisting of eleven 43 ft. spans, 24 ft. roadway, height over all 21 ft., reinforced concrete girder or plain concrete abutments and rein.-con. piers.

Mo., Boonville—Until June 4, by Cooper Co., building 60 ft. steel bridge, 14 ft. wide, concrete abutments, in Clear Creek Twp. E. T. Hale, Boonville, engr.

Mo., Osceola—Until June 23, by St. Clair Co., building two 14 x 60 ft. and one 14 x 110 ft. steel span, concrete or wooden floors. Work consists of 3 sets of abutments, involving 500 cu.yd. concrete or stone. L. P. Gregg, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Montgomery—Comrs. Lycoming Co., (Williamsport), let contract building rein.-con. bridge over Susquehanna River, here, to W. R. Cliffe, Abbott Bldg., Philadelphia. About $259,500.

★W. Va., Pineville—Comrs. Wyoming Co. let contract building 2 concrete arch bridges over Barkers' Run to Luten Bridge Co., Huntington, $12,416. Work involves 446 cu.yd. rein.-con., 119 cu.yd. concrete and 12 tons steel. Noted May 15.

★S. C., Lockhart—Chester Co. (Chester), and Union Co. (Union) let contract building 694 ft. bridge over Broad River, to Southern Bridge Co., Birmingham, Ala., $59,016. Work involves 885 cu.yd. concrete and 330 tons steel, etc.

★Wash., Spokane—Comrs. Spokane Co. let contract building 100 ft. concrete bridge over Latach Creek, 2½ mi. west of here, to C. A. McClung, 904 East Mission St., $12,850. Noted May 22.

★Ont., St. Thomas—Elgin Co. let contract building concrete and steel highway bridge, to I. W. Chivers, Belmont, cost $11,800.

Structural Steel

PROPOSED WORK

Tex., Jasper—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn — See "Industrial Works."

Reinforced Concrete

REINFORCED CONCRETE

PROPOSED WORK

N. Y., Brooklyn—See "Industrial Works."

Pa., Frankford—See "Miscellaneous."

S. C., Gaffney—See "Bridges."

Ore., Tillamook—See "Industrial Works."

Que., Yamachiche—See "Bridges."

BIDS DESIRED

Pa., Harrisburg—See "Bridges."

Pa., Phila.—See "Bridges."

Ala., Montgomery—See "Bridges."

Minn., Brainerd—See "Streets and Roads."

Minn., Duluth—See "Water Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn — See "Industrial Works."

★S. C., Lochart—See "Bridges."

Streets and Roads

PROPOSED WORK

Massachusetts—State Highway Comn., Capitol, Boston, having plans prepared for 24,000 ft. Mohawk Trail Highway, bituminous macadam, 18-24 ft. wide, Greenfield and Shelburne Twps. About $175,000. A. W. Dean, state highway engr.

Mass., Chicopee—Bd. Pub. Wks. soon receives bids paving various streets with concrete. About $45,805.

Mass., Fall River—City soon receives bids paving with Hassam concrete 14th St., cost $6500; Brownell St., $8300; Stafford Rd., $8300; Plymouth Ave., $3900; Stetson St., $4000 and Columbia St., $11,100.

R. I., Bristol—Town appropriated $50,000 bonds to improve Wood and High Sts. J. H. Coggeshall, clk.

N. Y., Binghamton—Council adopted ordinances to build concrete curb and gutter on Fairview Ave.; pave Prospect Ave. from Chenango to Way Sts.; also pave roadways of bridges on Washington and Court Sts. About $12,500. W. E. Weller, city engr.

N. Y., Carthage—Village plans to pave Francis St.; also West St. from Canal to Thorpe Sts.; South Washington St. from State to West Sts.; South Clinton St. from State to West Sts.; South Mechanic St. from State to West Sts.; Canal St. from State to West Sts.; North Clinton St. from State to Budd Sts.; Alexandria St. from Adelaide to Boyd Sts.; Budd St. from North James to North Clinton Sts. and North Washington St. from State to Fulton Sts. Cost between $80,000 and $100,000. Address C. F. Adams, village pres.

Streets and Roads (continued)

N. Y. Geneva—Bd. Pub. Wks. soon receives bids paving West, High, Pine and Castle Sts. Cost between $20,000 and $25,000. J. W. Brenan, city engr.

N. Y., Rochester—City passed ordinance to grade walks and build sewers in Northland Ave., cost $20,300; Winton Rd., $70,000; Stanfield St., $4100; Iceland Park, $6600. C. A. Poole, city engr.

N. Y., Rochester—City plans to pave Sterling St., asphalt, cost $12,750; widen Wisconsin St., $2000. C. A. Poole, city engr.

N. Y., Syracuse—City plans to pave Granes St. from Beecher to Highland Sts.; Manlius St. from Butternut to James Sts.; East Fayette St. from Warren to Montgomery Sts.; West Genesee St. from Salina to West Sts.; South Ave., from West Onondaga to Cortland Aves.; Cortland Ave. from Salina St. to Midland Ave.; West Genesee St. from Liberty St. to Erie Canal; East Genesee St. from Salina to Warren Sts. About $500,000. New York State Rys. will appropriate toward cost.

Pa., Ebensburg—Supervs. East Carroll Twp., c/o Controller Cambria Co., rejected bids reconstructing 7 mi. and 152 ft. road in East Carroll Twp., from Patton to Carrolltown and from Bradley Junction to 1 mi. south of Carrolltown, 18 ft. wide. Work will be readvertised calling for 16 ft. roadway of brick on concrete and slag base. O. P. Thomas, Leader Bldg., Johnstown, engr. Noted May 1.

Pa., Palmerton—Town voted $100,000 bonds to pave and improve streets.

Del., Middletown—City soon receives bids repaving Broad, East and Main Sts., concrete base with bituminous binder. About $45,000.

W. Va., Charleston—Kanawha Co., Union Dist., plans election soon to vote on $150,000 bonds to build roads. P. J. Walsh, Charleston, engr.

W. Va., Elkins—Comrs. Randolph Co. soon receive bids building 2 mi. road between Roaring Creek Junction and Barbour Co. line, waterbound macadam. About $17,462. F. A. Parsons, engr.

W. Va., Fayetteville—Fayette Co., Quinnimont Dist., election June 17, to vote on $194,000 bonds to improve roads. J. K. McGrath, Fayetteville, engr.

W. Va., Fayetteville—Fayette Co. election June 10, to vote on $125,000 bonds to improve roads. J. K. McGrath, co. engr.

W. Va., Fayetteville—Fayette Co., Kanawha Dist., voted $379,000 bonds to improve roads. J. K. McGrath, Fayetteville, engr. Noted May 8.

W. Va., Hinton—Comrs. Summers Co. soon let contract grading, furnishing material and laying 9 ft. pavement on 3 mi. Hinton-Powleys Creek Rd., grading 20 ft. wide. About $30,000. J. D. French, engr.

W. Va., Hinton—Summers Co., Pipestem Dist., election June 7, to vote on $22,700 bonds to improve roads. Z. V. Burke, Hinton, engr.

W. Va., New Cumberland—Comrs. Hancock Co. plan to build 2 mi. New Cumberland-Weirton Rd., grading 22 ft. wide, surfacing 9 ft. wide, involving 12,000 cu.yd. excav., 9400 sq.yd. brick surfacing, 10,500 sq.yd. concrete curb and gutter. About $55,000. C. E. Grafton, New Cumberland, engr. Noted Mar. 6.

W. Va., Princeton—Comrs. Mercer Co. receive bids about July 1, building 6 mi. Raleigh-Grayson-Turnpike, 16 ft. wide, waterbound macadam. G. Barton, Co., engr.

W. Va., Sutton—Comrs. Braxton Co. having plans prepared building 1 mi. Elk River Rd., 26 ft. wide, involving 13,000 cu.yd. excav., cost $13,000; 3 mi. Sutton-Nicholas Rd., 26 ft. wide, 12,000 cu.yd. excav., $13,000. R. M. Cavendish, Sutton, engr.

W. Va., Warwood—City plans to issue $119,000 bonds to improve roads. W. F. Bartels, recdr.

W. Va., Winfield—Comrs. Putnam Co. plan to build 4 mi. Culloden-St. Albans Rd., grading 24 ft. wide, surfacing 16 ft. wide, involving 40,000 cu.yd. excav., 37,000 sq.yd. surfacing. About $140,000. G. H Davis, 4 Dyer Apartments, Charleston, engr

N. C., Lenoir—Caldwell Co. voted $250,000 bonds to build roads. J. L. Cottrell, clk.

S. C., Bishopville—Lee Co. plans to relocate, grade and surface 28.5 mi. road from Camden to Kingstree, 30 ft. wide, cost $57,000; 19.5 mi. road from Sumter to Darlington, 30 ft. wide, $40,000. Federal Government asked to appropriate toward cost. J. R. Pennell, Commercial Bank Bldg., Columbus, engr.

S. C., Saluda—Saluda Co. plans to relocate, grade, drain and surface 15 mi. road from Batesburg to Saluda, 30 ft. wide. About $40,000. Federal Government asked to approriate toward cost. J. R. Pennell, Commercial Bank Bldg., Columbus, engr.

Fla., Okeechobee—City election June 20 to vote on $80,000 bonds to pave streets.

Miss., Brandon—Highway Comn. Pelahatchie Precinct Separate Rd. Dist., Rankin Co., rejected bids improving 6 mi. Federal Aid Rd. No. 5, between Jackson and Meriden. Work will soon be re-advertised. Noted May 8.

La., Winnsboro—Franklin Parish voted $750,000 bonds to build and improve 117 mi. roads.

Ky., Greenup—City having preliminary plans prepared and estimates made for 14,000 yd. brick or bitulithic pavement on Main, Washington and Harrison Sts. About $50,000. Eng. Serv. Co., Charleston, W. Va., engrs.

O., Wellsville—City plans to grade, pave, curb and build sewers in .76 mi. Chester Ave. from 15th to 22nd Sts. Work involves 12,700 sq.yd. vitr. brick pavement, 7384 lin. ft. combination curb and gutter, 450 lin.ft. concrete abutting, 158 lin.ft. straight and 410 lin.ft. circular curb, 9391 cu.yd. earth excav. and 420 ft. 15 and 30 in. sewers. About $56,912.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with sheet asphalt on 6-in. concrete foundation, Amherst or Medina curbstone, Epworth Blvd. from Tireman to Daley Aves., 46 ft. wide, less double track, about $66,310; Epworth Blvd. from Warren to Tireman Aves., 46 ft. wide, less double track, $56,430; Richter Ave., from McClellan to Pennsylvania Aves., 26 ft. wide, $10,320; Clairpointe Ave. from Essex Ave. to point 520 ft. south of Jefferson Ave., $39,250; with one course concrete; alley between Baldwin, Seyburn, Sylvester and Canfield Aves., 16-18 ft. wide, $7660; alley parallel to Chene St. between Ferry and Palmer Aves., 18 ft. wide, $2190; alley between Rivard, Russell, Watson and Erskine Sts., 20 ft. wide, $2500; alley between 15th, 16th, Stanley and Antoinette Aves., 20 ft. wide, $3040; alley between 2nd, 3rd, Burlingame and Webb Aves., 18 ft. wide, $4430; alley between Lawton, Linwood, Columbus and Montgomery Aves., 18 ft. wide, $4630.

Mich., Ford (Wyandotte P. O.)—Village having plans prepared by M. L. Brown & Son, engrs., 823 Chamber of Commerce, Detroit, grading, shaping, draining and paving with 1 course concrete and curbing with cement, 3000 ft. Goddard Rd., 30 ft. wide, and 1400 ft. Hudson St., 24 ft. wide.

Mich., Hamtramck—Village plans to pave with asphaltic concrete or concrete 2300 ft Yemens Ave. from Joseph Campau to Conant Aves.; 1300 ft. Mitchell Ave. from Holbrook to Evaline Aves.; 1100 ft. Norwalk Ave. from Gallagher to Conant Aves.; 900 ft. Evaline Ave. from Lumpkin to Dequindre Ave.; 1000 ft. Oliver Ave. from Conant Ave. to easterly village limits, 24 ft. wide; also paving and widening 1900 ft. Joseph Campau Ave. from city limits to Grand Trunk Ry.

Mich., Kalamazoo—City plans to pave with brick, concrete base, Oakland Dr., cost, $159,498; Douglas Ave., $51,460; Porter St., $20,712; Ransom St., $10,778; Pitcher St., $6500; Church St., $7456; with asphaltic concrete, Grand Ave., $8653; Prairie Ave., $14,236. A. Lenderink, city engr.

Mich., Kalamazoo — Comrs. Kalamazoo Co. soon let contract grading, shaping, building drainage structures and paving with waterbound macadam 14 mi. road in Assessment Dists. Nos. 2, 3, 4 and 7, 18 ft. wide.

Wis., De Pere—City council voted $15,000 bonds to improve streets.

Wis., Sheboygan—City having plans prepared grading, curbing, guttering and paving with concrete, 14 blocks North 6th St. from Pennsylvania to Michigan Aves., 20 ft. wide, cost between $15,000 and $20,000, grading, curbing, guttering and repaving with vitr. brick, 18 blocks North Water St., Erie and Center Aves., 20 ft. wide, $25,000. C. U. Boley, city engr.

Wis., Sheboygan—City plans to grade and pave with 2 course rein.-con. and build sidewalks with combined curb and gutter on 3.5 mi. East Water St., also 10th St. from Jule to Superior Ave., 15 ft. wide. Work involves 5920 sq.yd. concrete, 1925 lin.ft. concrete curbing, and 1925 lin.ft. concrete gutter. About $18,000. C. U. Boley, city engr.

Minn., Appleton—H. W. Steele, village aud., receives bids about June 1, paving 25 blocks, 30 or 50 ft. wide, involving 40,000 sq.yd. J. W. Shaffer & Co., 405 New York Life Bldg., Minneapolis, engrs.

Minn., Blooming Prairie—T. J. Cashman, village aud., receives bids about June 1 paving 7 blocks, 60 ft. wide, involving 15,000 sq.yd. J. W. Shaffer & Co., 405 New York Life Bldg., Minneapolis, engrs.

Minn., Luverne—Comrs. Rock Co. plan to pave and gravel 7 mi. road. About $175,000. D. E. Davidson, Luverne, engr.

Minn., Slayton—B. Tietema, village aud., receives bids about June 1, paving 5 or 6 blocks, 80 ft. wide, involving 20,000 sq.yd. J. W. Shaffer & Co., 405 New York Life Bldg., Minneapolis, engrs.

Minn., Spring Valley—E. H. Adams, village aud., receives bids about June 1, paving 7 blocks, 50 ft. wide, involving 20,000 sq.yd. J. W. Shaffer & Co., 405 New York Life Bldg., Minneapolis, engrs.

Minn., Windom—Comrs. Cottonwood Co. rejected bids graveling 17.5 mi. Federal Aid Project No. 43, State Rd. No. 12. Noted May 1.

Kan., Maryville—City retained C. McCrea, engr., 314 Republic Bldg., Kansas City, Mo., to prepare plans for 25,000 sq.yd. vertical fibre brick paving. C. Pusch, mayor.

Kan., Topeka—City receives bids about June 10, paving 8 blocks of concrete alleys, 7 blocks 3- and 4-in. vertical fiber brick streets, and 20 blocks asphaltic concrete streets. W. E. Baldry, city engr.

Neb., Madison—City soon receives bids paving 3400 ft. Madison, 2nd, 3rd and 8th Sts., Dist. No. 2, 24-50 ft. wide. About $55,000. W. D. J. Stickelberg, Madison, city engr.

South Dakota—State Highway Dept., Pierre, plans to grade, gravel and drain 23 mi. Whitewood-Spearfish-Beulah Rd., Lawrence Co., to include 11½ mi. earth road 36 ft. wide, and 11½ mi. gravel surfaced road, 20-24 ft. wide, involving 124,500 cu.yd. earth and 1250 cu.yd. rock excav., 16,100 cu.yd. gravel, 1060 cu.yd. concrete and 23 tons reinforcing steel, etc., cost $135,000. 18½ mi. Ft. Pierre-Phillip Rd., Stanley Co., to include 2½ mi. gravel surfaced road, 20 ft. wide, and 16 mi. earth road, 36 ft. wide, 121,300 cu.yd. earth excav., 3220 cu.yd. gravel, 840 cu.yd. concrete for drainage structures and 21 tons reinforcing steel, etc., $78,000.

N. D., Valley City—Comrs. Barnes Co. plan to issue $325,000 bonds to improve roads. C. N. Nelson, aud.

Montana—State Highway Comn., Helena, plans to pave 3680 ft. Bway., 32 ft. wide, cost $30,000; 4227 ft. Railroad Ave., S., 40 ft. wide, $45,000, both in Manhattan. Federal Government will be asked to appropriate toward cost. P. D. Pratt, state highway engr.

Mont., Billings—Yellowstone Co. plans to pave 1⅜ mi. North Poly Rd., cost $35,000; 2 mi. South Poly Rd., $53,000. Federal Government asked to appropriate toward cost. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Bozeman—City plans to pave Dickerson St., from Central to 3rd Aves.; 6th Ave. from Story to College Sts. C. C. Widener, city engr.

Mont., Cut Bank—Glacier Co. plans to grade 4 mi. Cut Bank-Sweet Grass Rd., cost $10,000; gravel surface 2 mi. Browning-Depot Rd., $4000. Federal Government asked to appropriate toward cost. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Helena—Lewis and Clark Counties plan to build Park to Park Highway. About $350,000. Federal Government will appropriate toward cost.

Mont., Jordan—Garfield Co. plans to grade 34 mi. Edwards-Mosby Rd. About $20,000. Federal Government asked to appropriate toward cost. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Streets and Roads (continued)

Mont., Thompson Falls—Sanders Co. plans to grade 17 mi. Thompson Falls-Idaho Rd. About $22,000. Federal Government asked to appropriate toward cost. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mo., Liberty—Clay Co. retained J. D. Davis, engr., Jefferson City, to prepare plans for 12 mi. Federal-aid roads. E. Archer, clk.

Mo., Platte City—Platte Co. retained Tuttle, Ayers & Woodard, engrs., Reliance Bldg., Kansas City, to make plans and supervise construction 8½ mi. Federal Aid road in Parkville Special Rd. District., 18 ft. wide, brick or concrete. G. W. Day, 705 N. Y. Life Bldg., Kansas City, secy. About $350,000. Work will be started as soon as plans are approved by Government.

Mo., St. Joseph—City plans to pave 1173 ft. Beck Rd. from Ashland Ave. to city limits, 26 ft. wide, involving 2910 sq.yd. 2 in. asphaltic concrete on 6 in. concrete base and 2280 lin.ft. combination curb and gutter, estimated cost $11,500; 2970 ft. Seneca St. from 28th to 33rd Sts., 24 and 28 ft. wide, 7720 sq.yd. 2 in. asphaltic concrete on 6 in. concrete base, 3800 sq.ft. concrete sidewalk and 6000 lin.ft. combination curb and gutter, $31,000; 6500 ft. 21st St. from Duncan St. to Garfield Ave., 30 ft. wide, 18,700 sq.yd. 2 in. asphaltic concrete on 6 in. concrete base, 12,100 lin.ft. combination curb and gutter and 59,400 sq. ft. concrete sidewalk, $83,000; 2900 ft. Commercial St. from 22nd St. to east city limits, 24 and 28 ft wide, 13,265 sq.yd. 6 in. concrete and 8700 lin.ft. integral curb, $43,000; 4250 ft. 6th St. from Monterey to Atchison Sts., 36 ft. wide, 18,000 sq.yd. 3 in. wire cut brick block on 8 in. concrete base, 2100 lin.ft. plain curb and 1800 sq.ft. concrete sidewalk, $97,000; 830 ft. 4th St. from Felix to Sylvanie Sts., 36 and 44 ft. wide, 3360 sq.yd. 4 in. wire cut brick block on 8 in. concrete base, $17,800; 4520 ft. Frederick Ave. from 8th to 17th Sts., 40 ft. wide, 10,500 sq.yd. 2 in. Trinidad asphalt, 1½ in. binder on 8 in. concrete base, 600 lin.ft. plain curb and 7200 sq.yd. repressed vitr. brick on 8 in. concrete base between Street Ry. Co.'s tracks, $98,000; 1260 ft. 17th St. from Beattie St. to S. L. Mt. Mora Cemetery, 24 ft. wide, 3620 sq.yd. 2 in. asphaltic concrete on 6 in. concrete base, 1520 lin.ft. plain curb and 6900 sq.ft. concrete sidewalk, $13,100. H. Judson, city engr.

Tex., Abilene—Taylor Co. plans to gravel surface and drain 8.403 mi. road extending from north of Buffalo Gap to ¼ mi. west of Tuscola. About $35,000. R. E. Schiller, c/o H. E. Elrod, Interurban Bldg., Dallas, engr.

Tex., Beaumont—Jefferson Co. plans to build 6.72 mi. concrete road or one with concrete base and 1- or 2-in. asphalt top, also all necessary rein.-con. drainage structures, on State Highways Nos. 3 and 7, known as Beaumont-Amelia Rd., located between Beaumont and Port Arthur and Beaumont and Houston, 16 ft. wide. About $208,000. D. R. Thornton, Beaumont, engr.

Tex., Boston—Bowie Co. voted $60,000 bonds to build roads from Oxford School through Red Water, Maud, and Minton Twps., to Pettis' Bridge, on Sulphur River.

Tex., Cleburne—Johnson Co. voted $2,000,000 bonds to build roads.

Tex., Corsicana—Navarro Co. soon lets contract improving 11.661 mi. Highway No. 14 extending from Corsicana to Rice and beyond. Work involves 63,014 sq.yd. plain concrete and 43,080 sq.yd. rein.-con. pavement, 13 acres clearing and grubbing, 13,846 cu.yd. earth and 128,774 cu.yd. borrow excav., 3516 cu.yd. concrete for bridges and culverts, 13,312 lin.ft. concrete piles and 404,285 lbs. steel. About $454,000. C. Chappell, Corsicana, engr.

Tex., Jasper—Jasper Co. plans to improve 16 mi. State Highway No. 7, 24 ft. wide. Work includes graveling 7 mi., clearing, grading and building drainage structures and steel bridge over Angelina River. Separate bids will be received for bridge. Cost $4000 per mile. G. R. Abney, Jasper, engr. Noted May 8.

Tex., Laredo—Webb Co. election June 14, to vote on $300,000 bonds to build roads.

Tex., Meridian—Bosque Co. plans to gravel surface, grade, pave and improve 51.5 mi. Meridian Highway, known as State Highway No. 2, 16-ft. wide. About $175,000. C. H. Van Eman, Walnut Springs, engr.

Tex., Montague—Montague Co. plans to clear, grub, grade, gravel surface and build drainage structures on 9.84 mi. Meridian Rd., Rd. Dist. No. 3, 16 ft. wide. About $139,708. J. R. Hill, Bowie, engr.

Tex., Sherman—Grayson Co., Howe Dist., voted $150,000 bonds to build roads.

Tex., Wichita Falls—Wichita Co. election June 4, to vote on $1,500,000 bonds to build roads.

N. M., Albuquerque—City receives bids in June, for 100,000 yd. street paving, 12,000 sq.yd. alley paving, 50,000 ft. combined curb and gutter, and 35,000 yd. grading. A. R. Hebenstreit, city mgr.

Wash., Cashmere—City soon receives bids paving Division St. and Cottage Ave. Cost to exceed $10,000.

Wash., Pomeroy—City soon lets contract improving Main St. Work involves 9000 cu.yd. grading, 2200 cu.yd. crushed rock, 9000 cu.yd. asphalt and 3000 cu.yd. waterbound macadam. D. A. Taylor, city clk.

Wash., Vancouver—Comrs. Clark Co. having preliminary plans prepared improving 4.75 mi. Feleda-Hazel Dell Rd. About $100,000.

Oregon—State Highway Comn., Portland, soon lets contract grading Cabbage Hill-Kamela Rd., Umatilla Co., involving 100,000 cu.yd. excav.; paving 9 mi. North Yamhill-McMillville Rd., Yamhill Co., 20,000 cu.yd. excav.

Ore., Astoria—Council adopted resolution to grade Grande and Floral Aves., Jerome, 31st and Irving Sts. G. T. McClean, city engr.

Ore., Coquille—City plans to improve Hall and 1st Sts. About $19,000. A. S. Lawrence, city recdr.

Ore., Forest Grove—City plans to grade and hardsurface 5th Ave. W. P. Dyke, recdr.

Ore., Marshfield—Coos Co. election June 3, to vote on $362,000 bonds to build and improve roads.

Ore., Oregon City—City soon receives bids paving 14th St. to Main St.; Washington St. from bridge to 14th St.; also building macadamized road from Main St. to Abernathy Bridge, all to be 18 ft. wide.

Ore., Portland—Multnomah Co. election June 3 to vote on $1,250,000 bonds to build and improve roads.

Cal., Fresno—Comrs. Fresno Co. have agreed with U. S. Forest Serv. to build 6.5 mi. road in mountains northwest of Huntington Lake. About $23,000. D. M. Barnwell, co. clk.

Cal., National City—City plans election soon to vote on bonds to pave 7 mi. of streets.

Que., Montreal—City plans to pave St. Denis St. from Craig to St. Catharine Sts., with granite block, and from St. Catherine to Ontario Sts., with asphalt, ½ mi. long, 60 ft. wide. About $20,000.

Que., Napierville—Dept. Rds., Quebec, plans to build 16 mi. road from here to St. Hyacinthe and 23 mi. road from St. Hyacinthe to Drummondsville, waterbound macadam. About $156,000.

Que., Tremblay—Municipal Council plans to build 7 mi. gravel road. M. Henry, c/o Rd. Dept., Parliament Bldg., Quebec, engr.

Ont., Arnprior—Town plans to build road, including concrete walks and curbing. About $16,000. F. H. Grout, clk.

Ont., Chatham—Town soon receives bids for 4 mi. concrete pavements, curbs and gutters, involving 32,850 sq.yd. concrete. About $120,000. M. Adams, engr.

Ont., Cobalt—Dept. Highways, Parliament Bldg., Toronto, plans to build 60 mi. macadam road from here to Timmins. About $60,000. Provincial Government will appropriate half of cost. G. Hogarth, c/o Dept. Highways, ch. engr.

Ont., Elk Lake—Dept. Highways Parliament Bldg., Toronto, plans to build 26 mi. tar macadam road from here to Gowganda. About $250,000. G. Hogarth, c/o Dept. Highways, engr.

Ont., Hamilton—City plans to build 6000 ft. asphalt pavement, 25 ft. wide, involving 4800 sq.yd. asphalt on 6 in. concrete base. About $18,000. E. R. Gray, city engr.

Ont., Islington—F. Barber, engr., 40 Jarvis St., Toronto, soon lets contract paving 8500 sq.yd. road, with bituminous macadam, for town. About $30,000.

Ont., Oshawa—Town soon receives bids building 70,000 sq.ft. concrete sidewalk. About $20,000. W. G. Worden, engr.

Ont., Ottawa—Bd. Control soon lets contract building asphalt pavement on Booth St. from Queen to Somerset Sts., involving 7734 sq.yd. asphalt, 53 sq.yd. concrete, 2020 lin.ft. concrete curb, 2367 lin.ft. concrete gutter, 700 sq.ft. concrete sidewalk, etc., cost, $40,000; wood block pavement on Bank St. between Arlington and Roseberg Aves., 3050 sq.yd. wood block, 1350 sq.yd. asphalt, 650 lin.ft. concrete curb and gutter, 1000 sq.ft. concrete sidewalk, $75,000. A. F. McCallum, City Hall, engr.

Ont., Sarnia—City Council soon lets contract for 40,000 sq.yd. asphalt surfacing on Christina, George, Victoria, Daves and Cromwell Sts. About $81,000. Noted Apr. 24.

Ont., Timmins—Dept. Highways, Toronto, soon receives bids building waterbound macadam road from here to South Porcupine thence to Dome Mines. About $60,000. G. Hogarth, c/o Dept. Highways, Toronto, engr.

Ont., Woodstock—J. Morrison, city clk., soon lets contract building 16,500 sq.yd. concrete pavement. About $55,000. F. J. Ure & Son, engrs.

BIDS DESIRED

Massachusetts—Until June 3, by A. W. Dean, engr., 212 State House, Boston, building gravel bituminous road on River and South Sts., Southbridge Twp.; 9700 ft., Weymouth Twp. and 6500 ft. bituminous macadam road, Wareham Twp., all 18 ft. wide.

New York—Until June 17, by State Highway Comn., Albany, improving highways in following counties: Chenango Co., 3 highways, 4. 78 mi., 5.57 mi. and 5.87 mi.; Erie Co., 5.78 mi.; Essex Co., 2 highways, 8.25 mi. and 1.09 mi.; Fulton Co., 3 highways; 2.8 mi., 4.9 mi. and 1.06 mi.; Onondaga Co., 2 highways, 7.45 mi. and 3.75 mi.; Rensselaer Co., 2 highways, 1.44 mi. and 4.95 mi.; completing highways in following counties, Broome Co., 4.7 mi.; Cattaraugus Co., 2.17 mi. and Nassau Co., 1.57 mi.; also repairing highways in following counties: Fulton, Herkimer, Monroe, Montgomery, Oneida and Westchester Counties. F. S. Green, comr.; advertised in this issue.

N. Y., Auburn—Until June 3, by city, paving Grove St. with asphalt, stone filled asphalt, vitr. brick or bitulithic and John St. with asphalt, stone filled asphalt, vitr. brick, bitulithic or concrete. C. A. Dayton, city clk.; advertised in this issue.

N. Y., Buffalo—Until June 3, by S. H. Norton, city engr., paving 748 ft. Argus St. from Essex to Rosel Sts., 26 ft. wide, involving 2186 sq.yd. asphalt, cost $12,000; 2730 ft. Cornwall St. from Delavan to Warwick Sts., 24 ft. wide, 7285 sq.yd. concrete, $40,000; 792 ft. Zenner St. north of Ferry St., 24 ft. wide, 2117 sq.yd. asphalt, $12,000; 1300 ft. Greeley St. from Hertel to Race Sts., 26 ft. wide, 3760 sq.yd. asphalt; 11,457 ft. Genesee Ave. from Jefferson to Bailey Sts., 30 and 42 ft. wide, 29,682 sq.yd. asphalt, $165,000; 1596 ft. Harriet St. from Delavan St. to end of street, 26 ft. wide, 4615 sq.yd. asphalt, $25,000; 1425 ft. Tifft St. from South Park Ave. to McKinley Parkway, 28 ft. wide, 4444 sq.yd. asphalt, $24,000; 2730 ft. Floss Ave. from Genesee to Delavan Sts., 24 ft. wide, 7285 sq.yd. asphalt, $40,000; 439 ft. Breckenridge St. from Niagara St. to Erie Canal lands, 26 ft. wide, 1272 sq.yd. asphalt, $7000; 951 ft. Thornton Ave. from Bailey to Comstock Aves., 26 ft. wide, 2752 sq.yd. concrete, $15,000; 198 ft. Cassy St. from William St. to point 185 ft. south, 26 ft. wide, 577 sq.yd. concrete, $4000.

N. Y., Ft. Edward—Until June 5, by Bd. Trustees, paving McCrea St. from westerly end to West Bway. and Lower Bway. from aqueduct to point where Hudson Valley Ry. leaves same, brick. F. J. Betts, clk.; advertised in this issue.

N. Y., New York—Until June 3, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving with granite block on concrete foundation, roadway of Moore St. from South to Water Sts.; West B'way. from Vesey to Franklin Sts.; William St. from Fulton to Beekman Sts.; Theatre Alley from Ann to Beekman Sts.; Centre St. from Duane to Leonard Sts.; Walker St. from Centre to Baxter Sts.; with sheet asphalt on concrete foundation, Madison Ave. from 116th to 125th Sts.

Streets and Roads (continued)

N. Y., New York—Until June 5, by Armory Bd., at office of J. F. Hylan, mayor, City Hall, removing curb, extending concrete sidewalks and laying concrete foundations for floor in drill hall of 8th Coast Artillery Corps Armory, Jerome Ave. and Kingsbridge Rd., Bronx Boro., Contr. No. 1.

N. Y., Olean—Until June 12, by Comrs. Pub. Wks., building brick pavement on concrete foundation and building sanitary and storm sewers and appurtenances in Fulton St. from East State St. to Pennsylvania R. R. switch; South Clinton St. from East State to East Green Sts.; East Henley St. from South Barry to Fulton Sts.; East Green St. from South Barry to South Clinton Sts. involving 7700 sq.yd. pavement; North 8th St. from Buffalo to Lincoln Sts.; North 9th St. from Buffalo to Wayne Sts.; North 6th St. from Washington to Sullivan Sts.; Buffalo St. from Washington to Reed Sts.; Winters Ave. from Washington to Sullivan Sts., 15,790 sq.yd. pavement; East 11th St. from Irving to Reed Sts.; North 12th St. from West State St. to viaduct; South 12th St. from West Henley to West State Sts., 15,970 sq.yd. pavement; 3640 sq.yd. 5th St. from Irving to Putnam Sts. S. M. Gaylord, comr. pub. wks.; advertised in this issue.

N. J., Jersey City—Until June 3, by city, improving Johnston Ave. from Grand St. to Corneilson Ave., belgian block on concrete base; also building 18 in. vitr. sewer from Corneilson Ave. to connect with Grand St. sewer. About $50,000. Noted May 15.

Pennsylvania—Until June 17, by State Highway Comn., Harrisburg, building roads in counties as follows:

Blair Co., 890 ft. rein.-con., Gaysport Boro., 23,075 ft. Logan Twp., 13,075 ft. to be repaired with bituminous surface course, 8 to 14 ft. wide.

Bradford Co., 6640 ft., concrete, Athens Twp.

Cambria Co., 32,185 ft. rein.-con. and Hillside vitr. brick, Jackson Twp.

Center Co., 27,940 ft. bituminous surface course or rein.-con. on concrete foundation, Boggs Twp.

Chester Co., 2932 ft. bituminous surface course or rein.-con. on concrete foundation, Oxford Boro.

Cumberland Co., 24,275 ft. rein.-con. and Hillside vitr. brick, Upper Allen Twp.

Crawford Co., 9067 ft. rein.-con., Woodcock and Hayfield Twps.

Erie Co., 4854 ft. bituminous surface course and vitr. brick on concrete foundation, Girard Boro.; 20,200 ft. rein.-con., Wayne Twp., 9154 ft. rein.-con. and Hillside vitr. brick, Union Twp.; 27,409 ft. bituminous surface course and Hillside vitr. brick on concrete foundation, or rein.-con. and Hillside vitr. brick, Mill Creek and Fairview Twp.

Lancaster Co., 37,684 ft. bituminous surface course or rein.-con. on concrete foundation, West Hempfield, East Hempfield and Manheim Twps.

Lycoming Co., 39,319 ft. rein.-con., Piatt and Woodward Twps.

Mercer Co., 3678 ft. bituminous surface course or rein.-con. on concrete foundation, Grove City Boro.

Potter Co., 26,400 ft. bituminous surface course or rein.-con. on concrete foundation, Eulalia and Roulette Twps.

Warren Co., 6544 ft. rein.-con. Youngsville Boro.

York Co., 40,712 ft. bituminous surface course on concrete foundation, and Hillside vitr. brick, or rein.-con. and Hillside vitr. brick, Carroll and Franklin Twps.

L. S. Sadler, state highway comr.; advertised in this issue.

Pa., Bellevue (Pittsburgh P. O.)—Until June 3, by Boro., grading, paving and curbing West St., Florence Ave., etc. Work involves 2190 sq.yd. vitr. brick, 1642 lin.ft. concrete curbing and 2775 cu.yd. earth excav. P. H. Martin, 331 4th Ave., Pittsburgh, engr.

Pa., Ebensburg—Until June 4, by C. Fletcher, secy. Hastings Boro., c/o Controller Cambria Co., for 1925 ft. shale or vitr. fire clay pavement on concrete base with cement or stone curbing, 22 ft. wide. C. E. Schlicher, Spangler, engr.

Pa., Wilkes-Barre—Until June 2, by city, grading and laying 25,800 sq.yd. sheet asphalt, 18,250 sq.yd. asphalt block and setting in place 31,586 lin.ft. concrete or stone curbing; also repairing sheet asphalt pavements in certain streets. F. H. Gates, city clk.

Del., Wilmington—Until June 10, by New Castle Co., building 2.87 mi. Silverside Rd., Brandywine Hundred Twp., 2.7 mi. Glasgow Rd., Pencader Hundred Twp., 4 mi. Hillside Mills Rd., Christiana Hundred Twp., 0.51 Greenback-Price's Corner, Christiana Hundred Twp., 2.10 mi. Hockessin-Yorklyn, Mill Creek Hundred Twp., 2.74 mi. Adam's Dam State Line, Christiana Hundred Twp., 12-14 ft. wide, 3 in. bituminous top surface (penetration or mixed method), estimated cost $160,000; 1400 ft. Duncan Rd., Brandywine Hundred Twp., new macadam or penetration method, $10,000. C. E. Grubb, co. engr.

Maryland—Until June 3, by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 4.68 mi. road from corporate limits of Cumberland to Brady Lane, near Cresaptown, Federal Aid Project No. 24, Contr. No. A-17, 16 ft. wide, concrete, 8 in. thick in center and 6 in. on sides, Allegany Co. Former bids rejected. Noted May 15.

W. Va., Fayetteville—Until June 5, by Comrs. Fayette Co., grading 3 mi. highway from Fayette to Lansing, involving 45,000 cu.yd. excav., about 30% rock. J. K. McGrath, Fayetteville, engr; advertised in this issue.

N. C., Henderson—Until June 17, by Mayor and Bd. Comrs. for 55,000 sq.yd. of asphalt, bitulithic, concrete, brick or other pavement, 7000 lin.ft. of granite or concrete curb, 7000 lin. ft. of concrete gutter, 9000 sq.yd. of sidewalk, 18,000 cu. yd. grading, etc. C. C. White, Durham, engr.

Ga., Griffin—Until June 3, by Comrs. Spalding Co., building 6.1 mi. concrete road to and from Experiment toward Henry Co. line, 6.1 in. thick, 18 ft. wide. About $250,000.

Ga., Metter—Until June 12, by Comrs. Candler Co., hard surfacing 15 mi. road with sand clay and ½ in. carpet coat sand asphalt. About $150,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs.

Fla., Bunnell—Until June 9, by Comrs. Flagler Co., grading, draining, hard surfacing and building bridges and 26 mi. road in Shell Bluff Special Road and Bridge Dist. About $99,500. P. Kendrick, Bunnell, engr. Noted Feb. 27.

Fla., Daytona Beach—Until June 9, by Mayor, paving 48,000 sq.yd., 30,000 sq.ft. sidewalk, 8400 ft. concrete curb and gutter. C. M. Brown, Daytona, engr.

Fla., Jacksonville—Until June 10, by L. L. Meggs, chn. Duval Co. Comrs. paving 250 ft. Riverside Ave. from McDuff Ave. to Donald St., 2000 ft. McDuff Ave from Riverside Ave north, 1500 ft. Lem Turner Rd. from end of Pearl St. to State Fair Grounds, 1000 ft. Myrtle Ave. in South Jacksonville from Hendrix Ave. to first railroad crossing, asphalt penetration method; building 460 ft. concrete causeway on Atlantic Blvd.

Miss., Aberdeen—Until June 2, by Rd. Comrs. of Supervs. Dist. No. 3, building 4.46 mi. Lavender and Hamilton Rd. and 4 mi. Aberdeen and Caledonia Rd. Work involves 60,970 yd. grading, 4564 yd. gravel, 87 stations clearing and grubbing, 465 ft. 18-36-in. pipe. G. G. Ray, clk. G. E. Hauser, Columbus Natl. Bank Bldg., Columbus, engr. Noted Apr. 3.

O., McConnelsville—Until June 2, by Comrs. Morgan Co., grading, paving and building drainage structures on 4200 ft. Sect. "I," McConnelsville-Athens Rd., I. C. H. No. 162, Chesterville Village, bituminous macadam pavement, 20 ft. wide, 30 ft. roadway. About $18,390. J. Whitney, co. clk.

O., Toledo—Until June 3, by D. H. Goodwillie, dir. pub. serv., repaving 750 ft. Front St. from Main to Oak Sts., 48 ft. wide, involving 4020 sq.yd. paving on 6 in. concrete base, 300 lin. ft. curbing and 1060 cu.yd. earth excav., cost $13,971; 1625 ft. Bancroft St. from Vermont Ave. to Cherry St., 36 ft. wide, involving 6550 sq.yd. paving on 6-in. concrete base, 400 lin.ft. curbing and 2200 cu.yd. earth excav., $36,200. Bids will be received on all types of pavement. H. C. McClure, city engr.

Indiana—By Bd. Co. Comrs. building roads in following counties:

June 4, Harrison Co., Corydon, building stone road, Harrison Twp. S. M. Mauck, aud.

Shelby Co., Shelbyville, 3 gravel roads, Shelby, Hendricks and Washington Twps. F. W. Fagel, aud.

Huntington Co., Huntington, improving certain road in Jackson Twp. O. E. Eviston, aud.

June 7, Dubois Co., Jasper, building crushed limestone road, 2 mi. long, Patoka Twp. J. H. Sneg, aud

Huntington Co., Hunting, building 6 roads in Clear Creek, Warren, Jackson and Warren Twps. O. E. Eviston, aud.

June 14, Whitley Co., Columbia City, building 3 gravel and 5 concrete and gravel roads in Union and Columbia Twps. W. K. Burwell, aud.

June 20, Montgomery Co., Crawfordsville, building 6710 ft. gravel road on county line between Sugar Creek and Franklin Twps., Montgomery Co. and Sugar Creek Twp., Boone Co. D. F. Batman, aud.

June 21, Hendricks Co., Danville, building 21,102 ft. gravel and macadamized road in Monroe Twp., Morgan Co. and Liberty Twp., Hendricks Co. C. M. Havens, aud.

Mich., Ann Arbor—Until June 11, by Bd. Pub. Wks. paving North 4th Ave. from Ann to Kingsley Sts., Catherine St. from Main St. to 5th Ave., Detroit St. from Ann to Catherine Sts., Bway from Michigan Central R. R. bridge to north line Swift St., Detroit St. from Catherine St. to Michigan Central R. R. bridge, South University Ave. from State St. to Oxford Rd., East University Ave. from North University Ave. to Hill St., Thayer St. from North University Ave. to Huron St. Work involves 38,000 sq.yd. pavement, 38,000 sq.yd. concrete foundation, 20,000 lin.ft. curb, 10,000 cu.yd. excav. and 500 lin.ft. stone header. Alternate bids will be received on brick, asphaltic concrete and concrete pavement. I. G. Reynolds, city clk.

Mich., Mt. Clemens—Until June 5, by J. H. Mathews, city clk., grading and paving ½ mi. Clinton St. from North Gratiot Ave. to North Ave., 26 ft. wide. Bids will be received on all kinds of paving on concrete foundation.

Mich., Saginaw—Until June 2, by Comrs. Saginaw Co., building 9.5 mi. Assessment Dist. Rd. No. 21, in Birch Run, Frankenmuth and Bridgeport Twps., 18 ft. wide. Cost between $243,000 and $285,000. R. W. Roberts, Saginaw, engr.

Mich., Saginaw—Until June 2, by Comrs. Saginaw Co., building 14.517 mi. Assessment Dist. Rd. No. 11, Chapin, Marion and Lakefield Twps., Class B road, 9 or 12 ft. wide. Cost between $155,000 and $167,000. R. W. Roberts, Saginaw, engr.

Ill, Rockford—Until June 6, by Bd. Local Impvts., building brick pavements on portions of Elm and South Elm Sts., involving 11,300 sq.yd. brick, 4000 cu.yd. excav., 175 ft. curbing, 5960 ft. curb and gutter, etc. R. Rew, pres.; advertised in this issue.

Wis., Plymouth—Until June 17, by H. A. Luedke, city clk., furnishing and laying 23,000 sq.yd. paving, 13,000 lin.ft. curbing and 4599 cu.yd. grading on Western Ave., Milwaukee, Reed, Selma, Thayer, Caroline and Main Sts. Bids will be received on rein.-con., vitr. brick, asphaltic concrete and sheet asphalt. J. Donohue, York Bldg., Sheboygan, engr. Noted Apr. 19.

Minn., Brainerd—Until June 19, by C. W. Mahlum, aud. Crow Wing Co., improving 21 mi. Federal Aid Project No. 51, State Aid Rd. No. 2, involving 100 acres clearing and grubbing 140,000 cu.yd. grading, 20,000 cu.yd. overhaul, 6200 cu.yd. hand ditching, 500 lin.ft. tile drain; 101,600 lin.ft. shaping and compacting, gravel surfacing, 3 rein.-con. bridges, etc.

Minn., Hayfield—Until June 3, by G. L. Taylor, aud. Dodge Co., improving Federal Aid Project No. 66, State Rd. No. 1, State Aid Job No. 1802, involving 315 acres clearing and grubbing, 38,491 cu.yd. earth excav., 29 cu. yd. hand ditching, 600 lin.ft. tile drain, 7600 cu.yd. gravel surfacing, etc.

Kan., Strong City—City receiving bids for 21,296 sq.yd. bituminous paving, 8566 lin.ft. curb and gutter; also 782 lin.ft. to be repaird and raised; advertised in this issue.

South Dakota—Until June 5, by State Highway Dept., Pierre, improving 13.56 mi. Flandreau-Madison Rd., Moody Co. Work involves 44 sq.yd. clearing and grubbing, 51,168 cu. yd. earth excav., 28,358 yd. station overhaul of excav., 6181 cu.yd. gravel surfacing, to be hauled and spread, 427 cu.yd. concrete, 26,718 lb. steel reinforcement, 798 lin.ft. corrugated culverts, etc. About $41,000.

Streets and Roads (Continued)

Mo., Millersburg—Until June 9, by Comrs. Millersburg Special Rd. Dist., Callaway Co., grading and surfacing 7.6 mi. State Rd. Project No. 11, 9 ft. wide, gravel and macadam. Work involves one 83 ft. concrete bridge, tile culverts, etc. About $49,988. W. B. Cauthorn, Columbia, engr. Noted Feb. 13.

Ark., Blytheville—Until June 3, by Comrs. Paving Dist. No. 1 and Curbing, Guttering and Storm Sewering Impvt. Dist. No. 1, for 38,476 sq.yd. rein.-con. paving, 25,584 sq.yd. rein.-con. gutters, 42,582 lin.ft. concrete curbs and 1800 lin.ft. 15 and 18 in. vitr. pipe storm sewer with appurtenances. Pride & Fairley, Blytheville, engrs.

Ark., Fayetteville—Until June 16, at office of B. F. Campbell, judge, Washington Co., building 22.27 mi. limestone or gravel macadam road from Springdale to Madison Co. line. Hamilton & Shreve, Fayetteville, engrs; advertised in this issue.

New Mexico—Until June 24, by State Highway Comn., Santa Fe, building Sects. 3, 4 and 5 of State Rd. No. 6, Federal Aid Project No. 4, Valencia Co., 20.62 mi. from Rio Puerco to Armijo, involving 17,955 cu.yd. earth and 1466 cu.yd. rock excav., 1087 cu.yd. one course gravel surfacing, 823 lin.ft. 18-36 in. corrugated metal culvert, 158 cu.yd. Class "A," "B" and "C" concrete, etc. L. A. Gillett, state highway engr.

New Mexico—Until June 18, by State Highway Comn., Santa Fe, building Sect. 5, of State Rd. No. 1, Federal Aid Project No. 15, Dona Ana Co., 11.68 mi. from Las Cruces to Mesquite, involving 15,373 cu.yd. excav., 51 cu.yd. Class "A" concrete, 2978 lb. expanded metal reinforcement, 19,282 cu.yd. one course cement concrete, 75,200 sq.ft. metal reinforcement, etc. L. A. Gillett, state highway engr.

Wash., Vancouver—Until June 7, by Comrs. Clarke Co., building 6½ mi. Sara-Ridgefield Rd. from Permanent Highway No. 6 and Pacific Highway Junction to Fruit Valley-Sara Rd. Bids will be received on all types of pavement. B. L. Dorman, co. engr.

Oregon—Until June 10, by State Highway Comn., Portland, building Service Creek-Valades Ranch Sect. of John Day Highway, Wheeler and Grant Counties. Unit No. 1, 13 mi., involves 91,000 cu.yd. excav.; No. 2, 12.5 mi., 74,000 cu.yd. excav.; No. 3, 12 mi., 91,000 cu.yd. excav., and No. 4, 11.5 mi., 103,000 cu.yd. excav. About $43,000. H. Nunn, Salem, state highway engr.

Ore., Tillamook—Until June 5, by F. B. Stranahan, city recdr., paving, curbing and draining 7th St. from Miller to Stillwell Aves. Noted May 15.

Cal., Santa Barbara—Until June 5, by S. B. Taggart, city clk., improving Cliff Dr., Montecito and Costello Sts., etc. About $55,000. Plans include grading, 4-in. concrete paving with 1½-in. Warrenite surface, cement curbs and gutters, sewers, catch basins and manholes. A. B. Cook, city engr. Noted Mar. 13.

Que., Maple Grove—L. Houde, Plessisville, receiving bids for 7 mi. asphalt macadam road for Municipal Council.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Massachusetts—State Highway Comn., Boston, received bids May 20, building 4000 ft. road, 18 ft. wide, in Tewksbury Twp., involving 8500 sq.yd. bituminous macadam, 2835 cu.yd. earth excav., 1200 ft. c.i. pipe and 2740 cu.yd. broken stone, from P. F. Giovanini, Revere, $13,871; A. Pallotto, 117 Crosby St., Lowell, $14,337. Noted May 15.

Mass., Worcester—City received bids for 20,000 ft. curbing, including 250 corners, (a) straight, (b) circular, (c) corners, from F. A. McAuliffe, Worcester, (a) $0.72; (b) $1.05; (c) $3.15; Hildredth Granite Co., 31 State St., Boston, (a) $0.88; (b) $1.00; (c) $4.50.

Rhode Island—State Bd. Pub. Rds., State House, Providence, received lowest bid, May 16, building 9197 ft. East Main Rd., Portsmouth Twp., from Lane Constr. Corp., 37 Colony St., Meriden Conn., $49,838; 8180 ft. Waterman Ave., East Providence Twp., from B. Perini, Ashland, Mass., $63,772; 10,560 ft. Hartford Pike, Johnston and Scituate Twps., from R. H. Newell Co., Uxbridge, Mass., $46,281; 3550 ft. Mendon Rd., Lincoln Twp., from Winslow & Cummings, Nashua, N. H., $22,343. Noted May 8.

★Conn., Bridgeport—City let contract paving various streets, Warrenite, to Warren Bros. Co., 193 Berkeley St., Boston, Mass. About $600,000.

★Conn., Hamden (New Haven P. O.)—City let contract paving 2500 ft. State St., concrete, to C. W. Blakeslee & Sons, 58 Waverly St., New Haven. About $15,000.

★New York—State Highway Comn., Albany, let contracts completing 6.88 mi. Rd. 5544, Hinsdale-Franklinville, Part 2 and 4.73 mi. Rd. No. 5607, Franklinville-Machias, Cattaraugus Co., to Amer. Pipe & Constr. Co., 112 North Broad St., Phila., Pa., $130,748 and $128,817 respectively; 5.19 mi. Rd. No. 5622, Holland-Yorkshire, Part 1, Erie Co., to Cold Spring Constr. Co., Buffalo, $184,924; Rd. No. 1426, Whitehouse Bridge-Vermont State Line, Rensselaer Co., to L. Mayersohn, Albany, $83,977; repairing Rd. No. 4 and 615, Repair Job No. 1187, Columbia Co., to Lane Constr. Co., 37 Colony St., Meriden, Conn., $87,645; Rd. No. 714, Repair Job No. 1214, Livingston Co., to M. H. Ripton, Livingston Bldg., Rochester, $63,418; Rd. No. 749, Repair Job No. 1222, Niagara Co., to Dale Eng. Co., Mann Bldg., Utica, $56,842; Rd. Nos. 42 and 157, Repair Job No. 1183, Orange Co., to Schunnemunk Constr. Co., Highland Mills, $57,109; Rd. No. 282, Repair Job No. 1182, Orange Co., to De Graff & Hogeboom, Inc., Kingston, $33,333; Rd. No. 521, Repair Job No. 1216, St. Lawrence Co., to McCarthy & Rock, Winthrop, $26,993; Rd. No. 5204, Repair No. 1223, Steuben Co., to Greenfield Constr. Co., 89 Main St., Hornell, $31,408. Noted May 22.

★N. Y., Albany—Bd. Contr. & Supply let contracts improving Euclid and Lenox Sts. and Homestead Ave., to M. F. Dollars, 7 Hall Pl., $17,499 and $26,150 respectively. Noted May 15.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids May 21, regulating and repaving with permanent asphalt on 6-in. concrete foundation (a) Bay 22nd St., (b) Warren St., (c) 65th St., (d) regulating and repaving with grade 1 granite blocks, River St., from Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $16,141; (b) $49,033; (c) $103,839; Cranford Co., 52 9th St., (a) $16,413; (b) $49,724; (c) $100,736; Brooklyn Alcalraz Asphalt Co., 407 Hamburg Ave., (a) $16,942; (b) $47,710; (c) $107,763; Scott & Kurth, West Brighton, S. I., (d) $3221; Greicco Bros., (d) $3663; Sicilian Asphalt Paving Co., 41 Park Row, New York City, (b) $49,000. Noted May 15.

★N. Y., Buffalo—City let contract to H. P. Burgard Co., Fillmore Ave., repaving 969 ft. Langmeyer Ave. between Bailey and Olympic Aves., 26 ft. wide, involving 2804 sq.yd. asphalt, 1918 lin.ft. Medina curbing, 1180 cu.yd. earth excav., cost $14,410; 1790 ft. Green St., between William and Lovejoy Sts., 17 and 30 ft. wide, 3891 sq.yd. asphalt on 6 in. concrete base, 3316 lin.ft. Medina curbing, 1650 cu.yd. earth excav., $21,425; 3685 ft. Deerfield Ave. between Delavan and Kensington Sts., 30 ft. wide, 12,306 sq.yd. asphalt, 6926 lin.ft. Medina curbing, 4353 cu.yd. earth and 12 cu.yd. rock excav., $54,000; to German Rock Asphalt Co., Inc., Morgan Bldg., 580 ft. Dewey Ave. between Fillmore and Castle Pl., 26 ft. wide, 1680 sq.yd. asphalt, 1094 lin.ft. Medina curbing and 532 cu.yd. earth excav., $6770.

★N. Y., Saranac Lake—Bd. Pub. Wks. will build macadam highway on Bloomingdale Ave., Woodruff and Dorsey Sts. About $25,000. Work will be done by day labor.

★N. Y., Syracuse—Bd. Pub. Wks. will improve Bellevue Ave. and change Wadsworth St. at intersection of Bellevue Ave. About $10,000. Work will be done by day labor. H. A. Allen, city engr.

★Pa., Ebensburg—Cambria Co. let contract rebuilding 1.6 mi. brick road on concrete base, from Beaverdale to Wilmore, Summerhill Twp., to J. Neapolitano, Johnstown, $43,114. Noted May 15.

Pa., Pittsburgh—Comrs. Allegheny Co. received bids building 5700 ft. Painters Run Rd., Bridgeville Boro., from T. Cronin, 17th and Muriel Sts., $53,137; M. Ott & Co., 4141 Warrington Ave., $54,538; Federal Constr. Co., Jones Bldg., $55,049. Work involves 625 sq.yd. vitr. brick, 7915 sq.yd. concrete, 1000 sq.yd. paved gutter, 12,000 cu.yd. earth excav. and 3100 ft. 6 in. vitr. pipe drain. Noted Apr. 24.

★Pa., Springdale—H. J. Barnes, boro. secy., let contract improving Pittsburgh St., Class "B" concrete sidewalk and plain curbing, to J. I. Dick, Scottsdale, $45,203. Noted Apr. 24 under "Pittsburgh."

★Maryland—State Rds. Comn., 601 Garret Bldg., Baltimore, let contract building 0.93 mi. concrete road through Reistertown from end of concrete road to Hitchue's corner, Contr. No. B-34, Federal Aid. Project No. 27, Baltimore Co., and 2.7 mi. Baltimore-Washington Blvd. from Baltimore city limits to Baltimore & Ohio R.R. overhead crossing near Relay, Contr. No. B. W. A., to Amer. Paving and Contg. Co., Montebello Ave. and Jenkins Lane, Baltimore, $76-,898 and $46,960 espectively; surfacing 1.38 mi. road between North East and Elkton, gravel, Contr. No. CE-26, Federal Aid Project No. 7, Cecil Co., to E. W. Brown, Port Deposit, $36,608; 2.15 mi. road from end of Constr. No. D-19 near Madison, to beginning of Contr. No. 466 at Parsons Creek, Constr. D-19 B, Dorchester Co., to Hilton Constr. Co., Denton, $59,979. Noted May 15th.

★Md. Cumberland—City let contract, to K. C. Constr. Co., 72 3rd Natl. Bank Bldg., paving North Liberty St. from Baltimore to Frederick Sts., wood block, cost $6151, Allamont Terrace from Baltimore to Harrison Sts., concrete, $6008, Rose Hill Ave. from Allegany St. to Arnet Ave., concrete, $1953, Patterson Ave. from Allegany to Beall Sts., brick, $4750, Beall St. from Baltimore & Ohio R.R. to Patterson Ave., brick, $8045; to Cumberland Contg. Co., 62 3rd Natl. Bank Bldg., paving Green St. from Brooke Ave. to city limits, brick, $81,720. Noted May 1.

★Md., Cumberland—Comrs. Alleghany Co. let contract building 4½ mi. concrete road from city limits to site of Amer. Cellulose and Chemical Mfg. Co., to R. G. Collins, Jr., 820 Munsey Bldg., Baltimore, $236,628. Noted Apr. 17.

★W. Va., Elkins—Comrs. Raleigh Co. let contract surfacing 8.65 mi. Surveyor-Marshes, Harper and Guyandotte roads, 9 ft. wide, macadam, with broken stone shoulders on either side, to Hennign & Hagerdon, Charleston. About $100,000.

★W. Va., Pineville—Comrs. Wyoming Co. let contract grading 4 mi. Elmore-Herndon Rd., 22 ft. wide, and building 2 bridges, to A. D. Weaver, Pineville. About $66,000. Noted May 1.

★S. C., Chester—Chester Co. let contract relocating, grading, draining and surfacing with top-soil 9.6 mi. road from here to York Co. line via Lewis, 30 ft. wide, to W. N. Thompson, Burlington, N. C., $48,522. Work involves 244 cu.yd. concrete, 46,930 cu.yd. earth excav., 761 lin.ft. vitr. pipe and 25,480 cu.yd. top-soil.

★S. C., Gaffney—Cherokee Co. let contract relocating, draining, grading and surfacing with top-soil 9.07 mi. Natl. Highway from city limits of Gaffney to Spartanburg Co. line, 30 ft. wide, to Blankenship & Elliott, 215 South Liberty St., Spartanburg, $47,511. Work involves 90 cu.yd. concrete, 66,000 cu.yd. earth, and 200 cu.yd. rock excav., 6600 cu.yd. gravel and 33,000 cu.yd. top-soil, etc.

★S. C., Newberry—Newberry Co. let contract re-locating, draining and surfacing, 5.63 mi. road from Little Mountain to Prosperity, involving 33,000 cu.yd. earth excav. and 860 lin.ft. vitr. pipe, to C. C. Jordan, Gaffney, $25,097.

★Florida—State Rd. Dept. Tallahassee let contract building 2¾ mi. road from Kissimmee and Campbell's Stations, to Maloney & Murphy, Jacksonville. About $60,000.

★Ohio—State Highway Comn., Columbus, let contract grading, constructing bridges and culverts and paving with concrete 2.48 mi. Sect. "I," Newark-Coshocton Rd., Coshocton Co., to Henderson Bros., Coshocton, $91,821. Noted May 8.

★O., Cleveland—City let contract paving Kraus Court from East 20th to 26th Sts., to McHugh Bros., 527 Society for Savings Bldg., $10,168; East 125th St. from Kinsman Rd. to Union Ave., to A. M. Pejsa, 527 Society for Savings Bldg., $16,372; East 114th St. from Harvard to Miles Aves., to Rieley Bros., 357 The Arcade, $16,936; West 98th St. from Loretta to Walford Aves., to Freshwater Paving Co., 11712 Detroit Ave., $19,832; West 24th St. from Franklin Ave. to Willeyville Allt., to Roehl Bros., West 25th St. and Clark Ave., $10,668; Aetna Rd., to Enterprise Paving Co., 8436 Bway Ave., $12,004. Noted May 22

Streets and Roads (continued)

O., Columbus—City received bids May 20, grading, draining, curbing, laying water mains and paving with (1) brick, (2) asphalt, (a) 783 ft. Stanley Ave. from Parsons Ave. to eastern terminus (b) 913 ft. Linwood Ave., from Bryden Rd. to Main St., (c) 1023 ft. Noble St. from Washington to Parsons Aves., (d) 1269 ft. 21st St. from Franklin Ave. to Broad St., from R. J. Deinst, 2515 West Broad St., (a1) $8126, (c1) $10,891, (d1) $9206; A. G. Pugh (a1) $9512, (a2) $7575, (b2) $9760, (c1) $12,115, (c2) $12,202, (d1) $9961, (d2) $9874; Franklin Asphalt Paving Co., (a2) $7,120, (b2) $8444, (c2) $10,887, (d2) $9043; Andrews Paving Co., Arcade Bldg., (a2) $7676; Cleveland Trinidad Paving Co., Commerce Bldg., Cleveland, (b2) $9826, (c2) $11,938, (d2) $9899; P. A. Beasley, (c1) $11,452, (d1) $9567. Noted May 8.

★O., Hamilton—City let contract paving, guttering and curbing High St. and along Erie Canal, Trinidad Lake sheet asphalt, to Andrews Asphalt Paving Co., Rentschler Bldg., $58,710.

★Michigan—State Highway Comn., Lansing, let contract grading, paving with concrete and building drainage structures on 7 mi. road, 16 ft. wide, 24 ft. roadway, Cass Co., involving $13,486 cu.yd. concrete, to Wolverine Constr. Co., Kalamazoo, $172,751.

Mich., Detroit—Dept. Pub. Wks. received bids paving with asphaltic concrete on 6 in. concrete base Berea, Medina or other curbing, (a) Harper Ave. from Hurlburt to Montclair Aves.; (b) Lakewood Blvd. from Kercheval to Waterloo Aves., from W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $28,821; (b) $12,366; Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $28,130; (b) $11,946; Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $28,915; (b) $12,240. Noted May 8.

Mich., Detroit—Dept. Pub. Wks. received bids paving with asphaltic concrete on 6 in. concrete base, Berea, Amherst or Medina curbing (a) 12th St. from Webb to Fenkell Aves.; (b) Casgrain Ave. from Army to Desmond St.; (c) Collingwood Ave. from 12th St. 1304 ft. west to westerly terminus; (d) Fremont Pl. from Elmwood to Ellery Aves.; (e) Pittsburg Ave. from Gilbert to Martin Aves.; (f) Sargeant St. from Elmwood to Moran Aves.; (g) Sunset Pl. from Woodward Ave. to John R. St.; (h) Tireman Ave. from Epworth Blvd. to Livernois Ave.; (i) Weyher Ave. from McClellan to Pennsylvania Aves., from Cleveland Trinidad Paving Co., 2940 Woodward Ave., (a) $119,880; (b) $27,172; (c) $16,948; (d) $13,823; (e) $16,244; (f) $8009; (g) $9416; (h) $25,213; (i) $8846; W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $120,577; (b) $27,267; (c) $16,825; (d) $14,003; (e) $16,203; (f) $8181; (g) $9926; (h) $25,010; (i) $9229; Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $121,930; (b) $26,907; (c) $17,079; (d) $13,580; (e) $15,992; (f) $7899; (g) $9585; (h) $25,053; (i) $8834. Noted May 1.

Mich., Port Huron—City received only bid, from J. H. Baker & Sons, Port Huron, paving Pine St. from Military to 13th Sts., involving 5175 cu.yd excav., 12,417 sq.yd. paving, 7000 ft. side drain, 4400 ft. curb to reset, 200 ft.- 8-in. sewer and 12,417 sq.yd. reinforcing, concrete, $37,395; 3-in. vertical brick fiber with bituminous filler, $52,789; 4th St., from Water to Wall Sts. and from Union to Griswold Sts, 2020 cu.yd. excav., 6050 sq.yd. paving, 3500 ft. concrete curb, 6050 sq.yd. reinforcing concrete, $18,275, brick, $26,025; Crescent Pl. from Water to 10th Sts., 645 cu.yd. excav., 215 cu.yd. fill, 1935 sq.yd. paving, 1200 ft. 4-in. side drain, 1925 sq.yd. reinforcing concrete, $5216, brick, $8093; Jenkinson St. from 7th to Military Sts., 260 cu.yd excav. and 745 sq.yd. paving, concrete, $1789, brick, $2766; all 30 ft. wide. Noted Apr. 10.

★Illinois—State Highway Comn., Springfield, let contract building Sect. 12 and H-15d, Lincoln Highway, Lee Co., to Keokuk Quarry & Constr. Co., Keokuk, Ia. About $121,000. Noted Apr. 3.

★Minn., Windom—Comrs. Cottonwood Co. let contract grading 17.5 mi. Federal Aid Project No. 43, State Rd. No. 12, to Cameron & Joyce, Keokuk, Ia., $55,098. Noted May 1.

★Kan., Eureka—City let contract, to M. S. Amerman, Salina, for 23,400 sq.yd. 2 in. asphalt paving on 5 in. concrete base at $2.39 per sq.yd., 15,000 lin.ft. curbing and guttering at $0.88 per ft. and 10,100 cu.yd. earth excav. at $0.90 per cu.yd. Total cost, $74,061. Noted May 22.

★Kan., Garden City—City let contract (a) paving, (b) curbing and guttering, improving Main and various other streets, to M. R. Amerman, Salina, (a) $3.69 per sq.yd., (b) $1.10 per ft. Total cost, $114,109. Noted May 22.

★Kan., Peabody—City let contract improving sections of Olive, Walnut, Sycamore, Maple, Elm, Division, 1st, 3rd and 4th Sts., (a) paving, (b) curbing, (c) excavating, to Kaw Paving Co., 616 New England Bldg., (a) $41,632, (b) $28,345, (c) $0.90 per cu.yd. Noted May 22.

★Neb., Alliance—Box Butte and Sheridan Counties let contract grading and sand clay surfacing 14.8 mi. Alliance-Antioch Rd., 24 ft. wide, grading, to J. F. Roberts Constr. Co., 206 Tramway Bldg., Denver, Colo., $59,800, culverts, to Central Bridge Constr. Co., Wahoo, $3340. Noted Apr. 24.

★Neb., Columbus—Platte and Madison Counties let contract grading 232,000 yd. of Federal-aid road from here to Norfolk, via Platte Center and Humphrey, to E. Peterson Co., 1217 Woodmen of World Bldg., Omaha, $85,840. Noted Mar. 27.

★Neb., Lincoln—City let contract paving 21st St., 25 ft. wide, to Burke-Cochrane Constr. Co., Lincoln, $29,718. Noted May 8.

★Neb., Plattsmouth—Cass and Otoe Counties let contract grading 144,000 yd. of Federal-aid road from here to Nebraska City, to E. Peterson Co., 1217 Woodmen of World Bldg., Omaha, $55,440.

★Neb., Schuyler—Colfax and Polk Counties let contract grading 176,611 yd. of Federal-aid road from here to Osceola, to E. Peterson Co., 1217 Woodmen of World Bldg., Omaha, $64,463.

Neb., Wahoo—Saunders and Dodge Counties let contract grading 30.3 mi. Fremont-Ceresco Rd., 24 ft. wide, to Lamoreaux Bros., 805-11 Brandeis Theater Bldg., Omaha. $53,249. Noted Apr. 24.

★Neb., Wayne—Wayne and Cedar Counties let contract grading 232,000 yd. Federal-aid road from here south to Cedar Co. line, to E. Peterson Co., 1217 Woodmen of World Bldg., Omaha, $55,680. Noted Mar. 27.

★South Dakota—State Highway Dept., Pierre, let contract building 12.6 mi. Aberdeen-Webster Rd., 26 ft. wide, Brown Co., to G. W. Humphrey, Pingree, N. D., $64,159. Noted May 1.

Tex., Haskell—Comrs. Haskell Co. received bids improving 16.797 mi. State Highway No. 39, 20 ft. wide, (a) concrete, (b) road work, from J. T. Rose & Son, Spur, (b) $16,758; C. Whitener, Spur, (a) $9348; Haskell Co., Haskell, (a) $9573. Noted May 15.

★Tex., Mason—Mason Co. let contract gravel surfacing and draining 24,878 mi. State Highway No. 9, from Mason southeast to Gillespie Co. line, 9 ft. wide, to Alamo Constr. Co., Frost Bldg., San Antonio. $50,801. Work involves 1070 cu.yd. concrete, 52572 cu.yd. earth and 1219 cu.yd. rock excav. and 41,227 lbs. reinforcing steel. Noted Mar. 6.

★Nevada—State Highway Comn., State Printing Office Bldg., Carson City, let contracts building Sect. C-1 Route 3 of State Highway, Tonopah to Millers cut off road, to J. O'Keefe, Goldfield, cost $33,576; Sect. A-1 Route 1, of State Highway, to W. Licking, Battle Mountain, $27,022; 16.73 mi. State Highway from Elko to Vivian, to J. H. Rooney, 1459 West 37th Pl., Los Angeles, $106,112.

★Ariz., Phoenix—City let contract improving Adams St. between 18th and 22nd Aves., to Southwestern Contg. Co., O'Neil Bldg., $33,716. Work involves 10,965 sq.yd. paving, $2 per sq.yd., 10,965 sq.yd. grading, $0.25, 4400 lin.ft. combination curb and gutter, $1.25, 215 lin.ft. single curb, $0.70, 60 lin.ft. single gutter, $0.70 and 20 lin.ft. valley gutter, $1.10.

★Wash., Seattle—Bd. Pub. Wks. let contract building sidewalks on 29th Ave., et al, involving 8821 sq.yd. concrete, to Goetz & Brennan, Seattle, $29,372. Noted May 22.

★Wash., Seattle—Bd. Pub. Wks. let contract building sidewalks on 13th Ave. S., et al, involving 1000 cu.yd. grading, 4120 sq.yd. concrete and 5000 ft. wooden curbing, to W. J. Smith, 4727 47th St. S., $10,331.

★Wash., Walla Walla—City Comrs. let contract paving 25,000 sq.yd. Alvarado, Clinton, 1st, Walnut and Thorne Sts., to Warren Constr. Co., Walla Walla, $69,992.

Railways

PROPOSED WORK

Wisconsin — Chicago-Northwestern Ry. plans to excavate grade and fill in sidetrack in Sheboygan, extending from city limits to city limits, involving 5000 cu.yd. earth and 2500 rock excav. About $12,000. T. W. Bowles, Chicago, ch. engr.

Oregon—Port of Astoria Comn. Astoria, plans to build belt line railroad to connect with Astoria Iron Wks. About $36,000. R. R. Bartlett, Astoria, engr.

New Brunswick—Canadian Natl. Rys., Moncton, soon lets contract building 120 mi. double track line from Moncton to Truro, N. S. L. S. Brown, Moncton, supt.

Excavation and Dredging

PROPOSED WORK

Mich., Sheffield—Excavation Fairbanks, Morse & Co. plan to change course of St. Joseph River for ½ mi. across their property, involving 120,000 yds. sand, gravel and muck excav.; preferably by centrifugal dredging pump. P. L. Bunn, engr.

Minn., Minneapolis—Ditch—Comrs. Hennepin Co. soon lets contract building Co. Ditch No. 32. A. P. Erickson, aud.

Mont., Billings—Canal—Victory Irrigation Dist. plans to build lateral irrigation canals to reclaim 1800 acres; water taken from Big Horn River and Lost Hope Ditch.

Mont., Miles City — Canals — Buffalo Rapids Irrigation Dist. plans election to vote on $75,000 bonds to build canals to irrigate 5000 acres.

Mo., Poplar Bluff—Excavation — Comrs. Inter. River D. D., Butler Co., rejected bids received May 14, building 200 mi. open ditch, 12-55 in. wide at base, 8 ft. deep, involving 7,200,000 cu.yd. floating dredgework. About $1,000,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. Noted Apr. 3.

Cal., Calexico—Excavation—P. B. Steintorff, city clk., soon receives bids excavating for 2 additional settling basins for water plant, cost, $20,000; also adding additional pumping facilities, $20,000.

BIDS DESIRED

N. Y., S. I., St. George—Dredging—Until June 6, by J. H. Delaney, comr. plant and structures, Municipal Bldg., New York City, dredging site of old coal dock at St. George Terminal of Staten Island Ferry.

Fla., Sanford—Ditch—Until June 3, by Comrs. Seminole Co., building 9.18 mi. of ditches, involving 58,660 cu.yd. excav. F. T. Williams, Sanford, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Chatham — Channel—City let contract dredging channel and building jetty to J. R. Burke Co., 78 Devonshire St., Boston, $11,850. Work involves 5000 cu.yd. floating dredgework and 350 ft. rock jetty.

Mass., Gloucester—Channel—F. W. Hodgdon, engr., 473 State House, Boston, received bids May 21, dredging channel and building dolphins involving 37,000 cu.yd. floating dredgework and 320 cu.yd. submarine rock excav., from G. F. Rendle, 270 Condor St., East Boston, $31,710; Boston Dredging Co., 172 Condor St., East Boston, $43,455; Bay State Dredging Co., 62 Condor St., East Boston, $45,610.

★N. J., Union Hill — Excavation — Bd. Educ. let contract excavating for No. 2 school on Hudson Ave. and 2nd St., to E. Hornung, West Hoboken, $5000, extra work, $5.00 per cu.yd. Noted May 22.

★Wis., Sheboygan — Drainage — Cedar Grove Village let contract installing drainage system, involving 9000 ft. 4-10-in. tile, to L. Cornelius & Co., North 14th St.; about $17,500. Noted May 1.

★Wis., Sheboygan — Drainage—City let contract installing drainage system in Sects. Nos. 10-15-16-17, Seheboygan Falls Twp., to J. Van Deusler, South 8th St. About $13,500. Work involves 7500 ft. 12-14 in. tile. Noted May 1.

Industrial Works

PROPOSED WORK

R. I., Providence—K. B. Ely, Boston, Mass., receives bids in June building 1 story, 52 x 85 ft., brick, steel and rein.-con. auto sales and service station, rein.-con. flooring, concrete foundation, on Reservoir Ave., here. About $30,000. W. R. Walker & Son, 117 Custom House St., archts.

Industrial **Works (Continued)**

Conn., Bridgeport — Columbia Graphophone Co., Barnum Ave., soon receives bids building 6-story, 80 x 240 ft. rein.-con. addition to plant, rein.-con. flooring, concrete foundation. About $200,000.

Conn., New Britain—Plans are out for figures for 1-story, 50 x 100 ft. brick and mill construction factory, rein.-con. flooring, concrete foundation, on Center St., for Landers, Frary & Clark, Commercial and Center Sts. Davis & Brooks, Gold St., Hartford, archts.

N. Y., Binghamton—P. J. McManus, Peoples Trust Co. Bldg., and G. S. Phalen, have purchased Middlebrook property, Lewis St., extending block on State St., from Armory Theatre to Lewis St., and plan to convert present mill into modern fireproof machine shop and repair garage. Cost between $25,000 and $35,000.

N. Y., Brooklyn—B. A. Cushman Sons, Inc., 49 Manhattan St., New York City, soon let contract building 3-story, 140 x 200 ft. brick and steel bakery, rein.-con. flooring, brick foundation, on Atlantic and Troy Aves., here. About $100,000. L. S. Beardsley, 40 West 32nd St., New York City, archt. and engr. Noted May 1.

N. Y., Brooklyn—Magid, Katzman & Stroker, 58 Boerum St., having revised plans prepared by H. J. Nurick, archt., 949 Bway, for 3-story, 100 x 168 ft., rein.-con. and steel warehouse, garage and workshop, rein.-con. flooring, concrete foundation, on Jefferson St., Wyckoff and Flushing Aves. About $120,000. Noted Apr. 24.

N. Y., Buffalo—R. C. Fayfield, archt., Iroquois Bldg., receives bids about May 31, building 6-story, 50 x 100 ft. brick and rein.-con. warehouse, rein.-con. flooring, concrete foundation, for Robertson Cataract Co., 151 West Montauk St. About $80,000.

N. Y., Long Island City—Steinway & Sons, 107 East 14th St., New York City, soon let contract altering and building rein.-con., steel and brick addition, rein.-con. flooring, concrete foundation to factory on Ditmar Ave., between 15th and 16th Aves. About $75,000. W. K. Benedict, 527 5th Ave., New York City, archt. Noted Apr. 3.

N. Y., New York—H. S. Coffin, 44 Pine St., had plans prepared by G. M. McCabe, archt., 96 5th Ave., for 2-story, 99 x 188 ft., steel and brick garage, rein.-con. flooring, concrete foundation, at 388-394 11th Ave. About $100,000.

N. Y., Niagara Falls—Republic Carbon Co., Sugar St., had plans prepared by A. G. Smith, engr., c/o owners, for 1-story, 50 x 167 ft. brick, steel and concrete plant, concrete foundation. About $75,000.

N. Y., Rochester—Eastman Kodak Co., Kodak Park, plans to build 2-story, 66 x 150 ft. "L" shaped rein.-con. factory, on Platt St. About $200,000.

Pa., Scranton—Maloney Oil & Mfg. Co., Land Title Bldg., Philadelphia, having plans prepared by J. J. Howley, archt., Traders' Bank Bldg., for 1-story, 36 x 76 ft., brick, stone and concrete, service station, concrete foundation, on City Hall Sq. here. About $50,000.

Md., Baltimore—Gardner Baking Co., c/o W. A. Gardner, 119 South Paca St., plans to alter and build 2 and 3-story, 43 x 54 ft. and 24 x 56 ft., rein.-con., steel and brick addition to bakery on Preston St. and Madison Ave. Cost, including machinery, $85,000. E. H. Glidden and T. W. Pietsch, 1210 Amer. Bldg., archts.

Md., Sparrows Point (Baltimore P. O.)—Bethlehem Steel Corp. plans to double size of present tinplate plant, also build 12 sheet mills and additional open hearth furnace. About $25,000,000. C. M. Schwab, chn. bd. dirs.

O., Cleveland—Guide Motor Lamp Co., 11400 Madison Ave., had plans prepared by A. C. Wolf, archt., 805 Swetland Bldg., for 2-story, 60 x 180 ft., steel and brick factory and office, at 1500 West Madison Ave., About $40,000.

O., Cleveland—G. W. Hale, 340 Leader-News Bldg., had plans prepared by H. T. Jeffreys, archt., 1836 Euclid Ave., for 3-story, 165 x 180 ft., rein.-con., steel and brick garage, on East 9th St. and Bolivar Rd. About $150,000. Noted Apr. 17.

O., Cleveland—J. M. Halladay, 9414 Richmond Ave., had plans prepared by Watson Eng. Co., engrs., 1101 Hippodrome Bldg., for 2-story, 75 x 200 ft., concrete, steel and brick factory at 9414 Richmond Ave. About $150,000.

O., Cleveland—Sabin Machine Co., 6536 Carnegie Ave., had plans prepared for 3-story, 45 x 80 ft., concrete, steel and brick addition to machine shop. About $30,000.

O., Cleveland—Union Garage Co., 517 Sloane Bldg., soon lets contract building 2-story, 165 x 212 ft., concrete, steel and brick garage on West St., Clair Ave. G. A. Grieble, 517 Sloane Bldg., archt.

O., Ironton — Ohio Valley Mining Car Mfg. Co., c/o M. E. Brown, Ohio Valley Machine Wks., 713 2nd Ave., Huntington, W. Va., plans to build 1-story, 100 x 300 ft. fireproof plant, here. About $50,000. Architect not selected.

Mich., Detroit—Gen. Motors Corp., Boyer Campbell Bldg., had plans prepared by Esselstyn, Murphy & Hanford, archts. and engrs., 810 Marquette Bldg., for 1-story, 100 x 360 ft. heat treatment shop, 1-story, 360 x 600 ft. shop and 2-story, 30 x 360 ft. office, concrete, brick and steel, rein.-con. flooring, concrete foundation, also 500 ft. shipping platform, on Holbrook and St. Aubin Aves.

Mich., Detroit — Maxwell Motor Co., Woodward and Warren Aves., soon lets contract building 1-story, 102 x 157 ft., concrete and steel, assembling plant No. 17B, rein.-con. flooring, concrete foundation, on Oakland Ave. Smith, Hinchman & Grylls, 710 Washington Arcade Bldg., archts.

Wis., Milwaukee—United Storage Co., 233-239 East Water St., had plans prepared by M. Tullgren & Sons Co., archts., 425 East Water St., for 6-story, 60 x 150 ft. storage warehouse, on Prospect and Woodstock Sts. About $130,000.

Wis., Sheboygan—H. C. Prange Co., 731 North 8th St., plans to build 2 story, 60 x 110 ft. concrete or brick garage, brick foundation, on Wisconsin Ave. Cost between $50,000 and $60,000. Architect not selected.

Tex., Eastland—Texas & Pacific R.R., Dallas, plans to build shops and division headquarters, here. About $500,000. E. F. Mitchell, ch. engr.

Okla., Okmulgee—The Okmulgee Sheet Glass Co. plans to build a factory. About $75,000. Architect not selected.

Wash., Vancouver—Daily Clay Products Co. having plans prepared by A. H. Haley, archt., Vancouver, for 1st unit of plant. About $50,000.

Ore., St. Johns—Eagle Flour Mills Co., Portland, plans to build 4 unit flour mill, at municipal terminal, here, first unit to have 750 bbl. daily capacity; total daily capacity 3000 bbl. Plans include warehouse. Total cost, $250,000.

Ore., Tillamook—Ackley & Miller having plans prepared by Stokes & Zeller, archts., Chamber of Commerce Bldg., Portland, for 1-story, 105 x 143 ft. rein.-con. garage.

Cal., Emeryville—Oakland Terminal Co., Oakland, having plans prepared by C. N. Burrell, archt., 217 1st Trust Bldg., Oakland, for 1-story, 22 x 450 ft., brick terminal warehouse, concrete foundation.

Cal., Los Angeles — Bd. Pub. Serv., 645 South Olive St., plans election June 3, to vote on $2,500,000 bonds to build power plant No. 2 in San Francisquito Canyon and power development in Owens River gorge and $11,000,000 bonds for purchasing distributing system owned by Southern California Edison Co. E. F. Scattergood, 645 South Olive St., engr.

Cal., Riverside—California Date Assn. plans to build packing plant. About $50,000. Architect not selected.

Cal., San Francisco—Grosjean Rice Mill Co., 3210 20th St., purchased 362x800 ft. site, in Islais Creek Dist., and plans to build mill and warehouse. Architect not selected.

Ont., London—Scott-Chamberlain Co., Richmond St., plans to build brick and steel addition to shoe factory, concrete foundation. About $45,000.

Ont., Oshawa — Ontario Steel Products Co., Ltd., plans to build factory here. About $1,500,000. Sampson & Bain, Gananoque, representatives.

Ont., Perth—Wampole Co., Sherbrooke St., plans to build 1 story, 30 x 90 ft. brick box factory. About $33,000.

Ont., Toronto—A. C. Chapman, archt., Harbor Bldg., soon lets contract building brick factory for Canadian Ice Mchy. Co., 82 Chestnut St. About $60,000. Noted Apr. 24.

Man., St. Boniface—Clarx Milling Co. plans to build 5-story, flour mill and storage building. About $275,000.

BIDS DESIRED

Conn., Hartford—Until May 31, by Libby, McNeil & Libby, 252 Asylum St., building 3-story, 50 x 112 ft., rein.-con. cold storage plant, rein.-con. flooring, concrete foundation, on Edwards St. About $60,000. P. Larmon, c/o Swift & Co., Union Stock Yards, Chicago, archt. Noted Jan. 30.

N. Y., Amsterdam—McCleary, Wallin & Crouse, 57 Lyon St., receiving bids building 3 story, 135x325 ft. main building with two 2-story, 75 x 130 ft., rein.-con. and brick additions and 1-story, 130 x 150 ft. picker house, mill construction, rein.-con. flooring, concrete foundation. About $500,000. F. P. Sheldon & Son, Rhode Island Hospital Trust Bldg., Providence, R. I., engrs.

Ill., Chicago—A. Woltersdorf, archt., 138 North La Salle St., receiving bids building 1-story, 65 x 162 ft., 2-story, 49 x 162 ft. and 3-story, 89 x 94 ft. mill construction bakery plants, concrete foundation, at 5324 Federal St., here, for Gordon-Pagel Co., 461 Chene St., Detroit, Mich. About $125,000.

Wis., Manitowoc—Until June 15, by R. Rauber, archt., Manitowoc, for converting brewery into ice cream factory and building 2 story, 90 x 140 ft. rein.-con. and brick addition, brick foundation, for Manitowoc Brewing Co., 9th and Marshall Sts. About $72,000. Noted Mar. 20.

Wis., Sheboygan—Until June 2 by Wadham Oil Co., 359 Clinton St., building 2 story, 60 x 150 ft. concrete, brick and steel ware house on Michigan Ave. Leiser & Holst, 105 Wells St., Milwaukee, archts.

Wis., Sheboygan—Until June 15, by F. Blocki Co., c/o F. Blocki, 8th and Maryland Aves., building 3 story, 60 x 120 ft. brick and steel factory, rein.-con. flooring, brick foundation, on 15th St. About $60,000. Noted Apr. 17. Architect to be selected in few days.

Wis., Sheboygan—Until June 15, by Columbia Shoe Co., c/o C. Wolf, 1525 North 10th St., building 2-story, 40 x 90 ft., concrete, brick and steel shoe factory, brick foundation, on 10th St.

Que., Cap de la Madeleine—St. Maurice Paper Co., receiving bids for pump house, model maker and machine shops. About $31,000. J. Harris, vice pres. Noted Feb. 20.

Que., Grand Mere—Laurentide Co., Ltd., McGibbon St. and 3rd Ave., receiving bids for factory. About $30,000. D. Wurtile, c/o owner, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Vt., Vernon—Connecticut River Power Co., Osgood Bradley Bldg., Worcester, Mass., will build 65 x 110 ft. brick, rein.-con. and steel addition to power plant, rein.-con. flooring, concrete foundation, along Connecticut River, here. About $1,000,000. Work will be done by day labor.

★Mass., Boston—Eliot St. Garage Co. let contract building 4-story, 120 x 200 ft. brick, concrete and steel garage and storehouse, rein.-con. flooring, concrete foundation, on Eliot St., to G. W. Harvey Co., 201 Devonshire St. About $1,250,000.

★Mass., Boston—Quincy Cold Storage Co. let contract building 10-story, 60 x 180 ft., rein.-con. cold storage plant, rein.-con. flooring, concrete and pile foundation, on India Wharf, to B. Fox, Inc., 15 Exchange St. About $500,000.

★Mass., Springfield—J. Weisenberg, 143 10th St., let contract building 1 story, 92 x 107 x 108 ft. brick and concrete garage, rein.-con. flooring, concrete foundation, on Nursery and Liberty Sts., to H. S. Sherman, 143 10th St. About $30,000.

★R. I., Woonsocket—Jarret & Proulx let contract building 2-story, 75 x 150 ft. brick and mill construction mill, wood flooring, concrete foundation, on Park Ave., to J. F. Fleurent & Son, 158 Rathban St. About $60,000. Noted May 15.

★Conn., Hartford — Hartford Electric Light Co., 266 Pearl St., let contract altering present plant and building 1 story brick and concrete garage, rein.-con. flooring, concrete foundation, on Sheldon St. to J. H. Grozier Co., 721 Main St. About $35,000.

★N. Y., Brooklyn—H. W. Cotton Co., Inc., 233 Bway, New York City, let contract building 6-story, 80 x 500 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on 35th St., here, to F. T. Ley, 19 West 44th St., New York City. About $1,000,000. Noted Oct. 3.

Industrial Works (Continued)

★N. Y., Brooklyn—Liberty Wyona Co., 100 Bristol St., will build 1-story, 100 x 110 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Pilling St. and Evergreen Ave. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Parshelsky Bros., Johnson Ave., will build 1-story, 200 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Morgan and Montrose Aves. About $150,000. Work will be done by day labor.

★N. Y., New York—R. Carvel, 401 West 89th St., will build 2-story, 75 x 100 ft., brick and steel garage, rein.-con. flooring, brick foundation, at 245 West 61st St. About $50,000. Work will be done by day labor.

★N. Y., New York—L. Gold, 44 Court St., Brooklyn, will build 5-story, 100 x 100 ft., rein.-con. garage, rein.-con. flooring, concrete foundation, at 229-235 West 64th St., here. Work will be done by day labor.

★Pa., Altoona—Eagle Bakery let contract building 3 story, 20 x 40 ft. brick addition to bakery, to H. Horn, Holidaysburg. Cost, including fixtures, $52,000.

★Pa., Phila—O. J. Maigne Co., 1017 Sansom St., let contract building 3-story, brick and steel factory, rein.-con. flooring, brick foundation, to W. Linker Co., Ferry and 9th Sts. About $30,000. Noted May 15.

★S. C., Columbia—City will build 1-story, 30 x 95 ft., brick and concrete abattoir, brick foundation, on Broad River Rd., 2 mi. from here. About $40,000. Work will be done by day labor.

★O., Cleveland—Haberman Provision Co., 2302 Bway Ave., let contract building 2-story, 46 x 60 ft., rein.-con., steel and brick addition to factory, to J. A. Moffett Co., 1836 Euclid Ave. About $25,000. Noted May 15.

★O., Cleveland—Superior Fdry. Co., 3310 East 71st St., let contract building 1-story, 60 x 131 ft., concrete, steel and brick addition to foundry, to F. W. Ruple Co., 5103 Euclid Ave. About $30,000. Noted May 1.

★O., Cleveland—Van Dorn Tool Co., 2978 Woodhill Rd., let contract building 4-story, 50 x 100 ft., rein.-con., steel and brick factory, to S. W. Emerson, 1900 Euclid Ave. About $100,000. Noted May 1.

★Ill., Chicago—Iron Mountain Co., 6416 Stoney Island Ave., let contract building 1 and 2-story, 110 x 400 ft. fireproof plant, concrete foundation, on 95th St., near Cottage Grove Ave., to E. P. Strandberg Co., 133 West Washington St. About $150,000.

★Ill., Chicago—Premier Electric Co., 1123 South Wabash Ave., let masonry and carpentry contract for 2-story, 75 x 125 ft., mill construction factory, concrete foundation, on Grace St. and Ravenswood Ave., to Menke-Thielberg Co., 139 North Clark St. About $35,000.

★Wis., Sheboygan—Armour & Co., c/o A. Lotz, Chicago, let contract building 1 story, 60 x 150 ft., brick, rein.-con. and steel cooler and warehouse, concrete flooring, brick foundation, on South Water St., to J. L. Carnegie, 189 West Madison St., Chicago. About $55,000.

★Wis., Sheboygan—United Phonographs Corp., c/o L. Jenkins, 1121 South 13th St., let contract building 3-story, 72 x 120 ft. rein.-con. and steel factory, brick foundation, on Kentucky and 13th Sts., to M. Stubenrauch, 1426 Maryland Ave. About $70,000.

★Ia., Sioux City—Western Terminal Elevator Co. let contract building 1,000,000 bu. rein.-con. grain elevator, to Burrell Eng. & Constr. Co., 327 South La Salle St., Chicago. About $300,000. Noted Jan. 16.

★Kan., Topeka—Capper Publishing Co., 8th and Jackson Sts., let contract building 2-story, 75x100 ft., rein.-con. and brick addition to printing plant, rein.-con. flooring, concrete foundation, to F. M. Spencer & Son, 214 Mulvane Bldg. About $50,000.

★N. D., Devils Lake—R. E. Cobb Co. 3rd and Cedar Sts., St. Paul, Minn., let contract building concrete cold storage and meat packing plant, rein.-con. flooring, here, to H. C. Strucher, 405 Dakota Bldg., St. Paul, Minn. About $60,000.

★Mo., Carthage—Howard-Hulme-Dettrick Shoe Co. let contract building 2 story, 97 x 100 ft., brick factory, concrete foundation, on 4th and Maple Sts., to L. W. Mason, Carthage. About $35,000.

Tex., Houston—Dow Motor Co., 800 Walker Ave., let contract building rein.-con. and hollow tile garage, to A. Ness, 3210 Smith St. About $36,000.

★Ore., Astoria—Port of Astoria Comn. let contract building 6-story, 47 x 100 ft. rein.-con. flour mill, 3-story, 30 x 47 ft. office annex and 3-story, 32 x 47 ft. packing room annex, to M. Willis, Seattle, $75,672. Noted May 15.

★N. S., Sydney—Dominion Tar & Chemical Co., Ltd., let steel contract building steel and concrete, still house, to Sydney Fdry. & Machine Co., Sydney, concrete, to R. V. Hall, Mira Rd. About $30,000.

★Ont., Guelph—Northern Rubber Co., Ltd., let contract building 4 story, 80 x 200 ft. rein.-con. factory, on Metcalf St., to P. H. Secord & Son, 133 Nelson St., Brantford. About $100,000. Noted May 8.

★Ont., Sarnia—Romeo Fdry. Co., Port Huron, Mich., let general contract for foundry here, to Wells & Gray, Ltd., Confederation Life Bldg., Toronto; steel, to Sarnia Bridge Co., Ltd., 176 North St. Total cost, $50,000. Noted May 8.

Buildings

PROPOSED WORK

Mass., New Bedford—High School—City receives bids in June for addition and alteration to 3-story brick, rein.-con. flooring, brick foundation. About $200,000. Smith & Howland, Pleasant St., archts. Noted Jan. 23.

Conn., New Haven—Bank—Pallotti-Andretta Co., 630 Chapel St., soon lets contract building 3-story, 75 x 90 ft. brick, steel and concrete, rein.-con. flooring, concrete foundation, on Olive and Chapel Sts. About $100,000. D. Guerriero, 647 Main St., Hartford, archt. Noted Feb. 27.

Conn., New Haven—Business—P. J. Kelly & Co., 74 Orange St., soon receives bids building 4-story, brick and steel addition. About $60,000. W. H. Allen, 82 Church St., archt.

Conn., New Haven—Y. M. C. A., 152 Temple St., purchased site on Chapel and Howe Sts. and plans to build 1 and 4-story club and gymnasium. Cost to exceed $50,000. Architect not selected.

Conn., Stratford (Bridgeport P. O.)—Business—H. C. Lorell, 2419 Main St., soon receives bids building 3-story, 100 x 104 ft., brick and concrete, concrete foundation. About $60,000. Noted Apr. 10.

N. Y., Albion—Community—Supervs. Albion, Barre, Gaines and Carlton Twps. plan to build soldiers and sailors memorial community here. About $100,000. Address A. Ronick, Albion, chn. supervs. bldg. com.

N. Y., Batavia—Church—St. Anthony's congregation plans to build new church on present site. About $50,000. Address W. C. Kirby, pastor.

N. Y., Groton—High School and Gymnasium—Bd. Educ. soon receives bids building 2-story, 61 x 144 ft. brick and tile, with annex for gymnasium. About $125,000. C. W. Clark, Cortland, archt.

N. Y., Hamlin—School—Bd. Educ. plans to build 2-story, brick. About $60,000. Address H. T. Newman, clk.

N. Y., Newark—Cottage— S. F. S. Armstrong, pres. bd. trustees, State Custodial Asylum for Feeble Minded Women, rejected bids received May 8, building cottage here. L. F. Pilcher, Capitol, Albany, state archt. Noted Apr. 17.

N. Y., New York—Office—J. Cullman, 161 Front St., soon lets contract altering 7-story, brick and steel, at 135 Front St. About $60,000. Dodge & Morrison, 135 Front St., archts. and engrs.

N. Y., Watertown—School—City plans election to vote on $300,000 bonds to build school on Cooper St. Address E. W. Sayles, city engr.

N. Y., Yorkville—School—Bd. Educ. soon receives bids building new school. About $70,000. Address F. Butterworth, chn.

N. J. Camden—Bank—P. Merz, archt., Pennsylvania Bldg., Phila., soon receives bids building, 1 and 3-story, 65 x 75 ft., rein.-con., for Bway. Trust Co., 1009 Bway. About $200,000.

N. J., Jersey City—Office and Store—Arlington Co. plans to build brick, stone and concrete foundation, on Boulevard and Bergen Ave. About $70,000. A. Davis, 10 Newark Ave., archt. D. Max, 341 Forest St., interested.

Pa., Danville—Hospital—E. Geisinger, 7th St., having plans prepared by F. G. Nelson, archt., Connell Bldg., Scranton, for 3 story, 40 x 42 ft., rein.-con., concrete foundation. About $70,000.

Pa., Gouldsboro—Church—D. J. Kane, Moscow, having plans prepared by J. J. Howley, archt., Traders Bank Bldg., Scranton, for 1½ story, 22 x 55 ft. timber, concrete and stone foundation here. About $52,000.

Pa., Morrisville—High School—School Bd. plans to build high school. About $50,000. T. B. Stockham, Pennsylvania Ave., pres. Architect not selected.

Pa., Parsons—School—Boro. plans to build 3-story, 40 x 160 ft. rein.-con., steel and brick, concrete and rock foundation, on Ash St. About $60,000. Architect not selected.

Pa., Phila.—Store—I. Press & Sons, 8th and Chestnut Sts., plan to alter 3-story 50 x 100 ft. stone, iron and marble. About $75,000. F. N. Griesher, Lafayette Bldg., archt.

Pa., Pocono Pines—Church—P. J. Bowen, Mt. Pocono, having plans prepared by J. J. Howley, archt., Traders Bank Bldg., Scranton, for 1½ story, 36 x 65 ft., concrete, brick and stone, concrete foundation. About $50,000.

Pa., Scranton—Office—M. J. Murray Estate, Maur Bldg., having plans prepared by J. J. Howley, archt., Traders Bank Bldg., for 5 story, 30 x 40 ft., brick, stone, and concrete, concrete flooring, concrete foundation, on Monroe Ave. About $50,000.

Pa., Summithill—School—Boro. having plans prepared by J. J. Howley, archt., Traders Bank Bldg., Scranton, for 2 story, 30 x 40 ft. concrete, stone and brick, concrete foundation, on Wells and Fergo Sts. About $50,000.

Pa., Throop—Schools—Boro plans to build two 2 story, 28 x 35 ft. brick, stone foundation, on 7th St. About $60,000. J. J. Howley, Traders Bank Bldg., Scranton, archt.

Pa., Vandling—High School—Boro. having plans prepared by J. J. Howley, archt., Traders Bank Bldg., Scranton, for 2 story, 30 x 30 ft. brick, stone, concrete and steel, concrete foundation. About $50,000.

Md., Baltimore—Lunch Room—G. W. Hyde, 225 East Baltimore St., soon receives bids altering and building concrete and brick addition to lunch room at 206 West Fayette St. through to 106 Park Ave. About $50,000. C. M. Anderson, 324 North Charles St., archt.

Md., Baltimore—School—St. Mary's Industrial School, Wilkens Ave., having plans prepared by H. I. Kavanaugh, archt., 913 North Calvert St., for two 3 story, 63 x 131 ft., rein.-con. and brick dormitories and class room, concrete foundation, on Wilkens Ave. About $700,000. O. B. Corrigan, Gilmer and Baker Sts., chn. bldg. com. Noted May 15.

W. Va., Logan—Jail—Comrs. Logan Co. plan to build new jail. About $100,000. Architect not selected.

S. C., Charleston—School—City plans to build 3-story on St. Phillips St. About $50,000. Benson & Borbal, 26 Broad St., archts.

S. C., Greer—High School—Bd. of city School Comrs. plans to build high school. About $75,000. Architect not selected.

O., Cleveland—Commercial—Avenue Co., 4500 Euclid Ave., had plans prepared by Hubbell & Benes, archts., 4500 Euclid Ave., for 2-story, 56 x 96 ft., concrete, steel and brick, at 2024 East 48th St. About $50,000.

O., Cleveland—Commercial—G. D. Koch & Son Co., 10300 Euclid Ave., plans to build concrete, steel and brick, at 10007 Euclid Ave. About $100,000. Architect not selected.

O., Cleveland—Commercial — Raine Co., c/o G. A. Grieble, archt., 517 Sloane Bldg., soon lets contract building 6-story, 33 x 124 ft., concrete, steel and brick, on East 11th St. and Chester Ave.

O., Cleveland—Hospital—Grace Hospital Assn., 2307 West 14th St., plans to build rein.-con., steel and brick addition. About $250,000. Architect not selected.

O., Cleveland—Market—Woodland—East 55th St. Co., c/o I. J. Rothchild, 510 Amer. Trust Bldg., plans to build 3-story, 200 x 273 ft., concrete, steel and brick, on East 55th St. and Woodland Ave. About $500,000. S. H. Weis, 1032 Schofield Bldg., archt.

O., Cleveland — Mercantile — Berkshire Realty Co., 517 Sloane Bldg., soon lets contract building 11-story, 66 x 147 ft. rein.-con., steel and brick, on East 6th St. G. A. Grieble, 517 Sloane Bldg., archt.

O., Cleveland—Office—See "Industrial Works."

Buildings (continued)

O., Cleveland—Theatre—Corlett Realty Co., 12613 Miles Ave., having plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., for 2-story, concrete, steel and brick, at 10705 Miles Ave. About $85,000.

O., Dayton—Club House—Kurt-Te-Si Club Co., Dayton, plans to build 2-story, steel and concrete, concrete foundation, at Island Park. About $50,000. Schenck & Williams, Mutual Home Bldg., archts.

O., Miamisburg—Theatre— Weaver Bros. plan to build 2 story, 60 x 160 ft., brick and timber. brick foundation, on Main St. About $50,000. R. Gebhart, 73 Callahan Bank Bldg., Dayton, archt.

Mich., Detroit—Office—See "Industrial Works."

Mich., Royal Oak—School—City having plans prepared by F. D. Madison, archt., Royal Oak, for 2-story, rein.-con., brick and steel school, concrete foundation, in Dist. No. 6, to include gymnasium and auditorium. About $95,000.

Ill., Chicago—Bank and Office—I. Viehe-Naess, archt., 64 East Van Buren St., receives bids in June, building 3-story, 90 x 160 ft., brick and timber, concrete foundation, on Clark St. and Belmont Ave., for Lake View State Bank, 3160 North Clark St. About $80,000. Noted Apr. 24.

Ill., Chicago—Theatre and Office—E. M. Bertha, 11 South La Salle St., plans to build 4-story, 125 x 175 ft., on 63rd St. and Cottage Grove Ave. About $350,000. Architect not selected.

Wis., Eau Claire—Hotel—City had plans prepared by M. Tullgren & Sons., archts, 425 East Water St., Milwaukee, for 6-story, 90 x 125 ft. hotel. About $350,000.

Wis., Lancaster—City Hall, Auditorium, etc.—City plans to construct brick building. About $100,000. Claude & Starck, Badger Annex, Madison. archts.

Wis., Sheboygan—Theatre—H. R. Prange Co., 731 North 8th St., plans to build 1 story, 60 x 90 ft. brick and rein.-con. on 8th St. About $80,000.

Minn., Minneapolis—Hotel—Curtis Court Hotel Co., 10th St., and 3rd Ave., plans to build 12-story, 52 x 165 ft., rein..con. and brick, fireproof construction, rock foundation. About $1,000,000. Long, Lamoreaux & Long, 1028 Andrus Bldg., archts.

Minn., Moorhead—Bank—First State Bank receives bids about June 26, building 2 story, 50x150 ft., rein.-con., brick and steel. About $75,000. Braseth & Rosatti, Fargo, N. D., archts.

Minn., Owatonna—High School—Bd. Educ. receives bids about June 15, building 3 story, rein.-con. and brick, rein.-con. flooring, brick foundation. About $350,000. Jacobson & Jacobson, Owatonna, archts.

Minn., St. Paul—School Bd. Educ., 1697 Edgerton Ave., soon lets contract building 2-story, 46 x 80 ft., brick and hollow tile, on Edgerton St., Dist. No. 1. About $50 000. A. S. Devor, 487 Endicott Bldg., archt.

Neb., Lincoln—Hospital—City voted $100,000 bonds which in addition to $100,000 subscribed will be used to build hospital. G. W. Bates, city engr..

Mont., Culbertson—High School—School Dist. plans to build 2-story brick and cement, concrete foundation. About $50,000. McIver, Cohagen & Marshall, 407 Electric Bldg., Billings, archts.

Tex., Dallas—Bank—Federal Reserve Bank, Commerce and Martin Sts., soon lets contract building 5 story, rein.-con. and steel, concrete foundation. About $500,000. L Talley, cashier. Graham, Anderson, Probst & White, 80 East Jackson Blvd., Chicago, archts. Noted Dec. 12.

Tex., Riverside—School—City voted $50,000 bonds to build school.

Wash., Seattle—Store—J. S. Graham, 2nd and Spring Sts., plans to build 3-story, 83 x 108 ft., brick and terra cotta, concrete foundation, on 2nd and Pine Sts. About $500,000. H. B. Pearce, Arcade Bldg., archt.

Ore., Marshfield—Home—Elks Lodge having plans prepared by Houghtaling & Dougan, archts., Henry Bldg., Portland, for 2-story, 100 x 100 ft. cement, tiling and brick. About $50,000. G. Dix., chn. Noted Mar. 6.

Cal., Bakersfield—School—City election June 5, to vote on $150,000 bonds to build Lincoln School. Architect not selected.

Cal., Fresno—Hotel—J. A. Madden, San Francisco, having sketches made by G. A. Applegarth, archt., Spreckles Bldg., San Francisco, for 12-story hotel here.

SEWAGE TREATMENT WORKS—CLEVELAND, O.

Bids were received by Department of Public Service, May 14th, for constructing westerly sewage treatment works, Contr. No. 25, from (A) Minnick-Gibbons Co., 5309 Prospect Ave.; (B) Masters & Mullen, Electric Bldg., (C) Great Lakes Dredge & Dock Co., Williamson Bldg.; (D) Central Dredging Co., $808,037, $74,950, $733,087; Bates & Rogers, 37 West Van Buren St., $894,045, $72,213, $821,832. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
Removing office building (lump sum)	$1,850.00	$2,030.00	$4,920.00
Removing existing structures (lump sum)	600.00	700.00	600.00
4 test pits	500.00	800.00	800.00
4 tests on piles	200.00	300.00	600.00
12,900 cu.yd. excavation, Class "A"	2.70	3.34	2.50
24,950 cu.yd. excavation, Class "B"	3.00	3.56	3.85
110 cu.yd. foundation cushion	3.50	3.40	3.00
1,700 lin.ft. wood piles, 40 ft. or under	.85	.69	.75
1,730 lin.ft. wood piles, over 40 ft	.95	.71	.70
8,710 lin.ft. concrete piles	2.10	2.24	2.50
450 hours pile driver and crew	60.00	17.00	13.00
16,490 ft. b.m. timber caps, stringers and grillage	90.00	149.00	150.00
6,050 cu.yd. concrete, Class "A"	10.00	10.25	15.00
840 cu.yd. concrete, Class "B"	11.00	13.85	20.00
7,350 cu.yd. concrete, Class "C"	13.00	17.34	25.00
1,010 cu.yd. concrete, Class "D"	20.00	23.94	36.00
810 cu.yd. concrete, Class "E"	30.00	36.11	40.00
9,300 sq.yd. flow partition walls	7.25	6.37	6.50
50 bbl. additional Portland cement	2.60	5.00	3.00
1,500 sq.yd. special surfacing of concrete	1.10	1.75	2.40
1,050 sq.yd. waterproofing for concrete	1.80	1.70	1.90
2,864 lin.ft. expansion joints	1.00	.75	1.10
1,466,500 lb. steel reinforcement	.05	.05	.05
30 tons bell and spigot cast iron pipe	105.00	83.00	77.00
56 tons flanged cast iron pipe	175.00	145.00	127.00
3.43 tons bell and spigot standard specials	200.00	170.00	145.00
7.84 tons flanged standard specials	210.00	200.00	200.00
9.18 tons special specials	300.00	250.00	210.00
675 lin.ft. 2-in. galvanised iron pipe	.75	.55	1.00
2,560 lin.ft. 1½-in. galvanised iron pipe	.65	.45	.70
150 lin.ft. 1-in. (or smaller) galvanized iron pipe	.45	.34	.45
4,100 lin.ft. 1½-in. perforated black iron pipe	.45	.40	.70
4 1-in. gate valves	3.00	2.00	2.00
64 1½-in. gate valves	4.30	3.00	4.00
65 2-in. gate valves	6.00	4.00	5.20
4 3-in. gate valves	9.00	7.25	17.00
2 4-in. gate valves	12.00	9.50	20.00
1 6-in. gate valve	19.00	16.50	27.00
65 8-in. gate valves	35.00	29.00	39.50
32 8-in. quick opening gate valves	50.00	43.00	55.00
28 6-in. shear gates	30.00	30.80	30.00
48 8-in. shear gates	35.00	37.50	35.00
12 6-in. sluice gates	50.00	73.70	83.00
6 adjustable valve boxes and covers	25.00	8.00	28.00
80 lin.ft. 1-rail iron pipe railing	2.50	2.20	1.70
330 lin.ft. 2-rail iron pipe railing	3.00	2.75	2.25
Setting Venturi meter and sluice gate castings (lump sum)	400.00	400.00	500.00
64 adjustable weirs	50.00	100.00	45.00
600 sq.ft. prism lights	2.25	2.50	3.85
90 sq.yd. brick invert	2.80	3.00	4.00
14,650 lb. miscellaneous cast iron work	.12	.145	.13
10 tons miscellaneous wrought iron and steel work	240.00	300.00	275.00
27,680 ft. b.m. miscellaneous wood work	200.00	260.00	195.00
For extra work and materials, if any, the actual cost of such work and materials as determined by the engineer, plus fifteen per cent. of such cost.			
Car house building (lump sum)	1,750.00	1,950.00	1,900.00
Coarse screen building (lump sum)	10,100.00	10,950.00	11,000.00
Laboratory building (lump sum)	6,000.00	6,300.00	6,100.00
Disinfection building (lump sum)	8,800.00	8,670.00	9,000.00
Plumbing and gas fitting (lump sum)	5,500.00	5,900.00	7,500.00
Electrical wiring for light and power (lump sum)	3,200.00	3,000.00	4,500.00
Steam heating equipment (lump sum)	3,500.00	3,600.00	5,500.00
Pumping equipment (lump sum)	3,850.00	3,600.00	3,500.00
Industrial equipment (lump sum)	1,600.00	1,970.00	1,400.00
Drainage (lump sum)	5,000.00	5,000.00	2,500.00
Roadways (lump sum)	14,000.00	7,250.00	14,550.00
175 cu.yd. gravel walks	9.00	6.00	20.00
380 lin.ft. fencing	1.00	1.25	1.25
1,400 cu.yd. loam	4.00	3.00	3.60
1,300 sq.yd. sodding	.75	.40	.30
2.5 acres seeding	235.00	125.00	660.00
3 fire hydrants	50.00	100.00	110.00
Extended totals, items 1 to 55	$640,926	$678,001	$798,456
Extended totals, items 55 to 71	72,568	65,048	78,835
Extended grand totals, excluding items 55 to 71	568,359	612,955	719,621

Cal., Tulare—Hotel—Tulare Hotel Assn. having plans prepared by E. J. Kump, archt., 227 Rowell Bldg., Fresno, for hotel on Kern and L Sts. About $125,000.

Cal., Whittier—Theatre—H. J. Siler et al, c/o Gale Theatre, plan to build theatre. About $65,000.

Cal., Woodland—Hospital—Comrs. Yolo Co. having plans prepared by W. Weeks, archt., 75 Post St., San Francisco, for rein.-con. group of hospital buildings, to include administration, ward and nurses' buildings and superintendents' houses, etc. About $150,000.

Que., St. Anne Des Monts—Church—Roman Catholic congregation having plans prepared by T. Raymond, archt., 43 Caron St., Quebec. for steel, concrete and stone. About $82,000.

Que., St. Anne des Monts—School—Roman Catholic School Bd. soon receives bids building brick and steel. About $60,000. L Lauesque, secy.

Que., St. Robert—School Bd. soon receives bids building 3 story, concrete, steel and brick school. About $72,000. I. R. Paquin, secy.

Ont., Duncas—High School—Bd. Educ. plans to build 2 story. About $60,000. J. S Fry, clk. Architect not selected.

Ont., Ingersoll—School—School Bd. having plans prepared by W. J. Murray, archt., Dominion Savings Bldg., for brick school. About $50,000.

Ont., Midland—School—C. A. Wilson, secy. school bd., soon lets contract building steel, concrete and brick school on 6th St. About $70,000. J. Wilson, Hurontario St., Collingwood, archt.

Ont., Ottawa—Lodge—Millson & Burgess, archts., 209 Sparks St., soon let contract for lodge building for Knights of Columbus, 1121 Wellington St. About $60,000.

Ont., Toronto—Hospital—Bd. Control and Provincial Government, having estimates made by F. R. Heakes, archt., Parliament Bldg., for hospital for insane. About $750,000. W. McQueen, secy.

BIDS DESIRED

N. J., Newark—School—Until June 17, by Bd. Educ., building Seymour Vocational School on Sussex Ave. between 1st and 2nd Sts. Bids will be received for general construction work and for 1 or more of sub-

Buildings (continued)

divisions of engineering equipment, namely, heating, ventilating and power, engines and generators, electric work, plumbing, and vacuum cleaner. J. H. and W. C. Ely, Firemen's Bldg., archts.

N. J., Union Hill—School—Until June 17, by H. Lugosch, archt. and engr., 21 Bergenline Ave., for 3-story, 105 x 192 ft., brick and steel, brick foundation, on Hudson Ave., between 1st and 2nd Sts., for Bd. Educ. About $200,000. Noted Mar. 13.

Pa., Mckees Rocks—Church—St. Marys congregation, receiving bids building 1 story, 45 x 96 ft. brick, concrete and brick foundation. J. H. Philips, Fulton Bldg., Pittsburgh, archt. Noted Dec. 26.

Pa., Pittsburgh—E. B. Lee, archt., Chamber of Commerce Bldg., receiving bids constructing 4 story, 81 x 120 ft. steel and brick building, concrete foundation, on Centre Ave. and Francis St., for Y. M. C. A. About $100,000. Noted Apr. 17.

Md., Frostburg—School—Until June 3, by Bd. Educ. Alleghany Co., Cumberland, building 2-story, brick addition and altering Beall High School, here. C. M. Anderson, 324 Charles St., Baltimore, archt.

W. Va., Huntington—School—Until July 2, by State Bd. Control, Charleston, building 2 story, 86 x 156 ft. brick, rein.-con. and steel, physical education building, at Marshall College, here; advertised in this issue.

Ky., Ashland—Church—Until June 10, by Ritter & Shay, archts., North Amer. Bldg., Phila., building 2-story, 100 x 142 ft. brick and stone. About $100,000. Noted Dec. 12.

Mich., Royal Oak—School—Until May 31, by C. A. Dunton, pres. Bd. Educ., Peter Smith Bldg., Detroit, building 2-story, 26 x 84 with 29 x 58 ft. wing., rein.-con. and brick, fireproof construction, rein.-con. flooring, concrete foundation, on Berkley Ave., here. Van Leyen, Schilling & Keough, 1115 Union Trust Bldg., Detroit, archts. and engrs.

Kan., Wichita—School—Until June 9, by J. L. Leland, secy. bd. educ., building 3-story, 91 x 185 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on 3rd and Hydraulic Sts. About $160,000. L. Schmidt, 121 North Market St., archt.

Neb., Omaha—Store—Until June 2, by J. Latenser & Sons, archts., 632 Bee Bldg., building 6 story 120 x 132 ft. brick and rein.-con., cement flooring, concrete foundation on 11th and Dodge Sts., for E. L. Means, Orleans. About $150,000.

Wash., Spokane — Hospital — Cutter & Blume, archts., Sherwood Bldg., receiving bids building 6-story, 46 x 200 ft., rein.-con. addition to Deaconess Hospital, 715 4th St. About $100,000.

Cal., Los Angeles—School—Until June 11, by Bd. Educ., building 2-story, 132 x 220 ft. brick and concrete, concrete foundation, on 7th St. About $90,000. Allison & Allison, 1405 Hibernian Bldg., archts. Noted Mar. 27.

Ont., London—School—Until June 1, by Watt & Blackwell, archts., Bank of Toronto Bldg., for 2-story, 150 x 250 ft. rein.-con. medical school, concrete foundation, on Ottaway Ave., for Western University. About $300,000. Noted Jan. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Meriden — Parish — Evangelical Lutheran Emanuel Church Society let contract building 2-story, 44 x 90 ft., brick and concrete, rein.-con. flooring, concrete foundation, on Hanover and Cook Sts., to H. Wales Lines Co., 134 State St. About $60,000.

★Conn., Meriden—Store and Office—E. Derecktor, 39 Crown St., will build 3-story, 40 x 75 ft. brick and timber, rein.-con. flooring and concrete foundation, on West Main St. About $50,000. Work will be done by day labor. Noted Mar. 6.

★Conn., Torrington — Dormitory—Charlotte Hungerford Memorial Hospital, Litchfield Rd., let contract building 2-story, 40 x 75 ft., brick and steel, rein.-con. flooring, concrete foundation, to Torrington Bldg. Co., 197 Water St. About $50,000. Noted May 1.

★Conn., Waterbury—School—Bd. Educ. let contract building 2-story, brick and concrete addition to Croft St. School, rein.-con. flooring, concrete foundation, to O. La Croix, 95 Bank St. About $141,000. Noted May 15

★N. Y., Binghamton — Theatre — Symphony Theatre Co., 109 Chenango St., let contract building fireproof rein.-con. theatre on Chenango St. (2000 seating capacity), to A. E. Badgely, Stone St.

★N. J., Jersey City—Hospital—City Comrs. let contract building steel and brick alterations and additions to hospital, brick foundation, on Baldwin Ave. and Montgomery St., to W. H. and F. W. Cane, 233 Bway., New York City. About $900,000.

Md., Baltimore—Bank—Maryland Trust Co., Calvert and Redwood Sts., received bids altering entire 1st floor of 50 x 200 ft., concrete and steel bank, on Calvert and Redwood Sts., also installing steel vault, from C. L. Stockhausen, Gay and Water Sts.; Consolidated Eng. Co., 243 Calvert Bldg.; Frainie Bros. & Haigley, 18 Clay St. About $50,000.

★Md., Homewood (Baltimore P. O.)—Laboratory—Trustees Johns Hopkins University let contract building 1 story, 50 x 150 ft., rein.-con. and brick, concrete and brick foundation, on Charles St. Ave., to Frainie Bros. & Haigley, 18 Clay St., Baltimore. About $55,000. Noted May 15.

★Md., Texas—Almshouse—Comrs. Baltimore Co., Towson, let contract building 2½-story, 44 x 90 ft., stone and brick, rein.-con. flooring, to Hicks, Tase & Norris, 106 West Madison St., Baltimore. About $85,000. Noted May 8.

Md., Tracys Landing—School—Bd. Educ. Anne Arundel Co., Annapolis, received bids building 2-story, 75 x 130 ft., brick and concrete, brick foundation, here, from J. Waters Bldg. Co., 23 East Center St.; C. W. Carlston, Annapolis; Home Cement Co., 2303 Maryland Ave., Baltimore; E. G. Turner, 15 East Fayette St., Baltimore. About $60,000. Noted May 22.

★D. C., Washington—Bank—Liberty Savings Bank, 1410 New York Ave., N. W., let contract building 1 story, 25 x 139 ft., brick, steel and stone, brick foundation, on 15th and Eye Sts., to S. J. Prescott Co., 814 13th St., N. W. About $100,000. Noted May 8.

★Va., Charlottesville—Bank — First Nat. Bank of Charlottesville let contract building 8-story, 56 x 100 ft., steel, brick and stone, rein.-con. flooring, to Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C. About $250,000. Noted Mar. 6.

★Fla., Jacksonville — Bank — Atlantic Natl. Bank let contract altering and building 50 x 100 ft. steel and brick addition, brick foundation, About $100,000, to E. D. Fitchner, Jacksonville.

★Miss., Charleston—School—Town let contract building school, to R. H. Byrd & Co., 208½ North 21st St. About $75,000. Noted Apr. 10.

★Ky., Scottsville — Hotel — Scottsville Hotel Co. let contract building 4 story, 86 x 110 ft. brick, to MacDonald Constr. Co., 428 Odd Fellows Bldg., St. Louis, Mo. About $60,000.

★O., Cleveland—Office—Fishel & Marks, 3013 East 55th St., let contract building 3-story, 37 x 60 ft., concrete, steel and brick, on East 55th St. and Krakow Ave., to H. W. Fahner, 14000 Woolworth Rd. About $50,000.

★O., Dayton—Salesroom—F. B. Heathman Co., 220 West 3rd St., let contract building 2 story, rein.-con. and brick rein.-con. flooring, concrete foundation, on West 2nd St, to Blanchard Bldg. Co., Chapel Rd. About $65,000. Noted May 8.

★O., Ironton—Theater and Store—H. A. Marting let contract building 4-story, 66 x 133 ft., steel and concrete, concrete flooring, on Main St., to Taylor & Lynn, 767 Fountain Sq., Zanesville. About $150,000. Noted May 1.

★O., Kent—Hotel—Kent Hotel Co. let contract building 3-story, rein.-con., steel and brick, to Crowell-Lundoff Little Co., 5716 Euclid Ave., Cleveland. About $150,000. Noted May 8.

★Mich., Detroit — School—St. Theresa congregation, c/o Van Leyden, Schilling & Keough, archts., 1121 Union Trust Bldg., let contract building 2-story, 70 x 180 ft., rein.-con. and brick, concrete foundation, to J. Finn & Co., 234 Fort St., E. About $130,000.

Mich., Flint—Hotel—Citizens Hotel Co., Ellicott Sq., Buffalo, N. Y., received bids building Durand Hotel here, 7-story, 100 x 200 ft., rein.-con. and steel, concrete foundation, from Hegemann-Harris Co., 33 West 42nd St., New York City, $699,900; Realty Constr. Co., 11th and Orange Sts., Wilmington, Del., $725,000; Duboise Constr. Co., Flint, $743,000. Noted Apr. 17.

★Ill., Chicago—Theatre and Stores—A. E. Whitbeck, c/o W. W. Ahlschlager, archt., 111 West Washington St., let masonry contract for 3 story, 125 x 150 ft. brick and timber, rein.-con. flooring, concrete foundation, on 63rd and Union Sts., to A. and E. Anderson, 19 South La Salle St. About $700,000. Noted Apr. 17.

★Wis., Eau Claire—Church—First Norwegian Lutheran congregation let contract building 1-story, 78 x 130 ft. brick and steel, rein.-con. flooring, to Hoeppner Bartlett Co., 414 Grand Ave., E. About $50,000.

★Wis., Plain—Church and School—St. Luke's congregation let contract building church, school, rectory and sisters' residence, to Wisconsin Constr. Co., Physics Bldg., University Ave. and Charter St., Madison, $60,464. Noted Sept. 12.

★Wis., Sheboygan—Church—First Congregational Church let contract wrecking old church and rebuilding 3-story, 50 x 110 ft., rein.-con. and brick, brick foundation, on 7th St., to W. Weeks, 730 Ontario Ave. Cost between $50,000 and $60,000.

★Minn., Duluth—School—Bd. Educ. let contract building 3-story, 54 x 64 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on East 3rd St., to H. Fawcett, 400 Amer. Exch., $53,397. Noted May 1.

★Minn., Hawley—High School—Bd. Educ. let contract building 2-story, 67x118 ft., fireproof, to Bracker Constr. Co., 638 Builders' Exch., Minneapolis. About $50,000. Noted Apr. 24.

★Minn., Minneapolis—Cathedral—Scottish Rite Cathedral Assn., 1015 Franklin Ave., W., will build 38x92x120 ft., rein.-con., brick and stone addition on Dupont and Franklin Aves. About $60,000. Work will be done by day labor.

★Minn., Round Lake—School—Bd. Educ. let general contract building brick and tile, concrete foundation, to J. B. Nelson Constr. Co., Mankato. About $50,000. Noted May 8th.

★Minn., Winnebago—High School—Bd. Educ. let general contract building 2-story, 107 x 112 ft., rein.-con. and brick, to Bracker Constr. Co., Builders' Exch., Minneapolis. About $90,000.

★Okla., Chickasha—Dormitory—State Bd. of Pub. Affairs, Oklahoma, let contract building dormitory, etc., at Oklahoma College for Women, here, to Kreipke-Schafer Constr. Co., El Reno, $142,898.

★Cal., Santa Cruz—Theatre—F. D. Hihn, Insurance Merchants Exch. Bldg., San Francisco, let contract building rein.-con. theatre to seat 1200, to C. W. Heyer, Jr., Dolziel Bldg., Oakland. About $100,000, cost plus percentage basis. Noted May 1.

★Ont., Brantford—School—School Bd. let contract building 2-story, brick, to P. H. Second & Sons, Ltd., 133 Nelson St. About $150,000. Noted Apr. 3.

★Ont., Ottawa — Schools — Dept. Educ., Toronto, let contract remodeling 2 schools here, to Taylor & Lacky, 93 Powell Ave. About $70,000. Noted Apr. 17.

Federal Government Work

PROPOSED WORK

Mass., Quincy—School—U. S. Housing Comn., 613 G St., N. W., Wash., D. C., plans to build 2-story, concrete and brick, on North St. About $150,000.

N. J., Lake Denmark—Magazine Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to complete buildings Nos. 3 and 4, here; Spec. 3911. About $18,500.

Pa., Phila—Dredging—U. S. Engr. Office, 1321 Walnut St., soon receives bids dredging Schuylkill River to depth of 30 ft. About $900,000 available for work.

D. C., Wash.—Reflecting Basin—C. Ridley, Dept. Pub. Wks. and Grounds, 1729 New York Ave., N. W., plans to build on Mall between Lincoln Memorial and 17th St., N. W. About $200,000.

Va., Hampton Roads—Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build industrial buildings at submarine base, here; Spec. 3909. About $325,000.

Va., Quantico—Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3910.

S. C., Charleston — Building — Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build amusement building, here; Spec. 3908. About $37,000.

Federal Government Work (Continued)

Tex., Mt. Pleasant—Post Office—J. A. Wetmore, act. superv. archt., treas. dept., Wash., D. C., rejected bids received May 8 building, here. Noted May 15.

Cal., California City—Power Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., having plans prepared for power plant at Navy Coaling Yard, here. About $20,000.

Cuba, Havana—Docks, Marine Railways, Storehouses, etc.—War Dept., Republic of Cuba, having plans prepared by Monks & Johnson, engrs., 99 Chauncey St., Boston, Mass., for docks, marine railways, storehouses, machine shops, foundry, barracks, etc., in Triscornia, Havana Harbor.

BIDS DESIRED

Me., Portland—Dredging—Until June 24, by U. S. Engr. Office, Portland, dredging Georges River (Thomaston Harbor) and Tenants Harbor; advertised in this issue.

N. Y., Ft. Slocum—Boilers—Until May 31, at Office of Quartermaster, Recruit Depot, furnishing material for retubing 5 steam heating boilers.

N. Y., New York—Dredging—Until June 23, by U. S. Engr. Office, 39 Whithall St., dredging Hackensack River, N. J., advertised in this issue.

Pa., Ft. Mifflin—T N T Plant—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3866. About $150,000; $10 deposit required for plans and spec. Noted Apr. 17.

Md., Baltimore—Rip Rap—Until June 12, by Supt. Lighthouses, Baltimore, furnishing and placing rip rap stone at Craney Island Light Sta., Va.; advertised in this issue.

D. C., Wash.—Water Main and Sewer System—Until June 9, by Suburban Sanitary Comn., 611 F St., N. W., building water mains and sewers in Hyattsville Sewer and Water Dist., involving 6500 lin. ft. 6 and 8-in. c.i. water mains, 7200 lin.ft. 6, 8 and 10-in. vitr. sewer pipe, etc. W. T. S. Curtis, chn.; advertised in this issue.

Va., Hampton Roads—Electric Distributing System—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing at submarine base, here; Spec. 3901. About $60,000; $10 deposit required for plans and spec. Noted May 22.

W. Va., Charleston—Boilers and Superheaters—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing, here; Spec. 3707. About $45,000; $10 deposit required for plans and spec. Noted Dec. 5.

W. Va., Wheeling—Steel, Forgings, Castings, etc.—Until June 23, by U. S. Engr. Office, furnishing and delivering structural steel, forgings, castings, etc. for Locks Nos. 1 and 4, Little Kanawha River; advertised in this issue.

S. C., Clinton—Post Office—Until June 18, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building, here, advertised in this issue.

Ala., Florence—Air Compressors—Until June 27, by U. S. Engr. Office, Florence, furnishing air compressors; advertised in this issue.

La., New Orleans—Bulkhead—Until June 25, by U. S. Engr. Office, Customhouse, building bulkhead at Southwest Pass, Mississippi River; advertised in this issue.

La., New Orleans—Coal—Until June 27, by U. S. Engr. Office, Customhouse, furnishing and delivering coal for U. S. plant; advertised in this issue.

La., New Orleans—Piles and Lumber—Until June 25, by U. S. Engr. Office Customhouse, furnishing and delivering piles and lumber on bank or wharves in Southwest Pass, South Pass and Head Passes, Mississippi River; advertised in this issue.

O., Cincinnati—Boiler—Until June 16, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., furnishing and installing 4 water tube boilers, in custom house and post office, here.

Mich., Houghton—Post Office—Until June 27, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here.

Ill., Cairo—Boiler—Until June 16, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., furnishing and installing boiler in post office, here.

Ill., Monmouth—Boiler—Until June 9, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing boiler, smokestack, steam and water mains, etc., in post office, here.

Tex., Galveston—Jetty Repairs—Until June 18, by U. S. Engr. Office, repairing north jetty, Galveston Harbor.

Colo., Denver—Boilers—Until June 9, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing 2 boilers in custom house, here.

P. R., Cayey—Radio Buildings—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building operators' quarters and 2 cottages, here; Spec. 3902. About $27,000; $10 deposit required for plans and spec. Noted May 22.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., New London—Dredging—U. S. Engr. Office, New London, let contract for maintenance dredging in New Haven Harbor, to Hartford & New York Transportation Co., 285 State St., Hartford, $15,400. Noted May 1.

★N. Y., Governor's Island—Boilers—Constr. Div., War Dept., let contract installing boilers, here, to Erie City Iron Wks., 915 Equitable Bldg., Baltimore, Md., $33,528.

★N. Y., Madison—Boilers—Constr. Div., War Dept., let contract installing boilers at barracks, here, to Erie City Iron Wks., 915 Equitable Bldg., Baltimore, Md., $5708.

★N. Y., New York—Dredging—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract dredging at Navy Yard, here, to Morris & Cummings Dredging Co., 17 State St., $.74 per cu.yd. (30 days).

N. J., Lake Denmark—Magazine Storehouses—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids completing 2 magazine storehouses at Naval Ammunition Depot, here, from Speedwell Constr. Co., 22 University Pl., $18,500 (45 days); Faillace Bros., 7 East 42nd St., $19,632 (45 days). Unit price on excav. $2.80 per yd. Both contractors of New York City.

★Del., Wilmington — Dredging — U. S. Engr. Office, Old Federal Bldg., let contract dredging Tuckerton Creek, N. J., to Hill Dredging Co., Altantic St. and Somerset Pl., Atlantic City, N. J., $4200. Noted Mar. 6.

D. C., Wash.—Paving—Dist. Comrs., Dist. Bldg., received only bid May 21, paving various streets and avenues, from Cranford Paving Co., Union Trust Bldg., 2½ in. asphalt, 6 in. base with natural pitch lake, $3.25 per sq.yd.; reduced oil asphalt, $3; vitr. block, $3.40; asphalt on 5 in. base, natural pitch lake, $3.05; reduced oil asphalt, $2.80; vitr. block, 5 in. base, $3.20. Noted May 8.

Va., Yorktown—Road—Constr. Div., U. S. Army, received bids May 19, building 2 mi. concrete road between Yorktown and Lee Hall, from:

S. R. Curtis, $38,956 per mi. 12-in iron pipe culvert $2.25 per lin.ft.; 13-in. $2.50; 18-in $3; 20-in. $3.50; 24-in. $4; 30-in. $5; 36-in $6; 4-in. drain tile $.38 per ft.; 12-in. vitr. sewer crock $.95; 15-in. $1.02; 18-in. $1.40; 20-in. $1.68; 24-in. $2.52; concrete laid in wet trench $1.. per cu.yd.; concrete laid under ordinary conditions $16; reinforced steel in place $.08 per lb.; gravel or stone $6 per cu.yd.; lumber $50 per 1000 ft.; grading highway outside line of ditch $200 per acre; additional concrete road $7.38; excav. for open ditches $.03.

McLean Contg. Co., 1412 Fidelity Bldg., Balitmore, Md., $38,965 per mi.; 12-in. culvert $2.50; 14-in. $2.75; 18-in. $3.45; 20-in. $3.75; 24-in. $4.50; 30-in. $5.15; 36-in. $5.75; 4-in. drain tile $.085; 12-in. vitr. sewer crock $1.65; 15-in. $1.75; 18-in. $1.95; 20-in. $2.45; 24-in. $3.25; concrete laid in wet trench $28 per cu.yd.; under ordinary conditions $20; steel $.08 per lb.; gravel or stone $5.50 per cu.yd.; lumber $135 per 1000 ft.; grubbing and cleaning highway outside of ditches, $295 per acre; additional concrete road $8.48; excav. for open ditches $.08.

Hampton Roads Constr. Co., Hampton Roads, Va., $42,000 per mi.; 12-in. culvert $2; 14-in. $2.50; 18-in. $3; 20-in. $3; 24-in. $3; 30-in. $3.50; 36-in. $3.50; 4-in. drain tile $.45; 12-in. vitr. sewer crock $1.50; 15-in. $1.60; 18-in. $1.75; 20-in. $1.90; 24-in. $3.45; concrete laid in wet trench $40; under ordinary conditions $22; reinforced steel $.12 per lb.; gravel or stone $4 per cu.yd.; lumber $75 per 1000 ft.; grubbing and cleaning $500 per acre; additional concrete road, $7.75; ditch $.09 per cu.ft.

W. Va., South Charleston—Cranes—Bureau Yards & Docks., Navy Dept., Wash., D. C., received bids May 20, installing 22 electric traveling cranes in open hearth, forge, furnace and machine shops and heat treatment building, here, (1) work complete from

Niles-Bement-Pond Co., 111 Bway., New New York City, 15 cranes—(5)—(10) inclusive and (15) (24) inclusive as indicated in specification, (22) is not included, $655,100,—(300 days), (6), (7), (8), (11) and (12)—cranes—lump sum bid.

Camden Iron Wks., Line St. and Coopers Creek, Camden, N. J., (11), $84,600 (183 days); (12) $84,600, (183 days).

Whiting Fdry. Equipment Co., Harvey, Ill., (5) $20,540, (180 days), alternate, $18,540 (180 days); (6) $20,400, each, (150 days); (12) $33,790, each, (225 days), alternate $33,470, (225 days).

Alliance Machine Co., Alliance, O., (1) $1,173,600, (180 days); (2) $94,900, (180 days); (3) $79,540, (180 days); (4) $61,345, (180 days); (5) $23,085, (150 days); (6) $18,540, each; (7) $75,445, (180 days); (8) $47,150, each, (180 days); (9) $113,900, each, (180 days); (10) $32,090, (180 days); (11) $69,370 each, (180 days); (12) $35,470, each, (180 days); (13) $64,250 (180 days).

Morgan Eng. Co., East Bway., Alliance, O., (1) $1,040,950, (262 days), deduct $17,555; (2) $81,250, (262 days), deduct $1375; (3) $75,500 (247 days), deduct $1040; (4) $58,675, (162 days), deduct $740; (5) $17,150, (149 days), deduct $480; (6) $17,950, each, (87 days), deduct $340; (7) $74,350, each (236 days); (8) $38,150 each (216 days), deduct $760, each; (9) $78,850, each (246 days), deduct $380 each; (10) $29,250, (223 days), deduct $760; (11) $66,350, each, (236 days), deduct $665, each; (12) $33,500, each, (178-216 days), deduct $760, each; (13) $53,250, (237 days), deduct $1550, alternate (1) $1,081,500, (262 days); alternate (2), $1,088,350, (262 days); (9) alternate (1), $99,650, each (246 days); (2) $103,150 each, (246 days).

Milwaukee Electric Crane & Mfg. Co., 60th and Greenfield St., Milwaukee, Wis., (5) $14,500, (90-120 days); (6) $25,200, (90-120 days); (8) $86,110, (120-180 days); (12) $208,800, (120-180 days).

Chesapeake Iron Wks., Westport, Md., (6) $24,860, each, (250-280 days); (12) $43,350, each, (200-300 days).

Cleveland Crane & Eng. Co., Wickliffe, O., (1) $1,074,670, (300 days); (2) $88,810 (161 days); (3) $86,550, (140 days); (4) $6750, (120 days); (5) $15,030, (110 days); (6) $15,210 each; (7) $80,640, each, (200 days); (8) $40,850, each, (280 days); (9) $74,725, each, (242 days); (10) $33,580, (165 days); (11) $68,160 each, (130 days); (12) $36,210, each, (270 days); (13) $45,420, (295 days), alternate (1) $1,118,880, (300 days); (2) $1,114,340, (300 days); alternate to (9) (1), $98,830, each, (242 days); (2) $96,560 (242 days).

Manning, Maxwell & Moore, 119 West 40th St., New York City, (5) $12,736, (80 days); (6) $24,816, (80 days); (8) $64,732, (110 days); (10) $23,646, (95 days); (11) $73,249, (110 days); (12) $169,505, (150 days).

Pawling & Harnischfeger, 38th St. and National Ave., Milwaukee, Wis., (5) $17,650, each, (240 days); (6) same; (7) $80,600, each; (8) $53,225, each; (10) $32,650, each; (11) $63,200; (12) $39,700, each.

V. R. Browning, 17701 Lake Shore Blvd., Cleveland, O., (6) crane No. 5 $12,984, (180 days); crane No. 6, $12,984, (200 days); (12) crane No. 18, $30,622, (180 days), crane No. 19, $29,622; crane No. 20, $29,622 (220 days); crane No. 21, $29,622 (235 days); crane No. 23, $29,622, (280 days); crane No. 24, $29,622, (280 days). Noted May 8.

★Ga., Augusta—Boiler—Constr. Div., War Dept., let contract installing boiler in arsenal, here, to Erie City Iron Wks., 915 Equitable Bldg., Baltimore, Md., $2854.

★Ga., Camp Benning—Boilers—Constr. Div., War Dept., let contract installing boilers, here, to Erie City Iron Wks., 915 Equitable Bldg., Baltimore, Md., $8562.

★Fla., Pensacola—Conduit System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building underground conduit system and transformer house, at Naval Air Sta., here, to G. E. Eng. Co., Leight and Varick St., New York City, $93,468 (150 days). Noted May 15.

Federal Government Work (Continued)

★Minn., Duluth—Dredging—U. S. Engr. Office, Duluth, let contract dredging Duluth-Superior Harbor, Minn., and Wis., involving, 2,083,333 cu.yd., to Duluth-Superior Dredging Co., Duluth, $.144 cu.yd. dipper work and $.155 cu.yd. hydraulic. Noted Apr. 24.

★Minn., Duluth—Rip Rap—U. S. Engr. Office, Duluth, let contract removing old timber from breakwater and furnishing and placing stone rip rap along lake face and over top of west breakwater, upper entrance, Keweenaw Waterway, Mich., to T. L. Durocher, Detour, $9.50 lin.yd. timber and $5.05 ton for stone rip rap. Noted May 1.

Mont., Kalispell—Road Work—Bureau Pub. Rds., Missoula, received bids May 15, building 29.5 mi. North Fork of Flathead Natl. Forest Rd., 10 ft. wide, from Carlson Norman & Co., Spokane, Wash., $124,003; Rich & Markhus, Prosser, Wash., $139,437. Noted May 8.

★Tex., Ft. Sam Houston—Boilers—Constr. Div., War Dept., let contract installing boilers, here, to Erie City Iron Wks., 915 Equitable Bldg., Baltimore, Md., $33,528.

Tex., Honey Grove—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash. D. C., received bids May 20, building post office, here, from Cooper & Lund, Inc., Newark, N. J., $42,230; Henry & Hatfield Constr. Co., 120 South Meridan St., Indianapolis, Ind., $44,965. Noted May 15.

Tex., North Ft. Worth—Helium Production Plant—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids May 21, building, here (former contract cancelled), (1) work complete, from Central Contg. Co., 585 Beatty Bldg., Houston Tex., (1) $448,000, (220 days); (2) $20,000; (3) $5000; (5) $3000; (6) $27,000; (7) $4500; (8) $8000; (16) add $600; (17) $1; (18) $4.

Federal Constr. Co., Wash., D. C., (1) $467,500; (2) $25,000; (3) $5000; (5) $5000; (6) $33,000; (7) $6500; (8) $11,000; (16) add $1000; (17) $3.50; (18) $5.

A. C. Moses Constr. Co., 915 New York Ave., N. W., Wash. D. C., (1) $485,000, (210 days); (2) deduct $28,500; (3) deduct $8000; (5) deduct $5500; (6) deduct $31,000; (7) deduct $3438; (8) deduct $10,382; (16) deduct $10,382; (17) $2.67; (18) $1.58.

(4) is eliminated under addendum No. 1. (11) is also eliminated. Noted Apr. 24.

Miscellaneous

PROPOSED WORK

Coal Pocket—Chicopee Falls, Mass.—A. L. DeGray, 7 Church St., plans to build new concrete coal pocket. About $11,000.

Coal Pocket—Chicopee Falls, Mass.—F. H. Howard, 62 Market St., soon receives bids building new concrete coal pocket. About $10,000.

Coal Yard—Syracuse, N. Y.—Gere Coal Co., 305 South Waren St., purchased site on 900 Block Canal St., and plans to build coal handling yard, to include 500-600 ft. railroad trackage, concrete trestle, coal and coke bins. Cost between $50,000 and $60,000.

Retaining Wall—Frankford (Philadelphia P. O.) **Pa.**—Chevra Bikur Cholem Assn., Bridge St., plans to build rein.-con. retaining wall, 500 ft. long, 10 ft. high. About $10,000. F. N. Greisler, Lafayette Bldg. engr.

Platform—Detroit, Mich.—See "Industrial Works."

Memorial Park, etc.—Drayton, N. D.—City purchased 36-acre tract for memorial park, to include baseball grounds, swimming pool, etc. About $7000 now available.

Telephone Line—Grenora, N. D.—Williams Mutual Telephone Co. plans to build 22 mi. extension between Grenora and Zahl. G. E. Johnson, genl. mgr.

BIDS DESIRED

Pier, etc.—Chaumont, N. Y.—Until June 18, by W. S. Carpenter, secy to Conservation Comn., building wood cribbing and concrete landing and recreation pier at Sony Point. Noted Mar. 6.

Paving Materials—New York, N. Y.—Until June 6, by F. L. Dowling, pres. Manhattan Boro., furnishing and delivering 20,000 bags Portland cement; 2000 cu.yd. mixed aggregate; 5800 cu.yd. binder stone; 100,000 sewer brick; 3800 tons limestone dust; 200,000 wood paving blocks; 600,000 gal. refined asphalt.

Fireproofing—Trenton, N. J.—Until June 2, by Dept. Architecture, 142 West State St., fireproofing dumbwaiter shafts and stairways, at State Hospital, here; advertised in this issue.

Road Material—Swarthmore, Pa.—Until June 5, by Boro., for 3270 sq.yd. tarvia-bound macadam, 2800 lin.ft. curbs and brick gutters, 2100 sq.yd. waterbound macadam, and 1800 lin.ft. stone curbs and brick gutters. F. M. Varrell, secy.; advertised in this issue.

Retaining Wall — Wilkes-Barre, Pa. — Until June 2, by city, building concrete retaining wall, steps and coal houses on Coal St. F. H. Gates, city clk.

Pipe, etc.—Detroit, Mich.—Until June 2, by J. A. Martin, comr. purchases and supplies, Municipal Courts Bldg., furnishing c.i. pipe and specials, cast steel fittings, machining and testing steel fittings, gate valves, manhole castings, hydrants and telephone conduits. Smith, Hinchman & Grylls, Washington Arcade, consult. engrs.

Road Roller—Saginaw, Mich.—Until June 10, by G. Holcomb, comr. pub. wks., furnishing 10-ton road roller; advertised in this issue.

Road Machinery—Two Harbors, Minn.—Until June 5, by I. W. Foote, co. aud., furnishing one 2-ton motor truck with 1⅓ cu.yd. dump body and power hoist; 1 portable gravel screening plant; 4 dump wagons, with 1⅓ and 2 cu.yd. capacity, hopper top; one tractor, caterpillar type, from 12-20 horsepower on draw bar.

Valves, etc.—Los Angeles, Cal.—Until June 10, J. P. Vroman, secy. Bd. Pub. Serv. Comn., furnishing valves and fittings for special penstock for power plant No. 2 in San Francisquito Canyon. W. Mulholland, 645 South Olive St., engr.

Wharf—Berthier, Que.—Until June 2, by Dept. Pub. Wks., Ottawa, Ont., improving wharf here. About $18,600.

Breakwater—Ft. William, Ont.—Until June 5, by R. C. Desrochers, secy. dept. pub. wks., Ottawa, building breakwater, as extension to revetment wall and wharves at entrance to Mission Channel.

Cast Iron Pipe—Waterford, Ireland—City receiving bids from American manufacturers, supplying 13,000 lin.yd. 15-in. c.i. water pipes, to stand vertical pressure of column of water 300 ft. T. F. Higgins, The Mall, Waterford, town clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Paving Blocks—Worcester, Mass.—City received only bid furnishing 600,000 granite paving blocks, from Hildredth Granite Co., 31 State St., Boston.

Sand—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro., received bids furnishing and delivering 6500 cu.yd. sand, from C. A. Myers, foot Stagg St., $12,545; E. W. Fitzpatrick, 128 3rd Ave., $12,610; T. F. Tuohy, 98 Main St., $13,455. Noted May 1.

Stone—Long Island City, N. Y.—M. E. Connolly, pres., Queens Boro., received bids furnishing and delivering 10,000 cu.yd. broken stone, from T. F. Tuohy, 98 Main St., $30,700; N. H. Trap Rock Co., $31,800; Peace Bros., $33,000.

Boiler Breeching—Ogdensburg, N. Y.—State Hospital Comn., Albany, received lowest 3 bids, May 20, for boiler breeching at St. Lawrence Hospital, here, from Mansfield & Savage, 135 Williams St., New York City, $6999; Murtagh & Reddington Co., 26 Pleasant St., Rochester, $9100; Shevlin Eng. Co., New York City, $9745. Noted May 15.

Piles, etc.—St. George, S. I., N. Y.—J. H. Delaney, comr. plant and structures, Municipal Bldg., New York City, received lowest 3 bids May 21, furnishing and delivering piles to St. George Terminal of Staten Island Ferry, from E. R. Mill & Lumber Co., $32,194; Central Timber Co., 115 Bway, New York City, $38,561; J. A. Maloney, 16 Beaver St., New York City, $64,654; hardware, from L. C. Hardy & Co., 114 Liberty St., New York City, $3023; Hanson & York, $3038; H. T. Dakin, $3463. Noted May 15.

Laundry Machinery—Wards Island, N. Y.—State Hospital Comn., Capitol, Albany, received bids May 20, for laundry, machinery and motors, at Manhattan State Hospital here, from J. Livingston, Inc., 70 East 45th St., New York City, $11,950; C. H. Darmstadt, 352 West 43rd St., New York City, $12,947; Jandous Electric Equipment Co., 109 West 31st St., $14,850. Noted May 15.

★Paving Material—Camden, N. J.—Com. Streets & Highways, let contracts furnishing the following materials for 1919: asphalt, to Atlantic Refining Co., 245 North 30th St., Phila., $12 per ton; crushed stone, to Gen. Crushed Stone Co., North Amer. Bldg., Phila., $2 per ton; pebbles, to Justice Coal & Iron Co., 312 Market St., $1.90 per ton; stone dust, to Camden Lime Co., 319 Federal St., $5.75 per ton; cement, to Justice Coal & Iron Co. and Camden Lime Co., $2.84 per bbl; fuel oil, to Standard Oil Co., 26 Bway., New York City, $0.0539 per gal., slag, to Duquense Slag Co., Commercial Trade Bldg., Phila., $1.95 per ton; bituminous coal, to Swain & Co., Pennsylvania Bldg., Phila., $2.60 per ton; asphalt sand, to Norcross & Edmunds Co., Penn Sq. Bldg., Phila., $0.70 per ton. Noted May 15.

★Coal Bunker—Newark, N. J.—Pub. Serv. Ry. Co., 80 Park Pl., let contract building extension to coal bunker, to Linde & Griffith Co., foot of 4th Ave. About $30,000. Work involves pile driving, concrete and excav.

★Curb Stop and Roadway Valve Boxes—Baltimore, Md.—City let contract furnishing and delivering (a) 10,000 curb stop boxes, (b) 1000 roadway valve boxes, to Central Fdry. Co., Dundalk (Baltimore P. O.), (a) $1.15 each, (b) $3.35 each. Total cost $14,850.

Cement—Portland, Ore.—State Highway Comn. received bids May 6, furnishing 26,000 bbls. Portland cement f.o.b. Oswego, for Hillsboro-Beaverton Project, from Oregon Portland Cement Co., Wilcox Bldg., at $2.35 per bbl. and H. Cowell Lime & Cement Co., Ry. Exch. Bldg., $3.22 and $3.25 Bids referred to H. Nunn, Salem, state highway engr.

★Cement—Portland, Ore.—State Highway Comn. let contracts furnishing 10,000 bbls. Portland cement, f.o.b. Marshfield, for Marshfield-Coquille Project, to H. Cowell Lime & Cement Co., Ry. Exch. Bldg., $3.65 per bbl.; 500 bbls. f.o.b. Arlington, Arlington Project, to Lehigh Portland Cement Co., $3.54; 1600 bbls. f.o.b. Miller Sta., Miller-Sherman Co. Project, to Oregon Portland Cement Co., Wilcox Bldg., $3.43. Price of sacks included in all bids at $.15 each, excepting bids of Oregont Portland Cement Co. and Lehigh Portland Cement Co. figured at $.25 each. All bids offered 5% discount for payment within 10 days.

Road Oil—Fresno, Cal.—Bd Supervs. Fresno Co. received bids furnishing 100,000 bbls. road oil, from A. F. Gilmore Co., Van Nuys Bldg., $1.51 per bbl. f.o.b. Taft; Union Oil Co., Union Oil Bldg., $1.60 f.o.b. Malta; Standard Oil Co., 1727 North Spring St., $12.75 per ton for E grade asphaltum f.o.b. Seguro, bidders all of Los Angeles. Noted Apr. 10.

★Pipe—Los Angeles, Cal.—Bd. Pub. Serv. Comn. let contracts, to U. S. Steel Products Co., 156 Central St., furnishing 20,000 ft. 6 in. Matheson joint welded steel pipe, f.o.b. Pittsburgh, Pa., $0.4816 per ft., Crane Co., 321 East 3rd St., furnishing 5000 ft. 2 in. dipped w. i. black pipe with threads and couplings, f.o.b. Los Angeles, $20.45 per 100 ft.

Road Oil—Los Angeles, Cal.—City received bids furnishing 81% road oil for year beginning June 30, 1919, from A. F. Gilmore Co., Van Nuys Bldg., $2.19 per bbl.; C. C. Harris Oil Co., 701 College St., $12.65 per ton of 2000 lbs.

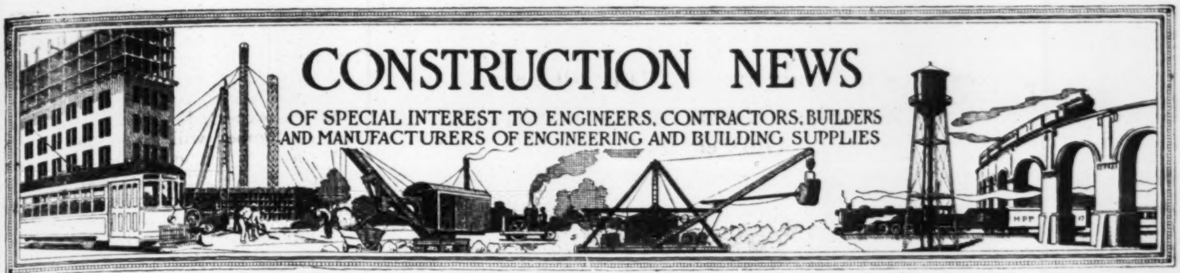
Shed — Oakland, Cal. — Parr-McCormick Terminal Co., foot of 7th St., received bids building 1-story, 120 x 500 ft., timber transit shed, from A. Olson, Oakland, $65,642; Clinton Constr. Co., 357 Pine St., San Francisco, $58,367 (without paving); Hayes-Oser Co., Call Bldg., San Francisco, $65,837.

★Dry Dock—San Pedro, Cal.—Southwestern Dry Dock Co., recently incorporated with $1,000,000 capital stock, will build dry dock near plant Southwestern Shipbuilding Co., here. Work will be done by day labor. I. H. and M. H. Hellman, c/o Hellman Commercial Trust & Savings Bank, Los Angeles, interested.

★Foundation, etc. — Montreal, Que. — Dept. Pub. Wks., Ottawa, Ont., let contract for foundation and excavation, for extension to custom house here, to P. Lyall & Sons, Transportation Bldg. About $100,000. Noted Mar. 27 under "Buildings."

★Sewer Pipe—Sherbrooke, Que.—City let contracts furnishing sewer pipe, to Codore Sons & Co., and J. S. Mitchell & Co., Wellington St. About $35.000.

★Wharf—Vercheres, Que.—Dept. Pub. Wks., Ottawa, let contract rebuilding wharf here, to L. and J. Trudel and N. Trudel, St. Irenee. About $10,000.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by heavy type: declines by *italics*.

PIG IRON—

	Current	One Month Ago
CINCINNATI		
No. 2 Southern	$30.35	$30.35
Northern Basic	27.55	27.55
Southern Ohio No. 2	**28.55**	28.25
NEW YORK, tidewater delivery		
2X Virginia (silicon 2.25 to 2.75)	*31.90*	32.50
Southern No. 2 (silicon 2.25 to 2.75)	*33.95*	34.90
BIRMINGHAM		
No. 2 Foundry	**26.25**	25.75
PHILADELPHIA		
Eastern Pa.	*30.65*	31.90*
Virginia No. 2	*30.85*	33.25†
Basic	**30.90**	29.65*
Grey Forge	**30.90**	29.65*
CHICAGO		
No. 2 Foundry Local	26.75	26.75
No. 2 Foundry Southern	*32.00*	33.00
PITTSBURGH, including freight charge from the Valley		
No. 2 Foundry Valley	**28.15**	26.25
Basic	**27.15**	25.75
Bessemer	29.35	29.35

* F. o. b. furnace. † Delivered.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f. o. b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Current	One Year Ago	Current	One Year Ago
Standard bessemer rails	$45.00	$63.00	$45.00	$65.00
Standard openhearth rails	47.00	65.00	47.00	67.00
Light rails, 8 to 10 lb	2.58½*	3.13 *	2.83½*	3.13 *
Light rails, 12 to 14 lb	2.54*	3.09*	2.79*	3.09*
Light rails, 25 to 45 lb	2.45*	3.00*	2.70*	3.00*

*Per 100 lb.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Current	One Year Ago	Chicago	St. Louis	San Francisco
Standard spikes, $\frac{9}{16}$-in. and larger	$3.35	$3.90	$4.27	*$4.44*	*$5.65*
Track bolts	4.35	4.90	5.17	Premium	*6.65*
Standard section angle bars	3.00	3.25	4.22	Premium	4.60

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

		7 In. x 9 In. by 8 Ft. 6 In.	6 In. x 8 In by 8 Ft.
Chicago	Plain	$1.48	$1.33
San Francisco	Douglas Fir—Green	1.35	.96
San Francisco	Douglas Fir—Creosoted	2.72	1.92

Prices per tie at Missouri mills: St. Louis prices about 25c. higher:

Untreated A Grade White Oak 6x8x8		Untreated A Grade Red Oak 6x8x8	
No. 1	$0.70	No. 1	$0.55
No. 2	.80	No. 2	.65
No. 3	.90	No. 3	.75
No. 4	.98		
7x9x8 white oak			1.05
7x9x8 red oak (No. 4)	$0.80	No. 5	.87

Note.—Add 36c. each for treatment.

PIPE

STEEL—From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	47%	*57.5%*	45%
2½ to 6 in. lap welded	42%	*53.5%*	41½%
	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	31%	*44%*	30½%
2½ to 6 in. lap welded	27%	*41%*	27½%

Malleable fittings, Class B and C, from New York stock sell at +15% list prices. Cast iron, standard sizes. 10% off.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Current	One Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	*$55.70*	$60.70	$64.35	*$54.80*	*$48.00*	*$72.50*	*$59.00*
6 in. and over	*52.70*	57.70	61.35	*51.80*	*45.00*	*69.55*	*56.00*

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$35.00	$22.50	$30.00	......	$33.44
4	51.00	51.00	27.00	40.00	$45.00	50.16
5	65.00	65.00	45.00	50.00	65.00	62.70
6	90.00	90.00	55.00	60.00	90.00	83.60
8	130.00	130.00	100.00	80.80	150.00	143.76

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	*$0.081*	$0.111	.....	*$0.09*	$0.09	$0.132
4	*.081*	.....	.....	*.09*	.15	.132
5	*.1215*	.1665	.....	*.135*	.1875	.207
6	*.1215*	.....	$0.16	*.135*	.225	.207
8	*.189*	.259	.21	*.21*	.3475	.2875
10	*.283*	.3885	.29	*.315*	.45	.4025
12	*.365*	.4995	.37	*.405*	.60	.5175
15	*.480*	.666	.56	*.54*	.9375	.7475
18	*.675*	.925	.91	*.875*	1.275	.9775
20	*.81*	1.11	1.14	*1.05*	1.71	1.15
22	*1.08*	1.48	1.46	*1.40*	....	1.495
24	*1.215*	1.665	1.56	1.80	2.125	1.725
27	*2.015*	2.47	1.90	**2.75**	....	2.5875
30	*2.232*	2.736	2.57	**3.45**	....	3.1625
33	*2.79*	3.42	3.09	**4.00**	....	4.025
36	*3.18*	3.895	3.37	**4.35**	....	4.60

	3	5	8	12	24	36
Boston	$0.093	$0.1395	$0.217	$0.4185	$1.395	$4.6125
St. Paul	.12	.18	.28	.45	2.00	4.75
Denver	.105	.16	.25	.425	1.575	......
Seattle	.15	......	.3375	.64	2.00	......
Kansas City	.12	.18	.25	.50	1.80	4.60
Los Angeles	**.0825**	**.1375**	.2475	.44	**1.50**	
New Orleans	*50* per cent. off list					
Detroit	.078	.117	.182	.351	1.35	4.10
Atlanta	*56* per cent. off list					
Montreal	.30†	.45†	.70	1.35	4.50	7.20†

†4-in., 6-in., 30-in. respectively.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices per gallon in tank cars 8000 gal. minimum f.o.b. place named:

	Current	One Month Ago
New York, 45-65% asphalt	$0.05	$0.06½
New York, liquid asphalt	.06½	.07½
New York, binder	.07	.07½
New York, flux	.05	.06½
St. Louis, 40% asphalt	.06	......
Chicago, 15-20% asphalt	.10	.10
Chicago, 100% dust layer	.11	.11
Dallas, 40-50% asphalt	.02	[illegible]
Dallas, 60-70% asphalt	.10	.10
San Francisco, 75-95% asphalt, per bbl.	2.10	2.10

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	$20.00	$16.00
Chicago	Mexican	*33.00*	*31.00*
San Francisco	California	17.00	13.75
Dallas	Texaco and Mexican	32.00	30.00
Seattle	D grade	23.10	......
Denver	Trinidad	**45.00**	......
Denver	California	38.00	......
St. Paul	Mexican	......	**21.00**
Kansas City	Mexican	**28.00**	**26.00**
St. Louis	Stanolind	24.90	13.40
Los Angeles	E grade	......	13.50
Detroit	Trinidad	32.00	......
Detroit	Petroleum	......	20.00

PAVING STONE—

Chicago	About 4x8x4 dressed	*2.45*	sq.yd.
	About 4x8x4 common	*2.20*	sq.yd.
San Francisco	Basalt block 4x7x8	57.75	per M
Kansas City	Limestone	2.75	sq.yd.
Boston	5-in. granite	110.00	per M
St. Paul	Sandstone	1.75	sq.yd.
Atlanta	No. 1 granite	1.70	sq.yd.
Detroit	Small granite	2.50	sq.yd.

FLAGGING—

New York	Bronx	$0.20	sq.ft.
	Manhattan	.21	sq.ft.
	Queens, 5 ft. square	.20	sq.ft.
	5x20-in. cross-walk	.70	lin.ft.
Chicago	18 in. wide	*.70*	lin.ft.

WOOD BLOCK PAVING—	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$3.25
New York	4	16	3.50
Chicago	4	16	3.10
Chicago	3½	16	2.95
Chicago	City specifications		3.10
St. Louis	3½	16	2.25
St. Louis	4	16	2.50
St. Louis, Minneapolis spec	3½	..	1.94
St. Louis, Minneapolis spec	4	..	2.25
Seattle	4	16	2.55
Kansas City	4	16	3.00
St. Paul	3½	..	*2.13*
Dallas	3½	18	3.17
Dallas	4	18	3.56
New Orleans	3½	16	2.63
New Orleans	4	16	3.00

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00	$2.00	$2.00	$2.00	$1.25	$1.25
Denver	1.60	1.50	1.60	1.50	1.25	1.05
Chicago	_1.65_	1.40	1.85	1.40	1.35	1.30
Kansas City	2.50	2.15	3.00	2.60	1.00†	.80
St. Louis*	1.76	.90	1.82	.90	1.68	.80
Seattle	1.25	1.00	1.25	1.00	1.25	1.00
Dallas	....	2.00	....	2.00	....	1.40
St. Paul	1.25	1.00	1.35	1.40	.60	.50
San Francisco	1.15	1.00	1.15	1.00	1.15	1.00
Boston	1.65	1.70	_1.65_	1.95	_1.70_‡	1.70
New Orleans	2.75	.....	2.75	.....	1.50	.....
Los Angeles	1.02	.85	1.02	.85	.70	.65
Atlanta	_2.30_‡	2.00	_2.30_‡	2.35	_1.00_‡	_.75_
Montreal	1.20‡	....	....	....	1.40‡	....
Detroit	1.90	....	1.90	....	1.80	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡ per ton.

CRUSHED STONE—Price for cago or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.65-1.75	$1.60	$1.75-1.85	$1.75
Chicago	1.60	1.20	1.70	1.20
St. Louis	1.35	1.08	1.35	1.08
Dallas	2.25	1.51	2.25	1.55
San Francisco	1.15	1.00	1.15	1.00
Boston	3.00*	1.75	3.00*	1.75
St. Paul (lime)	1.15†	1.00	1.25	1.10
St. Paul (trap)	1.60	....	1.80	....
Denver	....	1.50	1.60	1.50
Kansas City	1.90	1.60	2.00	1.70
Seattle	1.50	1.10	1.50	1.10
Atlanta	2.35*	2.00	.60*	2.35
Los Angeles	1.12	1.05	1.12	1.15
New Orleans	5.00	....	5.75	....
Montreal	1.75	....	2.00	....
Detroit	1.20	....	1.20	....

*Per ton at crusher. †Limestone; traprock, $1.60 and $1.80 per ton for 1½ and ¾-in., respectfully.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	21.00	......	2.30*	2.20*
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	18.00	.....	1.75*
Boston	22.75	18.25	3.65	3.30
Dallas	2.25*	1.25*	.....	.....
San Francisco	19.00	.....	.....	2.00
St. Paul	23.00	18.00	_1.50_*	_1.40_*
New Orleans	.....	.....	1.90*	2.05*
Atlanta	......	18.50	.....	1.50*
Montreal	20.00	20.00	15.00‡	15.00‡
Denver	......	.....	26.25‡	2.50*
Seattle	25.00	.....	.....	2.75*
Los Angeles	.....	.....	3.05†	2.80†

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton.

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., exclusive of bags:

St. Paul (Austin)	_$1.45_
Kansas City (Ft. Scott)	1.40
New Orleans	2.52

PORTLAND CEMENT—Current prices are for barrels in carload lots, without bags, to contractors:

	Current	One Month Ago Without Bags	One Year Ago With Bags
New York	$2.30	$2.30	$2.59
Jersey City	2.27	2.27	2.50
Boston	_2.42_	2.57	2.81
Chicago	2.00	2.00	2.36
Pittsburgh	2.05	2.05	2.46
Cleveland	2.32	2.32	2.59
Detroit	2.08	2.08	2.55
Indianapolis	2.27	2.27	2.59
Toledo	2.12	2.12	2.59
Milwaukee	2.11	2.11	2.48
Duluth	2.10	2.10	2.51
Peoria	2.12	2.12	2.48
Cedar Rapids	2.18	2.18	2.60
Davenport	2.14	2.14	2.55
St. Louis	_2.20_	2.40	2.60
San Francisco	2.40	2.40	2.80
New Orleans	_2.44_	2.70	....
St. Paul	2.20	2.20	2.68
Denver	2.67	2.67	3.39
Kansas City	2.26	2.26	2.54
Seattle	2.53	2.53	2.75
Dallas	2.03	2.03	2.60
Atlanta	2.60	2.60	3.60
Los Angeles	2.78	2.68	2.30
Montreal	2.50	....	....
Detroit	2.20	....	....

NOTE—Bag charge is generally 15c. each.

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-INCH x 4-INCH MESH

Style Number	Sectional Area Square Inches per Ft. Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.92	$1.16	$0.98	$0.99	$1.13	$1.32
049	0.049	1.18	1.48	1.26	1.26	1.43	1.67
068	0.068	1.44	1.86	1.53	1.56	1.79	2.06
093	0.093	1.85	2.39	1.97	2.00	2.41	2.65
126	0.126	2.28	3.02	2.43	2.47	2.92	3.28
153	0.153	2.72	3.59	2.90	2.95	3.48	3.93
180	0.180	3.12	4.13	3.33	3.39	3.99	....
245	0.245	4.12	5.44	4.40	4.47	5.27	....
287	0.287	4.76	6.29	5.08	5.16	6.10	6.86
336	0.336	5.52	7.30	5.89	5.99	7.06	.....
395	0.395	6.40	8.45	6.83	6.94	8.19	.....
PAVING							
036P	0.036	$0.71	$0.92	$0.76	$1.77	$0.88	....
053P	0.053	1.00	1.28	1.06	1.08	1.12	....
072P	0.072	1.26	1.66	1.34	1.37	1.46	....
097P	0.097	1.62	2.12	1.73	1.76	1.88	....
049R	0.049	1.00	1.28	1.06	1.08	1.12	....
067R	0.067	1.26	1.65	1.34	1.37	_1.46_	....
089R	0.089	1.62	3.11	1.73	1.76	1.88	....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

NOTE—New York Warehouse price is about 15% lower than given above, owing to mill decrease.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	_$29.10_	$30.97	$31.00	_$29.00_	$34.00	_$33.00_
26	250	_30.45_	32.03	32.00	_30.00_	35.00	_35.00_
25	300	_31.90_	33.19	33.25	.....	37.00	_37.00_
24	340	_33.50_	34.30	34.50	_33.00_	40.25	_40.00_
22	450	_36.60_	36.80	.....	.....	.....	_42.00_

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—Following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse Dallas	Warehouse San Francisco
¾ and larger	$2.35	$3.37	$4.09½	_$3.37_	$3.69	_$4.50_	$4.60
⅝	2.40	3.42	4.14½	_3.42_	3.74	_4.55_	4.65
½	2.45	3.47	4.19½	_3.47_	3.79	_4.60_	4.70
⅜	2.60	3.62	4.34½	_3.62_	4.04	_4.75_	4.85
¼	2.85	3.87	4.59½	_4.87_	4.19	_4.95_	5.10

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas		Chicago	St. Louis	Dallas
¾ in. and larger	$2.45	$2.45	_$4.25_	⅜	$2.70	$2.70	_$4.55_
⅝	2.50	2.50	_4.30_	¼	2.95	.....	_4.70_
½	2.55	2.55	_4.40_				

BRICK—To contractors price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$15.00	$10.25	No Quotations	
Chicago	12.00	12.00	8.00	......	.....
St. Louis, selected	16.00*	16.00	14.00	$26.00	.....
St. Louis, salmon	10.00	10.00	9.00	......	.....
Denver	12.00†	12.00†	10.00	......	.....
Dallas	.....	16.07	10.50	.....	.....
San Francisco	12.50	12.50	10.00	......	.....
Boston (on job)	18.00	18.00	14.00	30.00	45.00
New Orleans	_16.25_	18.00	.....	_17.00_	.....
St. Paul	10.25	10.25	8.60	30.00	36.50
Kansas City	15.00	14.00	11.00	52.00	.....
Seattle	15.00	15.00	12.00	36.00	.....
Atlanta	15.00	.....	14.00	......	.....
Los Angeles	12.50	12.50	7.00	......	.....
Montreal (plastic)	14.50	.....	.....	70.00	.....
Detroit	13.50	.....	.....	36.00	.....

* Hard brick, $14. † Salmon is _$10_ in Denver.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	_$0.11475_*	$0.09	$0.08	$0.08	$0.1125	$0.1072	......
6x12x12	_.153_*	.12	.112	.105	.15	.1474	$0.1512
8x12x12	_.204_*	.16	.144	.15	....	.2010	.1944
10x12x12	......	.....	.168	.173	....	.2546	.2268
12x12x12	......	.....	.208	.208	....	.3082	.2916

*Delivered below 72nd St.

	4x12x12	8x12x12	12x12x12
Boston	$0.10	$0.20	$0.30
St. Paul	.056	.11	.162
Kansas City	.0786	.15	.205
Denver	.125	.18	.25
Seattle	.09	.175	.30
Atlanta	.10	.13	.21
Los Angeles	.082	.154	.236
New Orleans	.165	.22	.325

STRUCTURAL MATERIAL—Following are base prices f.o.b. mill, Pittsburgh, together with quotations per 100 lb. from warehouses at places named:

	Mill Pittsburgh	New York Current	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$2.25	$3.47	$4.195	$3.54	$3.47	$4.70	$4.50
Channels, 3 to 15 in.	2.45	3.47	4.195	3.54	3.47	4.70	4.50
Angles, 3 to 6 in., ¼ in. thick	2.45	3.47	4.195	3.54	3.47	4.70	4.50
Tees, 3 in. and larger	2.45	3.52	4.195	3.54	3.47	4.70	4.50
Plates	2.66	3.67	4.445	3.54	3.67	4.90	4.70

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Current	Warehouse New York One Yr. Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$4.20	$5.05	$6.095	_$4.72_	_$4.79_	$6.05	$6.00
CONE HEAD BOILER							
¾ in. and larger	4.30	5.15	6.195	_4.82_	_4.89_	6.15	6.00
⅝ and 11/16	4.45	5.30	6.345	_4.97_	_5.04_	6.30	6.10
½ and 9/16	4.70	5.55	6.695	_5.32_	_5.29_	6.65	6.50

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.cl.	2-Ply c.l.	2-Ply l.cl.	3-Ply c.l.	3-Ply l.cl.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated Felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs _$1.80_ per roll in carload lots and _$2.05_ for smaller quantities.

Shingles, red and green slate finish, cost **_$5.00_ per square** in carloads; _$5.25_ in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots N. Y.	Carload Lots Chicago	Less Than Carload Lots N. Y.	Less Than Carload Lots Chicago
Tar felt (14 lb. per square of 100 sq.ft.)	$50.00	$50.00	$51.00	$51.50
Tar pithe (in 400-lb. bbl.)	19.00	16.00	20.00	17.00
Asphalt pitch (in barrels)	30.00	30.00	35.50	35.50
Asphalt felt	65.00	65.00	69.50	69.50

SHEETS—Quotations are in cents per pound in various cities from warehouse also the base quotations from mill:

	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York Current	New York One Yr. Ago
Blue Annealed						
No. 10	3.55	4.64	4.57	5.80	4.57	5.45
No. 12	3.60	4.69	4.62	5.75	4.62	5.50
No. 14	3.65	4.74	4.67	5.90	4.67	5.55
Black						
Nos. 18 and 20	4.15	5.24	5.17	6.75	5.17	6.25
*Nos. 22 and 24	4.20	5.29	5.22	6.80	5.22	6.30
*No. 26	4.25	5.34	5.27	6.95	5.27	6.40
*No. 28	4.35	5.44	5.37	7.05	5.37	6.45
Galvanized						
No. 10	4.70	4.79	5.72	....	5.50	6.70
No. 12	4.80	5.89	5.82	7.30	5.55	6.80
No. 14	4.80	5.89	5.82	7.30	5.60	6.80
Nos. 18 and 20	5.20	6.19	6.12	7.60	5.90	7.10
Nos. 22 and 24	5.25	6.34	6.25	7.75	6.05	7.25
*No. 26	5.40	6.49	6.42	7.90	6.20	7.40
*No. 28	5.70	6.79	6.72	8.20	6.50	7.70

*For painted corrugated sheets add 30c. per 1000 lb. for 25 to 28 gage; 25c. for 19 to 24 gages; for galvanized corrugated sheets add 15c., all gages.

LINSEED OIL—These prices are per gallon:

	New York Current	New York One Year Ago	Cleveland Current	Cleveland One Year Ago	Chicago Current	Chicago One Year Ago
Raw in barrel	$1.76	$1.55	$1.74	$1.65	$1.78	$1.65
5-gal. cans	1.89	1.65	1.90	1.80	1.98	1.75

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Current Dry	Red Current In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Current Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.00	14.50	11.25	11.00	13.00	10.50
25 and 50-lb. kegs	13.25	14.75	11.50	11.25	13.25	10.75
12½-lb. keg	13.50	15.00	11.75	11.50	13.50	11.00
5-lb. cans	15.00	16.50	13.25	13.00	15.00	13.00
1-lb. cans	16.00	17.50	13.25	13.00	16.00	13.00

500 lb. lots less 10% discount; 2000 lb. lots less 10-2½% discount.

LUMBER

San Francisco—Prices of rough Douglas fir No. 1 common, in more than carload lots:

Lumber Prices in Yards at San Francisco

	6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	25 to 32 Ft.
3x3 and 4	$29.50	$30.00	$33.00
3x6 and 8	30.50	31.00	34.00
4x4-6 and 8	31.00	32.00	35.00
3x10 and 12	31.00	32.00	35.00
3x14	31.50	32.50	35.50
4x10 and 12	31.00	32.00	35.00
4x14	32.00	33.00	36.00

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	$30.50	$32.50	$35.50
6x14	32.00	34.00	35.00
8x10	30.50	32.50	33.50
8x14	32.00	34.00	35.00

New York, Chicago and St. Louis	Southern Pine New York* 20-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	$40.00	$38.50	$39.50	$35.00	$37.00
3x10 to 10x10	43.00	40.50	41.50	38.50	40.00
3x12 to 12x12	46.00	43.50	44.50	40.00	41.50
3x14 to 14x14	49.00	47.50	48.50	45.00	47.00
3x16 to 16x16	55.00	51.00	52.00	48.00	50.00
3x18 to 18x18	58.00	55.00	56.00	52.00	53.00
4x20 to 20x20	61.00	61.00	62.00	......	......

*From Lumbermen's Bureau.

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities	8 x 8-In. x 20-Ft. and Under P.	8 x 8-In. x 20-Ft. and Under Fir	8 x 8-In. x 20-Ft. and Under Hemlock	8 x 8-In. x 20-Ft. and Under Spruce	12 x 12-In. 20 Ft. and Under P.	12 x 12-In. 20 Ft. and Under Fir
Boston	$46.50	$45.00	$45.00	$46.00	$52.00	$46.00
Kansas City	40.50	42.25	42.25	42.25	45.50	43. 5
Seattle	20.50	20.50	20.50	20.50	20.50	20.50
New Orleans	35.00	(No. 1)	......	......	40.00	(No. 1)
St. Paul	50.00	53.00	46.00	46.00	57.00	55.00
Denver	44.00	36.50	36.50	......	49.00	39.00
Atlanta	37.50	......	......	......	48.00	......
Montreal	......	65.00	.....	38.00	.....	38.00
Detroit	40.00	......	......	......	44.50	......

	1-In. Rough, 10 In. x 16 Ft. and Under P.	1-In. Rough, 10 In. x 16 Ft. and Under Fir	1-In. Rough, 10 In. x 16 Ft. and Under Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. P.	2-In. T. and Gr. 10 In. x 16 Ft. Fir
Boston	$50.00	$45.00	$40.00	$45.00	$48.50
Kansas City	52.75	59.75	59.75	55.00	66.00
Seattle	20.50	20.50	20.50	20.50	20.50
New Orleans	40.00	......	......	38.00	......
St. Paul	51.00	47.00	40.00	51.00	46.00
Denver	45.00	35.50	35.50	38.00	32.00
Atlanta	33.00	......	......	33.00	.....
Los Angeles	......	36.00	35.00	......	......
Montreal	60.00	.....	45.00	60.00	.....

Dallas—Yellow pine:

2x4 to 2x12—12, 14 and 16	$38.80
2x4 to 2x12—10, 18 and 20	40.90
2x4 to 2x12—22 and 24	43.20
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
8x10, 10x10 and 3x10	52.00
12x12 and 3x12	54.25

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.25	$3.90	$3.90	$3.90	$4.75
Cut	4.25	6.00	5.50	6.00	.....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl	$0.02½-03	$0.45
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.02	.03
Soda ash, in 400-lb. bbl. (dense)	.02	.03
Liquid chlorine in 100-lb. cylinders. Lime is quoted separately	.10	.13

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f. o. b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$2.55	$2.55	$4 to $5

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	+12½%
Galvanized cast steel rigging	7½%
Bright plow steel	35%
Bright cast steel	22½%
Bright iron and iron tiller	5

San Francisco: Galvanized, less 5%, bright, less 25% off.

MANILA ROPE—For rope smaller than ¾-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ¼-in., 8 ft., ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.25	Denver	$0.29
New York	.27	Kansas City	.28½
Chicago	.26½	New Orleans	.27½
St. Paul	.28	Los Angeles	.26
San Francisco	.26	Seattle	.27
Atlanta	.30	St. Louis	.26½
Detroit	.28	Montreal	.30

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	80%	Black Powder
New York	.....	$0.27½	$0.30	.....	$2.40
Boston	$0.22½	.24¼	.26¼	$.31	2.40
Kansas City	.19	.23¾	.26¼	.30	2.45
New Orleans	.22¾	.23¾	.24¾	.30¾	....
Seattle	.14¾	.18¼	.21	.31½	1.90
Chicago	.18¾	.21¼	.25½	.....	.....
St. Paul	.19	.23¾	.26¼	.....	2.45
St. Louis	.19	.23¾	.25¾	30	2.35
Denver	.17¾	.22	.24¼	.28¾	2.45
Dallas	.189	.22½	.288	.342	1.75
Los Angeles	.196	.237	.267	.....	2.75

POLES—Price of Western red cedar poles is as follows:

	New York Current	New York One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft	7.65	7.45	6.85	6.10	6.85
7-in. x 35-ft	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft	$9.00
12-in. butts, 6-in. tops, length 30-40 ft	11.50
12-in. butts, 6-in. tops, length 41-50 ft	12.50
14-in. butts, 6-in. tops, length 51-60 ft	21.00
14-in. butts, 6-in. tops, length 61-71 ft	23.50
	Dallas
6-in. x 20-ft	$3.00
6-in. x 30-ft	5.00
8-in. x 30-ft	7.50
8-in. x 35-ft	7.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges.

	New York	Chicago	St. Louis
No. 1 railroad wrought	$19.00	$16.00	$15.75
Stove plate	14.50	16.30	15.50
No. 1 machinery cast	.....	21.00	19.00
Machine shop turnings	7.50	5.50	6.00
Cast borings	8.00	8.50	8.00
Railroad malleable cast	13.00	16.00	14.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	San Francisco Black	Seattle Black
½	$10.50	$8.50	$8.55
[illegible]	9.85	7.85	8.25
[illegible]	9.70	7.70	8.30

Pittsburgh base, $[illegible].85 per 100 lb.

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 11	Baltimore, Md.	May 22
	Adv. May 22.	
June 11	Kansas City, Mo.	June 5
June 15	Duluth, Minn.	May 29
June 18	Beggs, Okla.	June 5
	Adv. May 29 and June 5.	
June 19	Gilboa, N. Y.	June 5
June 24	Toledo, O.	June 5

SEWERS

June 9	**Pontiac, Mich.**	**May 22**
	Adv. May 22.	
June 9	**Stratford, Conn.**	**May 15**
	Adv. May 15.	
June 9	Osgood, Ont.	May 22
Jnue 9	Duncan, Okla.	June 5
June 10	Saginaw, Mich.	May 29
	Adv. May 29 and June 5.	
June 12	Westerly, R. I.	May 29
	Adv. May 29.	
June 14	Brookhaven, N. Y.	May 29
June 14	Port Jefferson, N. Y.	June 5
	Adv. May 29 and June 5.	
June 17	Portland, Me.	June 5
	Adv. June 5.	
June 24	Toledo, O.	June 5
June 25	Lima, O.	June 5

BRIDGES

June 9	King City, Cal.	June 5
June 10	Peninsula, O.	May 29
June 10	Akron, O.	May 29
June 10	Portland, Ore.	June 5
June 11	Swainsboro, Ga.	June 5
June 12	Washington, Pa.	June 5
June 14	Bury, Que.	June 5
June 16	Minneapolis, Minn.	June 5
June 16	Manitowoc, Wis.	May 29
June 16	**Valdosta, Ga.**	**May 22**
	Adv. May 22, 29 and June 5.	
June 17	Pineville, W. Va.	June 5
	Adv. June 5.	
June 18	Red Oak, Ia.	June 5
June 19	Harrisburg, Pa.	May 29
	Adv. May 29.	
June 23	**Osceola, Mo.**	**May 29**

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 9	**Austin, Minn.**	**May 22**
June 9	**Hastings, Minn.**	**May 22**
June 9	**Bunnell, Fla.**	**May 29**
June 9	**Millersburg, Mo.**	**May 29**
June 9	**Daytona Beach, Fla.**	**May 29**
June 9	Yale, Okla.	June 5
June 9	Salt Lake City, Utah	June 5
June 9	Ebensburg, Pa.	June 5
June 9	Salt Lake City, Utah	June 5
June 9	Iowa City, Ia.	June 5
June 10	Toledo, O.	June 5
June 10	Hayes, Kan.	June 5
June 10	Canton, Tex.	June 5
June 10	Spencer, Ia.	June 5
June 10	Salt Lake City, Utah	June 5
June 10	Duluth, Minn.	June 5
June 10	Waterloo, Ia.	June 5
June 10	Wilmington, Del.	May 29
June 10	Montevideo, Minn.	May 22
June 10	**Marlington, W. Va.**	**May 22**
June 10	Clarksville, Pa.	Apr. 3
June 10	Oregon	May 29
June 10	Gilboa, N. Y.	May 22
	Adv. May 22, 29 and June 5.	
June 10	Toledo, O.	June 5
June 10	Delaware	June 5
June 10	Massachusetts	June 5
June 10	St. George, S. I., N. Y.	June 5
June 10	Wisconsin	June 5
June 10	Greensburg, Pa.	June 5
June 10	Salt Lake City, Utah	June 5
June 10	Upper Marlboro, Md.	June 5
June 11	**Morris, Minn.**	**May 22**
June 11	**Ann Arbor, Mich.**	**May 29**
	Adv. May 29 and June 5.	
June 11	Ganzales, Tex.	June 5
June 11	Iowa	June 5
June 11	New York, N. Y.	June 5
June 11	Brooklyn, N. Y.	June 5
June 12	Minneapolis, Minn.	June 5
June 12	Excelsior Springs, Mo.	June 5
June 12	Elm Grove, W. Va.	June 5
June 12	Washington, Pa.	June 5
June 12	Brainerd, Minn.	May 22
June 12	Metter, Pa.	May 29
June 12	Pittsburgh, Pa.	May 22
June 12	Olean, N. Y.	May 29
	Adv. May 29 and June 5.	
June 12	Garner, Ia.	June 5
June 13	Ebensburg, Pa.	June 5
June 13	Hinton, W. Va.	May 22
June 13	Bemedji, Minn.	May 22
June 14	Grand Rapids, Mich.	May 22
June 14	Indianapolis, Ind.	May 29
June 14	Lincoln, Neb.	June 5
June 14	Guelph, Ont.	June 5
June 14	Willoughby, O.	June 5
	Adv. June 5.	
June 14	Racine, Wis.	June 5
June 15	Beaver Crossing, Neb.	May 29
June 16	Elk River, Minn.	May 22
June 16	Fayetteville, Ark.	May 29
	Adv. May 29 and June 5.	
June 16	Fayetteville, Ark.	June 5
	Adv. June 5.	
June 16	Ebensburg, Pa.	June 5
June 16	Dublin, Ga.	June 5
June 16	California	June 5
June 17	Henderson, N. C.	June 5
	Adv. May 29 and June 5.	
June 17	New York	May 29
	Adv. May 29 and June 5.	
June 17	Pennsylvania	May 29
June 17	Elbow Lake, Minn.	May 22
	Adv. May 29 and June 5.	
June 17	Luzerne, Minn.	May 22
June 17	Plymouth, Wis.	May 29
June 18	Moorehead, Minn.	May 22
June 18	New Mexico	May 29
June 18	Massachusetts	June 5
June 18	Illinois	June 5
June 18	Little Falls, Minn.	June 5
June 18	Red Oak, Ia.	June 5
June 19	Little Falls, Minn.	May 22
June 19	Junction City, Kan.	May 22
June 19	Brainerd, Minn.	May 29
June 19	Pittsburgh, Pa.	June 5
June 19	St. Edward, Neb.	June 5
June 19	Winfield, W. Va.	June 5
June 19	Pittsburgh, Pa.	June 5
June 19	Junction City, Kan.	June 5
June 20	Harrisonville, W. Va.	May 22
June 20	Indianapolis, Ind.	May 29
June 20	Sydney, Ia.	June 5
June 21	Indianapolis, Ind.	May 29
June 21	Indianapolis, Ind.	June 5
June 23	Wichita, Kan.	June 5
June 23	Jackson, Tenn.	June 5
June 23	Toledo, O.	June 5
June 24	New Mexico	May 29
June 24	Massachusetts	June 5
June 27	Hiawassie, Ga.	June 5
June 27	Indianapolis, Ind.	June 5
June 27	Aberdeen, Wash.	June 5
June 30	Brunswick, Ga.	June 5
	Adv. June 5.	
June 31	Salt Lake City, Utah	June 5
July 1	Marshall, Ark.	May 22
July 7	Indianapolis, Ind.	June 5

EXCAVATION AND DREDGING

June 6	St. George, S. I., N. Y.	May 29
June 10	Wapello, Ia.	May 22
	Adv. May 22 and 29.	
June 10	Woodland, Wash.	June 5
June 17	Burlington, Ia.	June 5
	Adv. May 29 and June 5.	
July 1	**Edwardsville, Ill.**	**May 15**

INDUSTRIAL WORKS

June 6	New York, N. Y.	June 5
June 6	Waterbury, Conn.	June 5
June 9	Sarasota, Fla.	May 22
June 15	Manitowoc, Wis.	May 29
June 15	Sheboygan, Wis.	May 29
June 15	Milwaukee, Wis.	June 5
June 16	Marquette, Mich.	June 5
	Adv. May 29 and June 5.	
June 16	New Orleans, La.	May 22
Aug. 1	**Hastings, Minn.**	**May 15**

BUILDINGS

Bids Close		See Eng. News-Record
June 6	Brooklyn, N. Y.	June 5
June 7	New York, N. Y.	June 5
June 8	Barrington, R. I.	June 5
June 9	Lewiston, Idaho	June 5
June 9	Wichita, Kan.	May 29
June 9	St. Catherine, Ont.	June 5
June 9	Green Bush, Minn.	June 5
June 10	Bessemer, Ala.	May 15
June 10	Ashland, Ky.	May 29
June 11	Los Angeles, Cal.	May 29
June 11	New York, N. Y.	June 5
June 12	Duluth, Minn.	June 5
June 12	**Staunton, O.**	**May 22**
June 12	Detroit, Mich.	May 22
June 14	Hubbard, O.	May 22
June 14	London, Ont.	June 5
June 15	Anoka, Minn.	May 8
June 15	Rosebud, Tex.	June 5
June 15	Ranger, Tex.	June 5
June 16	Camden, N. J.	June 5
June 16	Los Angeles, Cal.	June 5
June 17	Morenci, Ariz.	June 5
June 17	Ossining, N. Y.	May 22
	Adv. May 22, 29 and June 5.	
June 17	Union Hill, N. J.	May 29
July 1	Austin, Minn.	May 22
July 2	Huntington, W. Va.	May 29
	Adv. May 29 and June 5.	
Aug. 1	Kenosha, Wis.	May 15

FEDERAL GOVERNMENT WORK

June 9	Laboratory — Washington, D. C.	June 5
June 9	Boilers—Denver, Colo.	May 29
June 9	Dredging—Baltimore, Md.	June 5
June 9	Boiler—Monmouth, Ill.	May 29
June 9	Water Main and Sewer System — Washington, D. C.	May 29
	Adv. May 29.	
June 10	Dike—Philadelphia, Pa.	June 5
June 11	Heating Plant and Distribution System—Spec. 3891—Brooklyn, N. Y.	June 5
June 11	Tanks — Spec. 3906 — Quantico, Va.	June 5
June 11	Dredging — Spec. 3548 — Hingham, Mass.	May 22
June 11	Fire Protection System — Spec. 3808 — Hingham, Mass.	May 22
June 11	Power House—Spec. 3889—Montauk, N. Y.	May 22
June 11	Laundry — Spec. 3887 — Portsmouth, N. H.	May 22
June 11	T. N. T. Plant—Spec. 3866—Ft. Mifflin, Pa.	May 29
June 11	Boiler and Superheaters — Spec. 3707 — Charleston, W. Va.	May 29
June 11	Earth Fill—Spec. 3897—Anacosta, D. C.	May 29
June 11	Electric Distributing System—Spec. 3901—Hampton Roads, Va.	May 29
June 11	Building, etc.—Spec. 3892—Brooklyn, N. Y.	June 5
June 11	Fence — Spec. 3888 — New York, N. Y.	June 5
June 11	Chimney — Spec. 3606 — New York, N. Y.	June 5
June 11	Boat Storage Building — Spec. 3889—South Brooklyn, N. Y.	June 5
June 11	Earth Fill—Spec. 2897—Anacosta, D. C.	June 5
June 12	Rip Rap—Baltimore, Md.	May 29
June 13	Furnaces — Washington, D. C.	June 5
June 16	Dredging — New York, N. Y.	May 22
	Adv. May 22, 29 and June 5.	
June 16	Boiler—Cairo, Ill.	May 29
June 16	Boiler—Cincinnati, O.	May 29
June 18	Jetty Repairs—Galveston, Tex.	May 29
June 18	Dredging — Spec. 3898 — Paris Island, S. C.	June 5
June 18	Radio Building—Spec. 3902—Cayey, P. R.	May 29
June 18	Post Office—Clinton, S. C.	May 29
	Adv. May 29 and June 5.	
June 18	Buildings — Spec. 3908 — Charleston, S. C.	June 5
June 18	Crane Runaways — Spec. 3678—New York, N. Y.	June 5
June 18	Additions to Ship Fitters—Spec. 3920—Boston, Mass.	June 5
June 18	Building, Railroad, Sewer, Shop and Water Works System — Spec. 3909 — Hampton Roads, Va.	June 5
June 18	Roads and Walks—Spec. 3881—Cape May, N. J.	June 5
June 18	Pavement — Spec. 3913 — Washington, D. C.	June 5
June 18	Pier—Spec. 3918—Hampton Roads, Va.	June 5
June 18	Bridge — Spec. 3907 — Hampton Roads, Va.	June 5
June 18	Wharf — Spec. 3910 — Quantico, Va.	June 5
June 18	Dredge—Spec. 3898—Port Royal, S. C.	June 5
June 19	Levee Work—St. Louis, Mo.	May 22
	Adv. May 22, 29 and June 5.	
June 19	Wall—Washington, D. C.	June 5
June 19	Lock and Abutment — Louisville, Ky.	June 5
	Adv. May 29 and June 5.	
June 20	Boilers—Memphis, Tenn.	May 22
	Adv. May 22, 29 and June 5.	

Bids Close		See Eng. News-Record
June 20	Boiler—New Port News, Va.	June 5
June 23	Steel, Forgings, Castings, etc.—Wheeling, W. Va. Adv. May 29 and June 5.	May 29
June 23	Dredging—New York, N. Y. Adv. May 29 and June 5.	May 29
June 23	Sewage Disposal System — Washington, D. C. Adv. June 5.	June 5
June 24	Dredging—Portland, Me. Adv. May 29 and June 5.	May 29
June 25	Piles and Lumber—New Orleans, La. Adv. May 29 and June 5.	May 29
June 25	Cranes—Spec. 3933—New York, N. Y.	June 5
June 25	Elevators — Spec. 3934 — New York, N. Y.	June 5
June 25	Pattern Shop—Spec. 3478—Philadelphia, Pa.	June 5
June 25	Administration Building, Roads and Walks—Spec. 3922—San Diego, Cal.	June 5
June 25	Rebuilding Shipbuilding Ways—Spec. 3590 — New York, N. Y.	June 5
June 25	Distributing System—Spec. 3921—San Diego, Cal.	June 5
June 25	Bulkhead — New Orleans, La. Adv. May 29 and June 5.	May 29
June 27	Air Compressors—Florence, Ala.	May 29
June 27	Dredging—Newport, R. I. Adv. June 5.	June 5
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La.	May 29
July 1	Post Office, Towah, Wis.	June 5
July 2	Dredging, New York, N. Y. Adv. June 5.	June 5
July 7	Steel—Philadelphia, Pa. Adv. June 5.	June 5

MISCELLANEOUS

June 6	Paving Material—New York, N. Y.	May 29
June 9	Flusher and Sprinkler — Lewiston, Mont.	May 22
June 9	Asphalt—St. Paul, Minn.	June 5
June 9	Road Material—Ebensburg, Pa.	June 5
June 10	Road Roller — Saginaw, Mich. Adv. May 29.	May 29
June 10	Valves, etc.—Los Angeles, Cal.	May 29
June 11	Castings, etc.—New York, N. Y.	June 5
June 12	Breakwater — Louis, P. E. I.	May 22
June 15	Grain Tanks — Carthage, Mo.	June 5
June 18	Pier, etc.—Chaumont, N. Y.	May 29

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Pa., Shenandoah—City having plans prepared by Gannett, Seelye & Fleming, engrs., 204 Locust St., Harrisburg, improving waterworks system, to include pumping station, pumps, motors, etc. D. T. Glover, city engr.

Ill., Chicago—See "Streets and Roads."

Minn., International Falls—City voted bond issue to purchase site and build waterworks plant. J. Croasdale, aud.

Kan., Hiawatha—City having plans prepared improving waterworks system. Plans include installing pumps at spring on County Farm, etc. About $25,000. Black & Veatch, Interstate Bldg., Kansas City., Mo., engrs.

Kan., Osborne—City having plans prepared by Archer & Stevens, engrs., New England Bldg., Kansas City, Mo., improving waterworks system.

Wyo., Pine Bluffs—City voted $40,000 bonds to extend water mains and sewers and enlarge light plant.

Okla., Holdenville—City voted $12,000 bonds to improve water-works system.

Colo., Grover—City voted $34,000 bonds to build waterworks system and electric light plant.

Ore., Yamhill—City sold $40,000 bonds to build waterworks system. Work involves 7½ mi. of water mains.

Cal., Avalon—See "Industrial Works."

Cal., Inglewood — City voted $217,000 bonds to build waterworks system. Plans include wells, pumps, standpipe, reservoir and distributing system or purchase of pumping plant and distributing system of Inglewood Water Co. and extending and improving same. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs. Noted Mar. 27.

Que., St. Johns—City plans to improve waterworks system. About $19,000. A. Bouthillier, mayor.

BIDS DESIRED

N. Y., Gilboa—Until June 19, by Bd. Water Supply, Municipal Bldg., New York City, building dam here, same being part of Schoharie Watershed development for New York City water supply. About $7,000,000. Former bids rejected. Noted May 22.

O., Toledo—Until June 24, by Comrs. Lucas Co., laying water line No. 7 in Norwood Dist., involving 960 ft. 8 in. and 25,620 ft. 6 in. c. i. pipe, twenty two 6 and 8 in. valves, 26 hydrants and 4½ tons special castings; estimated cost, $51,800; water line No. 8, in North Collingwood Park, involving 23,405 ft. 6 in. and 4708 ft. 8 in. c. i. pipe, 21 valves, 22 hydrants and 6 tons special castings, $58,000; water line No. 10 in Forest, Hickory and Upton Aves., involving 7700 ft. 6 in. c. i. pipe, ten 6 in. valves, 10 hydrants and 2 tons special castings, $15,700. L. A. Boulay, co. engr.

Mo., Kansas City—Until June 11, by J. R. Samuel, purch. agt., building rein.-con. standpipe, 1,000,000 gal. capacity, on 75th and Holmes Sts. Work involves 1500 cu yd. rein.-con., 180 tons reinforcing steel and 420 cu.yd. earth excav. W. G. Goodwin, ch. engr.; advertised in this issue.

Okla., Beggs—Until June 18, by Bd. Trustees, building mechanical filter plant, capacity 500,000 gal. per 24 hours; also for one 7 x 8 truplex pump and 25 hp. electric motor. W. K. Enoch, town clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Mt. Pleasant—Bd. Water Supply Municipal Bldg., New York City, received lowest 3 bids May 20 furnishing and laying water pipes, building concrete steps and walks, etc., at Kensico Dam, from Masterson Constr. Corp., 15 East 40th St., New York City, $32,955; T. Crimmins Contg. Co., 624 Madison Ave., New York City, $35,409; Hughes & Gardner, North Tarrytown, $36,831.

N. J., Jersey City—City received lowest 3 bids laying 72-in. steel water pipe between Boonton Reservoir and here, (a) Sect. 1 duplicating existing syphons between Boonton Reservoir and Passaic River at Lyndhurst, (b) Sect. 2, duplicating existing syphons between Passaic River at Lyndhurst and Summit Ave. Reservoir here, from J. T. Brady & Co., 103 Park Ave., New York City, (a) $2,101,067, (b) $1,858,208; J. L. Sigretto Co., South Curtis Ave., Woodhaven, N. Y., (a) $2,104,922, (b) $1,993,135; H. F. Curtis, 1270 Bway., New York City, (a) $2,256,075; P. McGovern, 50 East 42nd St., New York City, (b) $2,036,619. Noted May 15.

Ill., Morton Grove—Sanitary Dist. of Chicago received lowest 3 bids May 15, building sprinkling filter plant here, from Hoeffer & Co., 133 West Washington St., Chicago, $39,132; S. N. Nielsen, 3059 Augusta St., Chicago, $40,132, Schillinger Constr. Co., 2322 North Seeley Ave., Chicago, $40,146.

★Tex., Stamford—City let contract building reservoir here, 12 mi. concrete pipe line from river to pumping station and 2 mi. c.i. pipe line from pumping station, to Amer. Cast Iron Pipe Co., Birmingham, Ala., cost $200,000; building dam across Clear Fork of Brazos River, involving 9000 cu.yd. rubble and concrete masonry, 70,000 cu.yd. earthwork, etc., to List & Gifford Contg. Co., 415 Ry. Exch. Bldg., Kansas City, Mo., $100,000.

★Wash., Seattle—City let contract laying 3710 ft. 8-in. c.i. water mains in 60th Ave., S. W., et al., to Scalzo & Co., Seattle, $12,970.

Sewers

PROPOSED WORK

Mass., Springfield—City appropriated $50,000 to build new sewer in Carlisle Brook Sect. C. M. Slocum, city engr.

N. Y., Binghamton—Common Council soon receives bids building Sect. 2 intercepting sewer. About $60,000. J. A. Giles, comr. pub. wks.

N. J., Camden—Com. Streets and Highways rejected bids building sewers in sections of Liberty, 8th, 32nd and 36th Sts., Harrison, Lois, Hayes, River, Westfield and Trinity Aves. Work will be readvertised. Noted May 15.

Mich., Hamtramck—City plans to build ½ mi. vitr. crock sewer in Christopher Ave. from center line Conant Ave. to easterly village limits. About $12,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Wis., Chilton—City soon lets contract furnishing material and laying sewers in Division and Main Sts., involving 2500 ft. 12-24 in. vitr. pipe. About $15,000. J. Donohue, York Bldg., Sheboygan, engr.

Wis., La Crosse—Bd. Pub. Wks. soon lets contract furnishing and laying 12,449 lin.ft. 10-24 in. vitr. sewer pipe, 1459 lin.ft. 33-36 in. rein.-con. pipe, 30 manholes, etc.

Wis., Milwaukee — Sewerage Building Comn. soon lets contract building 20 intercepting sewers and regulating structures in various streets. About $70,000. T. C. Hatton, City Hall, engr.

Wis., Plymouth—City soon lets contract building and installing sanitary and storm sewers in Western Ave. from Reed to Selma Sts., involving 3500 ft. 8½-in. vitr. pipe. About $15,500. J. Donohue, York Bldg., Sheboygan, engr.

Kan., Arkansas City—City having plans prepared by C. E. McCrae, engr., 314 Republic Bldg., Kansas City, Mo., extending sewers and sewage disposal plant, involving 3 mi. 8-15-in. vitr. pipe.

S. D., Artesian—City voted $35,000 bonds to build sewerage system here.

Wyo., Pine Bluffs—See "Waterworks."

Ore., Portland—City soon lets contract building sewers in Boise St. from point 123 ft. west of west line of 42nd St. S. E.; East 51st St. from point 120 ft. south of south line of Division St. to sewer in 27th Ave. S. E.; also on line 33 ft. east of and parallel with railway near Lowell Ave., vitr. or concrete pipe. O. Laurgaard, ch. engr.

Cal., Holtville—City soon receives bids building 7000 ft. 12 in. vitr. outfall sewer. H. Burk, Holtville, engr. Noted May 22.

BIDS DESIRED

Me., Portland—Until June 17, by E. M. Hunt, comr. pub. wks., building Sect. 3 Fall Brook Branch Sewer and Milliken Branch Sewer, involving 3260 lin.ft. 15-24-in. pipe, 1900 cu.yd. earth and 770 cu.yd. ledge excav., 340 cu.yd. concrete masonry in trench, etc.; advertised in this issue.

N. Y., Port Jefferson—Until June 14, by Sewer Comrs., at office of T. O'Donnell, Post Office Bldg., furnishing labor and material for building sewers, sewage sedimentation tank and screen chamber. A. J. Provost, Jr., 39 West 38th St., New York City, consult. engr.; advertised in this issue.

O., Cleveland—City receiving bids building 815 ft. Nos. 2 and 3 C brick sewers, in St. Clair Ave. from Woodworth Ave. to East 138th St., involving 865 ft. 12-24 in. vitr. pipe, 8 manholes and 2 catch basins. R. Hoffman, city engr.

O., Lima—Until June 25, at office of A. L. Metheany, dir. pub. serv., building Collett St. Relief Sewer, Contr. No. 1. Work involves 16,430 ft. 42-84-in. circular and 78 x 127½-in. semi-circular, monolithic concrete, segment block or rein.-con. pipe; also outlet abutment at Ottawa River, overflow chamber, etc. V. C. Miller, city engr.; advertised in this issue.

Sewers (Continued)

O., Toledo—Until **June 24,** by Comrs. **Lucas** Co., building 30,300 ft. sewer in North Collingwood Park, involving 29,307 ft. 6-12 in. vitr. pipe, 1100 branches, 74 manholes, 1000 ft. 6 in. c. i. force main, 200 gal. centrifugal pump and concrete sewage lift, cost $69,700; 1800 ft. sewer in Harris St., involving 1737 ft. 6-15 in. vitr. pipe and 5 manholes, $7600. L. A. Boulay, co. engr.

Mich., Oakwood (Oxford P. O.)—H. L. Russell, engr., 505 Moffat Bldg., Detroit, receiving bids furnishing material and labor for building 8000 ft. 12-15 in. vitr. crock sewer in Dix, Zanger and Rouge Aves., involving 18 standard 36 in. manholes. Noted Mar. 27.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract building rein.-con. sewers in Kneeland St., involving 1200 ft. rein.-con. pipe, 700 cu.yd. earth and 50 cu.yd. rock trenching, 72 ton steel, 500 lin.ft. 6-in. tile and 120 cu.yd. concrete, to J. J. Coughlin Co., Boston, $38,237; in Clarendon St., 3200 ft. concrete pipe, 4500 cu.yd. earth trenching, 28 tons steel, and 900 cu.yd. concrete, to J. A. Costello Co., South Boston, $35,480.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract furnishing all labor and material for building sewer in Ave. U. to C. W. MacDonald, 1910 Webster Ave., New York City, $195,801. Noted May 29.

N. J., Newark—Passaic Valley Sewerage Comn., 820 Essex Bldg., received bids building (a) part Sect. 19, Lodi St. River Crossing, (b) part Sect. 19, Wallington River Crossing, from H. E. Fox Constr. Co., 81 East 125th St., New York City, (a) $98,150, (b) $67,945; Franco Amer. Constr. Co., Inc., 150 Nassau St., New York City, (a) $113,750, (b) $81,700; Cenedella & Co., Passaic, (a) $168,150, (b) $111,200.

Pa., Erie—City Council received lowest 3 bids for completion of Sect. 3 Mill Creek Flood Control Project from Scott Bros., Arlington Blk., Rome, N. Y., $589,058, Peckham Constr. Co., Niagara Life Bldg., Buffalo, $640,100, Foundation Co., 233 Bway., New York City, $653,697; Sect. 4, from Scott Bros., Arlington Blk., Rome, N. Y., $451,459, Peckham Constr. Co., Niagara Life Bldg., Buffalo, N. Y., $478,649, A. L. Anderson & Bros., McCance Bldg., Pittsburgh, $519,313; Sect. 5, from Erie Concrete & Steel Co., 13th and Cranberry Sts., Erie, $46,091, Schaaf Co., Mutual Life Bldg., Buffalo, N. Y., $47,189, Lupfer & Remick, Ellicott Sq., Buffalo, N. Y., $48,844. Noted Apr. 24.

O., Cleveland—City received bids building sewers in Russell Rd. from Superior Ave., south, from Manson Co., 345 The Arcade, cost $17,250; Gallagher-Burke Co., 1339 Irene Ave., $18,177; Gawne Constr. Co., 10510 Euclid Ave., $19,246. Noted May 29.

★O., Cleveland—City let contract building sewer in Euclid Ave. from London Rd. to Wayside Ave., to Gould & Maybach, 823 East 150th St., $11,759. Noted May 29.

★O., Cleveland—City let contract building sewer in East 19th St. from Prospect to Central Aves., to Amata Constr. Co., 343 The Arcade, cost $11,120; Euclid Ave. from London Rd. to Wayside Ave., to Gould & Maybach, 823 East 150th St., $11,959. Noted May 29.

★Wis., Milwaukee—City let contract building 37 intercepting sewers in various streets, to H. Greiling, 80 Davidson St., $137,277. Noted May 8.

Wis., Milwaukee—Sewerage Comn., City Hall, received bids building extension to intercepting sewers involving hauling and laying 2370 lin.ft. 72-in. pre-moulded rein.-con. pipe, etc., from A. H. Prange, Grand Rapids, Mich., $143,461; H. Hohensee, Wauwatosa, $156,468; F. H. Nakielski, Majestic Bldg., $160,076. Noted May 8.

★Wis., Milwaukee—Sewerage Comn. let contract building 1800 ft. rein.-con. sewers in various streets, to Mid Western Co., 140 South Dearborn St., Chicago, $86,100. Noted May 22.

★Wash., Seattle—City let contract building trunk sewer in Rainier Ave., et al, involving 3070 ft. 8 in. concrete pipe, to Puget Sound Bridge & Dredging Co., Central Bldg., $267,690.

★Cal., Fresno—City let contract building sewer in North Fresno Dist., to H. Gould, 1022 27th St., Sacramento, Sect. 1, $100,736, Sect. 2, $6279. Sect. 1 involves 36,016 ft. 8-27 in. vitr. pipe, etc.; Sect. 2, 656 ft. 8 in. and 3918 ft. 6 in. vitr. pipe, etc. Noted May 8.

Cal., Oakland—See "Streets and Roads."

Cal., Riverside—Bd. Supervs. Riverside Co. received only bid building sewer drainage system in Drainage Impvt. Dist. No. 3, from Wattson & Wattson, 4907 Melrose Ave., Los Angeles, $34,872. Noted Mar. 13 under "Excavation & Dredging."

Cal., San Francisco—Bd. Pub. Wks. received bids building 700 ft. 2 x 3 ft. concrete sewer in Euclid Ave. and Arguello Blvd. and 353 ft. 2 ft. 6 in. x 3 ft. 9 in. in Cornwall St. from Palm to 2nd Aves., from Hickey & Harmon, 1539 Greene St., $10,083; P. McHugh, 3908 Clay St., $11,458; T. D. Harney, Pacific Bldg., $11,793.

★Ont., Sandwich—Town Council let contract building vitr. sewer, to Pettypiece Co., Seymore St., Amherstburg. About $10,000.

Bridges

PROPOSED WORK

Mass., Holyoke—Boston & Maine R.R., North Shore Sta., Boston, plans to build 1500 ft. steel and concrete bridge over Connecticut River from here to Willimansett, to replace present one. A. B. Corthell, Boston, ch. engr.

Mass., Holyoke—City plans to build concrete culvert in Elmwood Park. About $15,000. T. J. McCarthy, city engr.

N. J., Hackensack—Bd. Supervs. Bergen and Hudson Counties, plan to repair Paterson Plank Rd. Bridge over Hackensack River. About $10,000. Plans include replacing buckle plates on draw span, painting entire bridge, placing pipe railing on hand-rail, etc.

Pa., Phila.—See "Streets and Roads."

Del., Wilmington—New Castle Co. soon lets contract strengthening 300 ft. steel bridge, 30 ft. wide, over Brandywine Creek at Market St. About $11,000. C. E. Grubb, co. engr.

Ga., Sales City—Mitchell Co., (Camilla), election July 3, to vote on $55,000 bonds to build bridge over Flint River at Newton, near here.

Ill., Carlinville—Highway Comn. of Polk Twp., Macoupin Co., plans election to vote on $13,735 bonds to build several bridges.

Ia., Decorah—Bd. Supervs. Winneshiek Co. soon receives bids building one 16 ft. x 25 ft., one 16 x 32 ft. and one 16 x 36 ft. I beam bridges, concrete floor and abutments. About $10,500. F. W. Arneson, co. engr.

Ia., Indianola—Bd. Supervs. Warren Co. soon receives bids building 120 ft. high steel truss bridge, 16 ft. wide, concrete floor and abutments, two 20 ft. approach spans on steel tubes. About $12,500. R. E. Boyle, co. engr.

Ia., Red Oak—Bd. Supervs. Montgomery Co. receives bids in June building 45 concrete bridges and culverts. About $25,000. B. Conlon, co. engr.

Minn., St. Peter—Comrs. Nicollet Co. rejected only bid received building 4 rein.-con. bridges, culverts and retainng wall on State Rds. Nos. 4 and 6. Work will be readvertised. H. W. Daniels, St. Peter, engr. Noted May 29 under 'Streets & Roads."

Neb., Central City—Merrick Co. (Central City) and Hamilton Co. (Aurora) receive bids about July 15, building 800 ft. bridge, 16 ft. wide, near here, to have sixteen 50-ft. rein.-con. arch spans and 3000 lin.ft. approach fill. About $55,000. G. E. Johnson, c/o State Highway Dept., Lincoln, engr.

Neb., Grand Island—Hall Co. receives bids about July 15, building 800 ft. bridge, 16 ft. wide, near here, to have sixteen 50-ft. rein.con. arch spans and 3000 lin.ft. approach fill. About $55,000. State will appropriate $27,500 toward cost. G. E. Johnson, c/o State Highway Dept., Lincoln engr.

Ore., Oregon City—State Highway Comn., Salem, plans to build 385 ft. bridge over Willamette River, structural steel encased in concrete, 5% grade. About $268,000. C. B. McCullough, Capitol Bldg., Salem, state bridge engr.

Ont., Grand Valley—Wheelock & Christie, engrs., Orangeville, soon let contract building rein.-con. bridge with two 80 ft. arch spans, over Grand River, for town.

Ont., London—Town soon lets contract building 2 rein.-con. bridges, 30 ft. long. About $10,000. M. Grant, 110 Dundas St., clk.

Alta., Calgary—Works Comn. plans to expend 207,000 to build Louise Bridge on Main St.

BIDS DESIRED

Pa., Washington—Until June 12, by T. J. Underwood, controller, Washington Co., building rein.-con. bridge over Chartiers Creek, near Thompsonville, 50 ft. span, 18 ft. roadway.

W. Va., Pineville—Until June 17, by W. P. Cook, clk., Wyoming Co., building 2 bridges on Elmore-Herndon Rd., West Virginia Project No. 1054; advertised in this issue.

Ga., Swainsboro—Until June 11 (change of date), by Comrs. Emanuel Co., building 7 rein.-con. bridges on Dixie-Overland Highway. About $61,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs. Noted May 15.

Ia., Red Oak—Until June 18, by Bd. Supervs. Montgomery Co., building 30 concrete box culverts, 1 concrete deck girder bridge, 3 I-beam spans, concrete floor and abutments, one 20 x 120 ft. high steel truss bridge on piling, 2 pony truss bridges, concrete floor and abutments and 8 circular culverts. B. Conlon, co. engr.

Minn., Minneapolis—Until June 16, by A. P. Erickson, aud. Hennepin Co., removing bridge 63 over Elm Creek and building new 35 ft. rein.-con. arch bridge, 20 ft. roadway, on State Rd. No. 8, Champlin Twp. About $10,000. E. E. Terrell, Court House, engr.

Okla., Yale—See "Streets and Roads."

Ore., Portland—Until June 10, by State Highway Comn., Court House, Portland, building 8 rein.-con. bridges between McMinnville and Bellevue, on Yamhill-Nestucca Highway, Yamhill Co., involving 58,000 lbs. reinforcing steel, 604 cu.yd. Class A concrete, 400 lin.ft. hand rail; Rogue River Bridge at Rock Point near Gold Hill, Jackson Co., 490 ft. long, to have seventeen 25 ft. rein.-con. spans and one 115 ft. arch, 150,000 lbs. reinforcing steel, 1050 cu.yd. Class A concrete and 1125 lin.ft. hand rail. H. Nunn, state highway engr.

Cal., King City—Until June 9, by California Highway Comn., 515 Forum Bldg., Sacramento, building bridge over Salinas River, to have 14 steel spans, 100 ft. each, and 1230 lin.ft. rein.-con. trestle, involving 56 cast iron drains, 3412 cu.yd. Class "A" portland cement, 6560 lin.ft. rein.-con. piles, 3375 lin.ft. wooden piles, 2200 lin.ft. double pile continouus dikes, 760 lin.ft. cross dikes and 6200 sq.yd. asphalt surface.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Rome—Supt. Pub. Wks., Capitol, Albany, let contract building 8 ft. pipe culvert over Barge Canal here, to Scott Bros., Arlington Blk., $46,731. Noted May 8.

★Ga., Chatsworth—Bd. Supervs. Murray Co. let contract building 5 rein.-con. bridges, to Luten Bridge Co., 59 Stokes Ave., Atlanta, $12,795.

★Ga., Mt. Vernon—Comrs. Montgomery and Wheeler Counties let contracts building steel span for rein.-con. bridge over Oconee River, 2 mi. from here, to Southern Bridge Co., 39th St., Birmingham, Ala., cost, $81,795; concrete work, to C. T. Dawkin Constr. Co., Jacksonville, Fla., $91,746. Noted Mar. 13.

★Ga., Thomasville—Comrs. Thomas Co. let contract building rein.-con. bridge, 4½ mi. from here, to Nichols Contg. Co., Trust Co. of Georgia Bldg., Atlanta, $58,000. Contract let tentatively depending on Federal aid. Noted Apr. 24.

★Ill., Watseka—Iroquois Co. let contracts building one 60 ft. rein.-con. span bridge, 20 ft. roadway, Sect. J-15d, to Joliet bridge & Constr. Co., Joliet, $7498; 100 ft. span, Sect. I-15d, 20 ft. roadway, to Continental Bridge Co., 53 West Jackson St., Chicago, $11,345. Noted May 8.

★Ia., Clarion—Bd. Supervs. Wright Co. let contract building two 18 x 75 ft. and one 16 x 60 ft. pony truss bridges with concrete floors and abutments, 40 concrete box culverts and 6 concrete circular culverts, to Iowa Bridge Co., Hubbell Bldg., $37,575. Work involves 1326 cu.yd. rein.-con., 54 tons structural and 44 tons reinforcing steel and 2560 lin.ft. wooden piling.

Bridges (Continued)

★Ia., Ellsworth—Bd. Supervs. Hamilton Co. (Webster City) let contract building 20 x 120 ft. high steel truss bridge with concrete floor and abutments, to A. Swanson & Co., Webster City, $16,416. Work involves 373 cu.yd. rein.-con., 46 tons structural and 13 tons reinforcing steel and 1728 lin.ft. wooden piling.

★Ia., Marion—Bd. Supervs. Linn Co. let contract building 13 concrete box culverts and 2 concrete slab bridge, to P. Jayne, Cedar Rapids, $14,400. Work involves 602 cu.yd. rein.-con., 18 tons reinforcing steel and 1240 lin.ft. wooden piling.

★Ia., Mt. Ayr—Bd. Supervs. Ringold Co. let contracts, to Koss Constr. Co., 2818 5th St., Des Moines, building 6 box culverts, 10 circular culverts, one 20 x 20 ft. I beam bridge concrete floor and abutments and one 20 x 50 ft. pony truss bridge, concrete floor and abutments, cost, $18,999; A. Phelps & Son, Knoxville, 13 box culverts and 13 circular culverts, $14,082; G. F. Lambert Co., 405 Utica St., Des Moines, 3 box culverts, and 9 circular culverts, $8551.

★Kan., Lyndon—Osage Co. let contract building 90 ft. rainbow arch bridge, 18 ft. wide, to McTernan-Halpin Constr. Co., 2500 Grand Ave., Kansas City, Mo., $13,790. Noted Feb. 6.

★Kan., Lyons—Rice Co. let contract building one 90 ft. steel truss bridge, 20 ft. roadway; one 30 ft. and one 35 ft. rein.-con. bridges, 20 ft. roadway, to Missouri Valley Bridge Co., 4th and Walnut Sts., Leavenworth, $17,400. Noted May 1.

★Wash., Marysville—State Highway Bd., Olympia, let contract building one 50 ft., one 40 ft. and two 20 ft., rein.-con. arch bridges on Pacific Highway between here and Silvana, Snohomish Co., to Fleiness & Dahl, 1305 East 41st St., Seattle, $23,710. Noted May 8.

Que., L'Assomption—Municipal Council received bids building concrete and steel bridge over L'Assomption River, from J. A. Brouillet, L'Assomption, $38,000; P. Marcil and S. Rivest, St. Paul de Joliette, $39,877; J. F. R. Leduc, St. Timothe, $49,859. Noted May 15.

★Ont., Peterboro—City rescinded contract awarded to Russell Townsend Co., Harbor Bldg., building rein.-con. bridge over Otonbee River, and relet same to Canadian Eng. & Constr. Co., Depew St., Hamilton. Cost plus basis, not to exceed $276,860. Noted May 15.

Reinforced Concrete

PROPOSED WORK

Ga., Hawkinsville—See "Streets & Roads."
Que., Sherbrooke—See "Industrial Works."
Ont., Grand Valley—See "Bridges."
Ont., London—See "Bridges."

BIDS DESIRED

Pa., Washington—See "Bridges."
Ga., Swainsboro—See "Bridges."
Ia., Red Oak—See "Bridges."
Mo., Kansas City—See "Waterworks."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ga., Thomasville—See "Bridges."
★Ill., Chicago—See "Industrial Works."
★Ont., Peterborough—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Boston—City appropriated $35,000 to build granolithic sidewalks, 6-12 ft. wide. J. W. Holmes, Everett, city engr.

Mass., Chelsea—City had plans prepared paving Spencer St., Spruce St. from Everett St. to tracks Boston & Main R.R., Central St. from Lynn to Highland Sts., 3rd St. from Spruce to Maple Sts., Arlington St. from 3rd St. to Everett Ave. About $100,000. J. A. O'Brien, city engr.

Mass., Quincy (Boston P. O.)—City had plans prepared paving Whitwell, Granite, Franklin, Brooks, Intervale, Beach, Beal, Atlantic, Roberts, Butler and Revere Sts. About $60,000. M. L. Brown, city engr.

Conn., New Hartford—City appropriated $25,000 bonds to improve main highway. Engineer not selected.

N. J., West New York—Town plans to improve 19th and 20th Sts., granite. About $25,000.

N. J., West Orange—Town soon lets contract improving Ridgeview Ave. from Valley Rd. to Overlook Ave., involving 2496 lin.ft. standard concrete curb, 1096 sq.yd. standard concrete gutter, 3012 sq.yd. bituminous pavement. G. W. Foster, clk. Noted Feb. 27.

Pennsylvania — State Highway Dept., Harrisburg, rejected bids building 10,554 ft. road in Somerset Co. and 7783 ft. in Warren Co. L. S. Sadler, state highway comr. Noted May 8.

Pa., Phila.—Dept Pub. Wks. soon lets contract grading, paving, repaving and improving various streets with asphalt or wood block, building, repairing and painting various bridges, furnishing and applying dust layer, and furnishing and delivering fuel oil. About $350,000. G. E. Datesman, dir.

Pa., Phila.—Holy Cross Cemetery plans to build 1 mi. road with gutters and necessary drainage. Bids will not be asked for same. J. O. Clarke, 133 South 12th St., engr.

Md., Towson—Comrs. Baltimore Co. soon let contract resurfacing 1.75 mi. Sparrows Point Rd., sheet asphalt over old macadam, 14 ft. wide with 5 ft. slag shoulders. Cost between $35,000 and $38,000. W. G. Sucro, co. engr.

W. Va., Charleston—Cabin Creek Dist., Kanawha Co., plans election soon to vote on $900,000 bonds to improve roads. F. C. Burdette, Charleston, engr.

W. Va., Harrisville—Comrs. Harrison Co. plan election soon to vote on $4,000,000 bonds to improve Class A roads. J. R. Wilson, Clarksburg, engr.

W. Va., Middlebourne—Comrs. Tyler Co. plan election soon to vote on $800,000 bonds to improve Class A roads, 16 ft. wide. P. P. Berkley, Middlebourne, engr.

W. Va., New Cumberland—Hancock Co. voted $100,000 bonds to pave and grade roads in Butler Dist. with vitr. brick. C. E. Grafton, New Cumberland, engr.

W. Va., New Martinsville—Comrs. Wetzel Co. soon receive bids paving and grading 5 mi. Wileyville-New Martinsville Rd., with vitr. brick. About $83,000. S. Palmer, Clarksburg, engr.

W. Va., Pineville—Wyoming Co., Slab Fork and Barker Dists. plan election soon to vote on $140,000 bonds to improve roads. A. B. Shannon, Pineville, engr.

W. Va., Wheeling—Comrs. Ohio Co. plan to build 1 mi. National Pike, grading 32 ft. and surfacing 20 ft. wide, involving 25,000 cu.yd. excav., 11,730 sq.yd. concrete pavement and miscelleanous items. About $38,000. W. O. McCluskey, Wheeling, engr.

Ga., Albany—Dougherty Co. voted $400,000 bonds to pave various roads and build concrete bridge over Flint River. State Highway Comn. will appropriate like amount. Noted Mar. 27.

Ga., Camilla—Mitchell Co. election July 3, to vote on $400,000 bonds to build concrete roads.

Ga., Dawson—Terrell Co. election June 17 to vote on $150,000 bonds to build roads. Federal Government will appropriate like amount if election carries.

Ga., Hawkinsville—Pulaski Co. voted $200,000 bonds to build roads. Federal Government will appropriate like amount.

Ga., Hawkinsville—Town soon lets contract building concrete road on Jackson and Commerce Sts. About $30,000. G. W. Jordan, mayor. S. R. Shi, Macon, engr.

Ga., Madison—Morgan Co. voted $325,000 bonds to build roads.

Ga., Nashville—Berrien Co. voted $500,000 bonds to pave 75 mi. roads 9 ft. wide, with brick, asphalt or concrete. Federal Government will appropriate like amount. Noted May 1.

Ga., Quitman—Brooks Co. election June 18 to vote on $500,000 bonds to build 100 mi. roads. Federal Government will appropriate like amount if election carries.

Ga., Tifton—Tift Co. voted $300,000 bonds to build roads. Noted May 1.

Fla., Sanford—Seminole Co. voted on $300,000 bonds to build brick and asphalt roads. F. T. Williams, Lockwood, co. engr.

Ky., Winchester—City soon lets contract paving 3½ mi. various streets, 36 ft. wide, concrete, brick, asphaltic concrete, and bitulithic with concrete curbing and guttering. About $200,000. S. H. Rutledge, city engr.

O., East Liverpool—City soon receives bids paving East 5th, Bway, St. Clair, Market, Dresden, Lisbon and West 8th Sts. vitr. brick. About $175,000. J. N. George, East Liverpool, engr.

O., Toledo—Lucas Co. having surveys made and plans prepared paving 1320 ft. Florence and January Aves., 16 ft. wide, concrete; ¾ mi. Richards Rd., from Bancroft to Dorr Sts., 16 ft. wide, waterbound macadam; ⅜ mi. Nevada and Boos Aves., 24 ft. wide, concrete; 2.5 mi. South St., from Reynolds Rd. to Hill Ave., 16 ft. wide, concrete. C. L. Rood, co. engr.

Ind., Indianapolis—Bd. Pub. Wks. having plans prepared grading, graveling, curbing and building sidewalks on Julian Ave. from Emerson to Bancroft Aves. and Gimber St. from Shelby St. to end of Gimber St., grading and graveling 26th St. from Cherry to Dearborn Sts. F. C. Linginfelter, city engr.

Ind., Indianapolis—City adopted resolution to resurface Pennsylvania St. from 25th to Fall Creek Blvd., and Meridian St. from Merrill to McCarty Sts. F. C. Linginfelter, city engr.

Ind., Indianapolis—Comrs. Marion Co. soon let contract grading, draining and paving 2700 ft. 21st St. from Massachusetts Ave. to Baker Rd., 40 ft. wide. vitr. brick on 6 in. concrete base. About $24,138. L. Griffith, co. engr.

Michigan—State Highway Comn., Lansing, soon lets contract grading, shaping, surfacing and providing drainage structures on following roads: 3.752 mi. in Assessment Dist. No. 31, 9 ft. wide, Class "B," gravel, Wright Twp., Hillsdale Co.; 7.987 mi. in Assessment Dist. No. 69, 9 ft. wide Class "B" gravel with 3 ft. gravel shoulder on either side, from limits of Pinconning in Bay Co. to south limits of city of Standish, Arenac Co.; 3.462 mi. in Assessment Dist. No. 183, 12 ft. wide, Class "E", waterbound macadam, Windsor, Fairhaven and McKinley Twps., Huron Co.; 1.993 mi. in Assessment Dist. No. 208, 12 ft. wide, Class "E" waterbound macadam, Windsor Twp., Huron Co.; 3.915 mi. in Assessment Dist. No. 18, 12 ft. wide, Class "E", waterbound macadam from Ohio-Michigan line northerly in Fairfield Twp., Lenawee Co.; 4.493 mi. in Assessment Dist. No. 111, 12 ft. wide, Class "E", waterbound macadam in vicinity of Pigeon River, McKinley Twp., Huron Co.; 4.531 mi. in Assessment Dist. No. 155, 12 ft. wide, Class "C", stone bottom and gravel road top, Seneca, Fairfield and Madison Twps., Lenawee Co.; 4.052 mi. in Assessment Dist. No. 120, 12 ft. wide, Class "E", waterbound macadam, McKinley Twp., Huron Co.; 2.981 mi. in Assessment Dist. No. 45, 12 ft. wide, Class "C", stone or slag bottom gravel top or Class "E", waterbound macadam, Lenawee Co.; 3.985 mi. in Assessment Dist. No. 102, 12 ft. wide, Class "E", waterbound macadam, McKinley Twp., Huron Co.; 3.026 mi. in Assessment Dist. No. 17, 12 ft. wide, Class "C", stone or slag bottom with gravel top, or Class "E", waterbound macadam, Lenawee Co. F. F. Rogers, state highway comr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract paving with 1 course concrete Alley No. 1003, 20 ft. wide; No. 1004, 11-20 ft. wide; No. 1005, 18-20 ft. wide; No. 1006, 20 ft. wide; No. 1007, 17-20 ft. wide; No. 1008, 20 ft. wide; No. 1009, 18 ft. wide; No. 1010, 18 ft. wide; No. 1011, 20 ft. wide; No. 1012, 19 ft. wide; No. 1013, 18 ft. wide; with brick, No. 1014, 16 ft. wide. Work involves 6519 cu.yd. excav., 17,678 sq.yd. paving, 51 lin.ft. curbstone, 8 cu.yd. concrete in curb setting, etc. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. plans to repave and improve portions of following streets with asphalt: Alexdrine, Beaufait, Bellevue, Belvidere, Bethune, Brewster, Cadillac, Cass, Clay, Dearborn, Dix, Dragoon, Garland, Grand River, Gratiot, Hamilton, Collingwood, Harper, Hart, Helen, Holbrook, Hurlbut, Joseph Campau, Junction, Kirby, Lawton, Library, McDougall, Marantette, Marston, Merrick, Milwaukee, Montclair, Oakland, Sheridan, St. Antoine, Superior, Sylvester, Townsend, Warren, Willis, Woodward, Wreford, Parker and Trombly Aves.; Bagg, Baker, Chene, Farmer, Duffield, Henry, Illinois, Levett, McMillan, Randolph, Russell, 2nd, 23rd, 29th,

Streets and Roads (Continued)

Vermont, Hastings, John R. Hancock and Hendrie Sts., Opera House Crossing; with creosote block, Shelby Ave.; with brick or asphalt, Livernois and Oak Aves., and Riopelle St.; with stone, Beaufait, Cass, Clark, Kirby, Lafferty, St. Aubin, Vermont and Wayne Aves.; Orleans, Russell, 2nd and 3rd Sts. E. F. Hubbell, city engr.

Mich., Middleville—City retained L. A. Boulay Co., engrs., 1250 Nicholas Bldg., Toledo, O., to prepare plans for 1½ mi. concrete or brick road, 20-48 ft. wide. About $50,000.

Illinois—State Highway Comn., Springfield, received no bids improving roads in Menard, Ogle, Mason, Lake, Bureau, Fulton, McHenry, Bond, Adams and Edward Counties. Will readvertise. Noted May 15.

Ill., Chicago—Bd. Local Impvts. soon lets contract building 6 ft. sidewalks, (56 different jobs); furnishing and installing water service pipes, (11 jobs), water supply pipes (8 jobs); Also furnishing and installing 6 in. tile drains, (10 jobs). J. Ericson, city engr.

Ill., Chicago—Bd. Local Impvts., City Hall, soon lets contract paving Cornelia, Karlov, Kedvale, Keeler and Lowell Aves., Roscoe, Henderson, School and Melrose Sts., involving 6450 cu.yd. grading, 21,500 ft. concrete curbing, 29,800 sq.yd. asphalt on 6 in. concrete base, cost $94,500;

South Park Ave., 14,000 cu.yd. grading, 12,100 ft. concrete curbing, 25,900 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or trap rock, $87,000;

North Claremont, Oakley and Irving Sts., and Rosemont, Highland and Thome Aves., 8200 cu.yd. grading, 11,500 ft. concrete curbing, 18,200 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or traprock, $64,000;

Lawrence Ave., 13,600 sq.yd. paving, creosoted wood block on 6 in. concrete base, 6400 cu.yd. grading, $71,500;

Lafayette Ave., West 66th and West 68th Sts., 9700 ft. concrete curbing, 14,800 sq.yd. asphalt paving on 6 in. concrete base, $49,500;

South Chicago Ave., 4000 cu.yd. filling, 4390 ft. sandstone curbing, 10,780 sq.yd. vitr. brick on 6 in. concrete base, $39,000;

Archer Ave., 5200 cu.yd. grading, 6700 ft. concrete curbing, 1028 sq.yd. granite block on 6 in. concrete base, 11,220 sq.yd. vitr. brick on 6 in. concrete base, $44,500;

Harrison St., 4600 cu.yd. grading, 5330 ft. concrete curbing, 8000 sq.yd. vitr. brick, on 6 in concrete base, $36,500;

Karlov Ave., 3000 cu.yd. grading, 5370 ft. concrete curbing, 8750 sq.yd. asphalt on 6 in. concrete base, $40,000;

Hayne Ave., 255 cu.yd. grading, 5165 ft. concrete curbing, 8570 sq.yd. asphalt on 6 in. concrete base, $26,000;

Keating St., 2400 cu.yd. grading, 5430 ft. concrete curbing, 7520 sq.yd. asphalt on 6 in. concrete base, $26,500;

Longwood Dr., 6400 cu.yd. grading, 5630 ft. concrete curbing, 9020 sq.yd. asphalt on 6 in. concrete, $35,500.

Devon Ave., 1200 cu.yd. grading, 2100 ft. concrete curbing, 280 sq.yd. granite block on 6 in. concrete base, 3080 sq.yd. vitr. brick on 6 in. concrete base, $17,500;

Kolin St., 1090 cu.yd. grading, 1810 ft. concrete curbing, 2810 sq.yd. asphalt on 6 in. concrete base, 6 brick catch basins, $13,000;

Otto St., 1300 cu.yd. grading, 2280 ft. concrete curbing, 3800 sq.yd. asphalt on 6 in. concrete, $15,500;

Morgan St., 300 cu.yd. grading, 1400 ft. concrete curbing, 2360 sq.yd. asphalt on 6 in. concrete base, $9500;

Leavitt St., 800 cu.yd. grading, 740 ft. concrete curbing, 1100 sq.yd. paving with 8 in. crushed slag or limestone and 2½ in. crushed granite or traprock, $4500;

West 35th Pl., 1200 cu.yd. grading, 2350 ft. concrete curbing, 3680 sq.yd. asphalt on 6 in. concrete base, $13,000;

South Wabash Ave., 800 cu.yd. grading, 860 ft. concrete curbing, 1240 sq.yd. paving with 8 in. crushed slag or limestone on 2½ in. crushed granite or traprock, $5000;

Windsor Ave., 1200 cu.yd. grading, 2270 ft. concrete curbing, 3070 sq.yd. asphalt on 6 in. concrete base, $13,000;

West 18th St., 1100 cu.yd. grading, 3630 ft. concrete curb, 3100 sq.yd. vitr. brick on 6 in. concrete base, $12,500;

Alleys between Harrison and Flournoy Sts. and Spaulding and Homan Aves., 501 cu.yd. grading, 1198 ft. concrete curbing, 940 sq.yd. vitr. brick on 6 in. concrete base, $3777;

Van Buren and Congress St. and Washtenaw and California Aves., 600 cu.yd. grading, 2028 ft. concrete curbing, 1780 sq.yd. vitr. brick on 6 in. concrete base, $6100;

Alley between Wabausia and North Aves. and Kedzie and Sawyer Aves., 470 cu.yd. grading, 1590 cu.yd. concrete curbing, 1440 sq.yd. vitr. brick on 6 in. concrete base, $4900.

Alley between Montrose and Cullom Aves., Ashland Ave. and Paulina St., 580 cu.yd. grading, 1180 ft. concrete curbing, 1180 sq.yd. vitr. brick on 6 in. concrete base, $5000;

Alley between Blackhawk and Division Sts. and Holt and Dickson Aves., 1300 cu. yd. grading, 2690 ft. concrete curbing, 2330 sq.yd. vitr. brick on 6 in. concrete base, $10,457. C. D. Hill, ch. engr. Noted Apr. 17.

Ill., Danville—City soon lets contract for 17,000 sq.yd. asphaltic macadam paving. H. H. Edwards, city engr.

Ill., Edwardsville—Madison Co. soon lets contract paving road from Wood River to Grant City Rd., Sect. H-15d, 18 ft. wide, involving 28,076 sq.yd. vitr. brick (4-in. monolithic type) on 4½-in. concrete base, 5068 cu.yd. earth excav., 67 cu.yd. concrete in culverts, etc.; Sect. I-15d, 25,230 sq.yd. vitr. brick (monolithic type), on 4½-in. concrete base, 8836 cu.yd. earth excav., 89 cu.yd. concrete in culverts, etc. Estimate cost excluding cement, $88,610 and $82,938 respectively. W. E. Howden, Edwardsville, engr.

Wis., Chilton—City soon lets contract grading and pacing 2.5 mi. Division and Main Sts., 18 ft. wide. Work involves 20,000 sq.yd. vitr. brick, asphalt or concrete, 9000 lin.ft. concrete curb and gutter and 4200 cu.yd. grading. About $25,000. J. Donohue, York Bldg., Sheboygan, engr. Noted May 8.

Wis., Jefferson—Bd. Pub. Wks. soon lets contract paving portion of 6 streets, vertical fibre brick, rein.-con. or creosoted wood block. Work involves 2884 cu.yd. excav., 9328 sq.yd. pavement, 170 lin.ft. curb and 770 lin.ft. 10-15 in. storm sewers, etc.

Wis., Oshkosh—Comrs. Winnebago Co. soon let contract grading, draining and concrete surfacing 2 mi. Menasha-Appleton Rd., 16 ft. wide, involving 3200 cu.yd. grading, 16,000 sq.yd. 8-in. concrete, cost $50,000; 1½ mi. Oshkosh-Fond du Lac Rd., 16 ft. wide, involving 2800 cu.yd. grading, 18,000 sq.yd. 8-in. concrete, $25,000; 5 mi. Oshkosh-Winneconne Rd., 16 ft. wide, involving 14,000 cu.yd. grading, 48,000 sq.yd. 8-in. concrete, $113,000. Noted Mar. 20.

Wis., Racine—Racine Co. soon lets contract concrete surfacing and grading Asylum Rd., 16 ft. wide, involving 2200 cu.yd. excav., and 14,222 sq.yd. surfacing, etc., and Mygatt's Rd., 16 ft. wide, involving 3400 cu.yd. excav., and 14,430 sq.yd. surfacing, etc. About $56,000. A. R. Hirst, c/o State Highway Dept., engr.

Ia., Spencer—Clay Co. election June 10, to vote on proposition to pave entire primary road system and to form assessment districts along system, entire length 54.28 mi. V. McCown, co. engr.

Minn., Aitkin—Comrs. Aitkin Co. voted $125,000 bonds to build roads. H. G. Beecher, co. aud.

Minn., Bemidji—Comrs. Beltrami Co. authorized issuance of $250,000 bonds and soon receive bids building roads. A. D. Johnson, co. aud.

Minn., Fairmont—Comrs. Martin Co. voted $195,000 bonds to build trunk lines of Federal paved roads. A. Q. Palmquist, co. aud.

Minn., Minneapolis—Hennepin Co. voted $256,000 bonds to build roads. A. P. Erickson, aud.

Minn., Pine City—Comrs. Pine Co. voted $100,000 bonds to build roads. A. P. Edlin, co. aud.

Kan., Emporia—Lyon Co. plans to hard surface Santa Fe Trail from east to west of county through Emporia. W. S. Ruggles, Emporia, engr.

Kan., Hutchinson—Reno Co. rejected bids building Sect. "A" of Santa Fe Trail.

Kan., Independence—City soon lets contract curbing, paving and guttering 1st, 2nd, 4th, 19th and Sycamore Sts. and Tonopah Dr. Work involves 16,250 sq.yd. vitr. brick on concrete base, 890 lin.ft. curbing, 8835 lin.ft. guttering and 9300 cu.yd. earth excav. W. S. Greenleaf, Independence, engr.

Kan., Iola—Allen Co. plans to hard surface 21 mi. Iola-Wichita Highway, and roads in Salem and Marmaton Twps. C. E. Stebbins, Iola, engr.

Kan., Kansas City—Wyandotte Co. soon lets contract building (a) 13,188 ft. road, 18 ft. wide, 2 course portland cement concrete, (b) 6728 ft. road 18 ft. wide, 1 or 2 course portland cement concrete; Federal Aid Project No. 25. M. W. Watson, c/o State Highway Comn., Topeka, acting engr.

Kan., Kansas City—Wyandotte Co. soon lets contract paving 2¼ mi. Parallel Rd., portland cement. W. Beggs, co. clk.

Kan., Plainville—City having plans prepared for 20,000 sq.yd. brick paving. Archer & Stevens, 609 New England Bldg., Kansas City, Mo., engrs.

Kan., Syracuse—Hamilton Co. plans to build 50 mi. sand clay road and several concrete bridges. R. B. Glass, co. engr.

Neb., Beaver Crossing—City receives bids about June 15, paving and laying storm sewers in 5000 ft. Main St., 30 ft. wide. About $60,000. Grant & Fulton, Lincoln, engrs.

Neb., Lincoln—City soon lets contract paving and grading 2500 ft. 22nd, 30th, Starr and Franklin Sts., 25 ft. wide, involving 6390 sq.yd. asphaltic concrete on 5-in. concrete base, 125 sq.yd. concrete, 100 lin.ft. concrete curbing, 4900 lin.ft. gutter and curb, 125 lin.ft. sidewalk, and 840 cu.yd. earth excav. About $20,250. G. W. Bates, city engr.

Mont., Bozeman City—City plans to grade and pave 7th Ave. from Main to Lamme Sts., 5th Ave. from Main to Lamme Sts., Lamme St. from 5th to 7th Aves., cost, $20,500; bithulithic paving on Olive St. from Bozeman Ave. to Lindley Pl. and Lindley Pl. from Olive to Koch Sts., $12,561. C. Widener, 607 South Central St., engr.

Mont., Hardin—Big Horn Co. plans to grade 28 mi. Rosebud River Rd. About $20,000. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Hardin—Big Horn Co. plans to grade 12 mi. Hysham-Sarpy Rd. About 10,000. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Philipsburg—Granite Co. plans to grade 2 mi. Drummond Rd. About $10,000. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mo., Clayton—St. Louis Co. plans election soon to vote on $1,000,000 bonds to improve roads. W. Elbring, co. engr.

Mo., Fulton—Callaway Co. soon receives bids hard surfacing 25 mi. road. Bonds for $120,000 sold for project. W. P. Divers, co. engr.

Mo., Liberty—Clay Co. plans to build 24 mi. state aid road, 18 ft. wide, asphaltic macadam. About $20,000 per mile. E. Denny, co. engr.

Mo., Mt. Vernon—Lawrence Co., Mt. Vernon Special Rd. Dist., voted $36,000 bonds to build roads. R. Ford, Mt. Vernon, street comr.

Tex., Belton—City election June 17 to vote on $75,000 bonds to improve streets.

Tex., Carthage—Panola Co., Beckville Precinct voted $135,000 bonds to build roads.

Tex., Corsicana—Navarro Co. plans to grade, drain and gravel surface 2.121 mi. road between Barry and Blooming Grove, 24 ft. wide. About $11,975. C. Chappell, Corsicana, engr.

Tex., Denton—Denton Co., Rd. Dist. No. 4, voted $125,000 bonds to build roads.

Tex., Hillsboro—Hill Co., Dist. No. 11, plans election to vote on $216,000 bonds to build roads.

Tex., San Antonio—City plans election to vote on $17,500 bonds to macadamize principal streets in Dist. No. 14.

Tex., San Augustine—San Augstine Co. Precinct No. 4 voted $100,000 bonds to build roads, Precinct No. 1, $100,000, Precinct No. 2, $50,000.

Tex., San Marcos—Hays Co. plans to improve and build highways. About $415,000. J. W. Puckett, Buda, engr.

Tex., Sherman—Grayson Co. Gunter Dist. voted $90,000 bonds to build roads, Southmayde Rd. Dist. No. 9, $90,000.

Okla., Oklahoma—City plans to pave Hudson St., 26 ft. wide, involving 7500 sq.yd. asphalt, 5000 lin.ft. concrete curb and gutter, and 5000 cu.yd. earth excav.

Idaho, Buhl—City soon lets contract paving 37,650 sq.yd. streets in Dist. No. 1, concrete and asphaltic concrete. G. B. Brazeau, clk.

Idaho, Cascade—Comrs. Valley Co. plan election to vote on $75,000 bonds to build roads.

Streets and Roads (Continued)

Utah—State Highway Comn., Salt Lake City, soon lets contract paving 8.23 mi. state road from Pleasant Grove to north city limits of Provo, 18 ft. wide, 11.12 mi. state road from Midvale to city limits of Lehi. 18 ft. wide, Utah Co.; 8.98 mi. state road from Hot Springs to south city limits of Brigham City, 18 ft. wide, 6-8 in. plain concrete, Box Elder Co. I. R. Browning, Salt Lake City, engr.

Utah, Salt Lake City—Salt Lake Co. soon lets contract grading and building 42,000 ft. road from Lark Twp. to Bear Gulch near Copperfield, 18 ft. wide, waterbound macadam. G. Bywater, co. engr.

Utah, Salt Lake City—Salt Lake Co. soon lets contract paving 8.2 mi. Highland Dr. from present pavement near 33rd St. S to Murphy's Lane, 18 ft. wide. Bids will be received on (1) plain cement concrete, (2) bituminous concrete on cement base, (3) bituminous concrete on crushed stone base (4) tarvia macadam on cement base, (5) tarvia macadam on crushed stone base. G. Bywater, co. engr.

Wash., Anacortes—Skagit Co. soon lets contract grading and paving roads in Local I. D. No. 6, Local I. D. No. 8 and Local I. D. No. 5, bithulithic or 1 course concrete. E. Swanberg, clk.

Wash., Washougal—City soon lets contract paving 2nd St. from Richard Ave. to Durgan St., center 30 ft., curb at edge, leaving park strip 9 ft. wide between sidewalk and curb; from Durgan to Webber Sts., from Webber to Russell Sts.; Russell St. from 2nd to intersection County Rd.; County Rd. from Russell St. to town limits, 18 ft. wide in center, two 2 ft. crushed rock shoulders; Local Impvt. Dist. No. 2. H. C. Carpenter, clk. T. A. Garrow, 421 Northwestern Bank Bldg., Portland, Ore., engr.

Wash., Wenatchee—Comrs. Chelan Co. soon let contract hard surfacing 1.2 mi. Permanent Highway No. 11.

Wash., Yakima—City soon lets contract paving Walnut St., concrete. About $215,000.

Ore., Hillsboro—City soon lets contract for 6000 ft. concrete curbs, 25,000 sq.yd. concrete pavement, 5000 cu.yd. excav. R. W. Jones, city engr.

Ore., North Bend—City having plans prepared and estimates made for improving and hardsurfacing California Ave. from Sherman to Sutherlin Sts. R. L. Cavanaugh, city engr.

Ore., Portland—City soon lets contract paving with concrete No. 1 on crushed rock base, asphaltic concrete on crushed rock or concrete Nos. 1 and 2, East 61st St. from Fremont St. to Sandy Blvd.; East Sherman St. from Stratford Sydney addition to 34th St.; East 53rd St. from East Hoyt to East Glisan Sts.; East 11th St. from East Davis to East Flanders Sts.; with macadam, Boise St. from East 39th to 42nd Sts.; with crushed rock or gravel, 45th St.; also improving Leland and Bellevue Sts. and Dekum Ave. G. R. Funk, city aud.

Ore., Portland—City soon lets contract paving with asphaltic concrete Nos. 1 and 2 on crushed rock or bituminous base, on concrete Nos. 1 or 2, East 52nd St. from south line of lots 44 and 54, Melrose, to south line of East Burnside St. O. Laurgaard, city engr.

Cal., Holtville—City soon receives bids grading and paving with concrete, bitulithic surface, etc., 252,220 sq.ft. in 5th, 6th, Palm, Pine and Holt Sts., Rd. Dist. No. 1; 244,800 sq.ft. 6th, 7th, Olive, Pine, Palm and Holt Sts., in Dist. No. 2. Contract will be let in 2 sections. H. J. Burk, Holtville, engr. Noted Mar. 6.

Cal., Pomono—City receives bids in July paving with 4 in. concrete, with ⅜ in. screenings and oil surface 1.22 mi. Philadelphia St. C. E. Bayley, city engr.

Cal., Santa Cruz—Santa Cruz Co. election June 10 to vote on $924,000 bonds to pave highways.

N. B., Shediac—Town having plans prepared paving 1 mi. Main St. and several miles various streets, waterbound macadam. J. A. McQueen, clk.

Que., St. Alexis—E. Beaudoin, secy.-treas., soon lets contract building 6 mi. gravel road. G. Henry, Parliament Bldg., Quebec, engr.

Que., Victoriaville—Town voted $25,000 bonds to pave streets. L. J. Boyer, clk.

Ont., Belleville—City plans to pave with asphaltic concrete Campbell St. from Front to Pinnacle Sts., and with asphalt Burnham, Ann and William Sts., from Bridge to Dundas Sts., and Coleman St. from Moira to Bridge St., E. About $80,000.

Ont., Exeter—Town plans to spend $37,'00 to pave concrete roads during 1919.

Ont., Kingston—Frontenac Co. soon receives bids building roads. About $68,000 available for project.

Ont., St. Thomas—City soon lets contract paving streets involving 20,000 sq.yd. asphalt on 6-in. concrete base, 10,000 lin.ft. concrete curb and gutter, and 1900 sq.yd. creosoted block on concrete base. About $80,000. M. Ferguson, city engr.

Ont., Swastika—Dept. highways, Toronto, plans to build 6 mi. macadam road from here to Kirkland Lake. About $60,000.

B. C., Vancouver Island—Dept. Pub. Wks., Victoria, soon lets contract grading and paving about 1 mi. Island Highway from Craigflower Bridge to Parsons Bridge, 16 ft. wide. Alternate bids will be considered on one course concrete and asphaltic concrete on macadam or concrete base, A. E. Forman, c/o Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

Massachusetts—Until June 10, by State Highway Comn., Boston, building 11,200 ft. bituminous macadam road, 18 ft. wide. Taunton Twp., A. W. Dean, state highway engr.

Massachusetts—Until June 24, by State Highway Comn., Boston, building 11,200 ft. bituminous macadam highway, 18 ft. wide, Great Barrington Twp. A. W. Dean, state highway engr.

Massachusetts—Until June 18, by State Highway Comn., Boston, building 23,500 ft. bituminous macadam road in Hancock and Pittsfield Twps., and 12,800 ft. in Braintree Twp., 18 ft. wide. A. W. Dean, state highway engr.

N. Y., Brooklyn—Until June 11, by E. Riegelmann, boro. pres., regulating, grading, curbing and laying sidewalks on East 38th St. from Church to Synder Aves.; 51st St. from 16th to 17th Aves.; regulating and repaving with permanent asphalt on 6 in. concrete foundation a strip 18 ft. wide in center of roadway of 47th St. from New Utrecht to 18th Aves.; 51st St. from 16th to 17th Aves.

N. Y., New York—Until June 11, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving with granite block on concrete foundation, roadway of James Slip from South to Cherry Sts.; Leroy St. from Hudson to West Sts.; with sheet asphalt on concrete foundation, Broad St. from South to Water Sts.; Wall St. from Pearl St. to Bway.; Lexington Ave. from curb to rail at intersection of 60th St.; 79th St. from 2nd to Madison Aves.; Bway. from 181st St. to Nagle Ave.

N. Y., S. I., St. George—Until June 10, by C. D. Van Name, pres. Richmond Boro., repairing with wood block pavement roadways of Richmond Ave. from Richmond Terrace to south property line of Post Ave.; Castleton Ave. from Columbia St. to east property line of Caroline St. and from west property line of State St. to east property line of Bway.; Columbia St. from Richmond Terrace to south property line of Cary Ave.; Bay St. from south property line of Thompson St. to Clifton R.R. crossing and New York Ave. (Bay St.) from Clifton R.R. crossing to south property line of Bayview Ave.

Pa., Ebensburg—Until June 13, by Controller Cambria Co., building, excavating and furnishing material for 2 mi. road in West Carroll Twp., 18 ft. wide, brick block on 6 in. concrete base. F. Akline, Carrolltown, engr. Noted May 22.

Pa., Ebensburg—Until June 16, by Supervs. Clearfield Twp., c/o Controller, Cambria Co., building 2 mi. road from Clearfield Creek at Dysart to Patton, also intersection Pennsylvania Rd. Route 221, ½ mi. east of Patton to Dysart, vitr. fire clay or shale block on combination or 6 in. concrete base. Owen & Plummer, Otto Bldg., Johnstown, engrs.

Pa., Greensburg—Until June 10, by Westmoreland Co., building 7th St. extension in New Kensington Boro., 1.5 mi. long, and Scottdale-Greensburg Rd., Sect. 3, 3.31 long.

Pa., Pittsburgh—Until June 19, by Controller Allegheny Co., improving 17,000 ft. Butler Pike, Shaler and Hampton Townships, 20 ft. wide, asphaltic concrete and brick block; 8000 ft. Bakerstown and Warrendale Rd., Pine Township, 18 ft. wide, concrete. R. V. Warren, co. engr.

Pa., Washington—Until June 12, by T. J. Underwood, controller, Washington Co., building 1.1 mi. Beallsville-Zollarsville Rd., 1.25 mi. Avella-Cross Creek Rd., 1.70 mi. Burgettstown-Bulger Rd., 1.8 mi. Midway-Primrose Rd. and 0.27 mi. West Alexander-Mechanic Street Rd., all concrete. Chaney Eng. Co., co. engrs.

Delaware—Until June 10, by State Highway Dept., Dover, building 4.07 mi. road from Georgetown toward Laurel, 3.55 mi. road from Millsboro toward Oak Orchard, 4.41 mi. Dupont Rd., 14 ft. wide, 2 in. bituminous surface on concrete, asphalt or slag base, Sussex Co. About $135,000. C. M. Upham, ch. engr.

Md., Upper Marlboro—Until June 10, by Comrs. Prince Georges Co., resurfacing 6000 lin.ft. Upper Marlboro-Bowie Rd. with 4 in. limestone and grading shoulders to width of 4 ft. on either side of macadam. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

W. Va., Elm Grove—Until June 12, by Town Council excavating and paving 1 mi. Wheeling, Woddle, Marshall, Liberty, and Springdale Sts., 14 ft. wide, vitr. brick or concrete on gravel base. Above $25,000. H. L. Maddocks, Newark, O., engr.

W. Va., Winfield—Until June 19, by Putnam Co., building 4 mi. Culloden-St. Albans Rd., grading 26 ft. wide, surfacing 16 ft. wide. Work involves 40,000 cu.yd. excav. and 37,000 sq.yd. of concrete, brick or asphaltic concrete. About $140,000. G. H. Davis, 4 Dyer Apartments, Charleston, engr. Noted May 29.

Ga., Brunswick—Until June 30, by Comrs. Glynn Co., paving 4.4 mi. (46,400 sq.yd.) road extending from here to picric acid plant. Federal Government will appropriate toward cost. C. Miller, chn.; E. R. Conant, Brunswick, consult. engr.; advertised in this issue.

Ga., Brunswick—Until June 30, by Mayor and Bd. Aldermen, paving about 110,000 sq.yd. streets. E. R. Conant, Brunswick, consult. engr.; advertised in this issue.

Ga., Dublin—Until June 16, by city, paving, draining and curbing 40,000 cu.yd. streets. Bids will be received on all classes of pavements. M. J. Guyton, city engr.

Ga., Hiawassee—Until June 27, by Comrs. Towns Co., grading and draining 12 mi. roads. About $70,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, engrs.

Tenn., Jackson—Until June 23, by City Comrs., paving 8 streets, involving 52,000 sq.yd. sheet asphalt on concrete base, 1 street, 3350 sq.yd. sheet asphalt on macadam base, 5300 sq.yd. concrete alleys, 12,000 lin. ft. curbs, 3250 sq.yd. vitr. brick gutters and 6000 lin.ft. 12-24 in. vitr. storm drains. J. T. McCutchen, comr. pub. utilities.

O., Cleveland—City receiving bids paving East 137th St. from Livingston St. to Abell Ave., involving 23,500 sq.ft. paving, 1650 ft. curbing and 7900 sq.ft. 3 in. stone sidewalks; South Moreland Blvd. from Shaker Blvd. to Buckeye Rd., 32,000 sq.ft. paving, 3300 ft. curbing and 8000 sq.ft. 3 in. stone sidewalks; South Moreland Blvd. from Shaker Blvd. to Drexmore Ave., 25,000 sq.ft. paving, 2300 ft. curbing and 7000 sq.ft. 3 in. stone sidewalks; Southington Rd. from Livingston Rd. to city limits, 21,000 sq.ft. paving and 1950 ft. curbing; Ripley Ave. from Hampton Rd. to Ashwood Ave., 22,250 sq.ft. paving and 2200 ft. curbing; North Moreland Blvd. from Shaker Blvd. to Woodland Ave., 35,000 sq.ft. paving and 3800 ft. curbing; Ludlow Ave. from East 132nd St. to city limits, 53,000 sq.ft. paving and 4350 ft. curbing; Livingston Rd. from East 132nd St. to Abell Ave., 57,500

Streets and Roads (Continued)

sq.ft. paving, 4100 ft. curbing and 20,000 sq.ft. 3 in. stone sidewalks; Keswick Rd. from Hampton Ave. to city limits, 19,500 sq.ft. paving and 1720 ft. curbing; Hampton Rd. from East 132nd St. to Albion Rd., 57,000 sq.ft. paving and 5100 ft. curbing; Drexmore Rd. from South Moreland Blvd. to city limits, 25,750 sq.ft. paving and 1930 ft. curbing; Corby Ave. from Hampton to Ludlow Rds., 14,600 sq.ft. paving, 1250 ft. curbing and 6250 sq.ft. 3 in. stone sidewalks; Chadbourne Rd. from Drexmore Rd. to city limits, 19,200 ft. paving, 1600 ft. curbing and 4500 sq.ft. 3 in. stone flagging; Bechet Rd. from Hampton Rd. to city limits, 47,000 sq.ft. paving and 4000 ft. curbing; Ashland Ave. from East 132nd St. to city limits, 63,000 sq.ft. paving and 4300 ft. curbing; Albion Ave. from Hampton Ave. to city limits, 30,200 sq.ft. paving and 1250 ft. curbing; East 132nd St. from Shaker Blvd. to Griffing Ave., 127,000 sq.ft. paving and 11,200 ft. curbing; all 4 in. brick paving on 6 in. concrete base and 5 in. stone curbing. R. Hoffman, city engr.

O., Toledo—Until June 10, by D. H. Goodwillie, serv. dir., grading, draining, curbing and paving 1259 ft. Booth Ave., from Stickney Ave. to Brigham St., 24 ft. wide, involving 3554 sq.yd. paving, 2600 lin.ft. curbing and 1874 cu.yd. earth excav., estimated cost $16,591; 1259 ft. Bricker Ave. from Stickney Ave. to Brigham St., 24 ft. wide, 3554 sq.yd. paving, 2600 lin.ft. curbing and 2175 cu.yd. earth excav., $14,966; 1248 ft. Martha St. from Berdan to Phillips Aves., 24 ft. wide, 3362 sq.yd. paving, 2550 lin.ft. curbing and 1749 cu.yd. earth excav., $16,131; 4190 ft. Hudson St. from Lagrange St. to Stickney Ave., 24 ft. wide, 11,927 sq.yd. paving, 8400 lin.ft. curbing and 7172 cu.yd. earth excav., $49,428; 2581 ft. Oakdale Ave. from Oak St. to East Bway, 26 ft. wide, 7852 sq.yd. paving, 5200 lin.ft. curbing and 5012 cu.yd. earth excav., $35,724. Bids will be received on all types of pavement. H. C. McClure, city engr.

O., Toledo—Until June 23, by Comrs. Lucas Co., grading, draining, curbing and paving 1½ mi. Parkside roads and streets, 24 ft. wide, involving 21,530 sq.yd. paving, 14,760 lin.ft. stone curbing, 12,155 cu.yd. earth excav., etc.; bids will be received on all types of pavement, cost $110,326; 9892 ft. Key St., 16 ft. wide, 17,500 sq.yd. concrete and 5403 cu.yd. earth excav.; 6905 ft. Lyon Rd., 16 ft. wide, 12,500 sq.yd. waterbound macadam and 3764 cu.yd. earth excav.; $25,566; 7966 ft. Yondota Rd., 16 ft. wide, 14,300 ft. waterbound macadam and 2011 cu.yd. earth excav., $28,655; 4.39 mi. Sylvania-Alexis Rd., 16 ft. wide, 41,700 sq.yd. 6-8 in. concrete, 23,500 cu.yd. earth excav. and 13,600 ft. 6-10 in. drain tile, $119,125. C. L. Rood, co. engr.

O., Toledo—Until June 10, by D. H. Goodwillie, serv. dir., grading, draining, curbing and paving 1176 ft. Fremont St., 24 ft. wide, involving 3244 sq.yd. paving on 6 in. concrete base, 2390 lin.ft. curbing and 2404 cu.yd. earth excav. About $18,699. Bids will be received on all types of pavement. Noted May 22.

O., Willoughby—Until June 14, by C. C. Jenkins, village clk., building 47,000 sq.yd. brick pavement on 6-in. concrete foundation, cement grout filler, 33,000 lin.ft. concrete curb and gutter, and 12,000 lin.ft. 6-18 in. storm sewers; advertised in this issue.

Indiana—By Bd. Co. Comrs. building roads in following counties:

June 21, Hendricks Co., Danville, 21,102 ft. gravel and macadamized road, on line Monroe Twp., Morgan Co. and Liberty Twp., Hendricks Co. C. M. Havens, aud.

June 27, Jennings Co., Vernon, crushed stone road on county line Jackson Twp., Decatur Co., and Geneva Twp., Jennings Co. E. Bimish, aud.

July 7, Dubois Co., Jasper, 2 mi. and 13 rods crushed limestone road in Patoka Twp. J. H. Seng, aud.

Illinois—Until June 18, by State Highway Comn., Springfield, improving roads in following counties: Effingham Co., 22,445 ft. Sect. I, Natl. Highway, 16 ft. wide, involving 39,832 sq.yd. pavement, 22,370 cu.yd. excav., 166.3 cu.yd. concrete in culverts and bridges; 7724 ft. Sect. J, 18ft. wide, 15,230 sq.yd. pavement, 13,914 cu.yd. excav., 511.2 cu.yd. concrete; 10,425 ft. Sect. K, 18 ft. wide, 20,854 sq.yd. pavement, 13,743 cu.yd. excav., 104.9 cu.yd. concrete; 22,459 ft. Sect. L, 30 ft. wide, 95,239 cu.yd. excav., 700 cu.yd. concrete; 17,994 ft. Sect. M, 16 ft. wide, 31,831 sq.yd. pavement, 22,431 cu.yd. excav., 300 cu.yd. concrete; 27,887 ft. Sect. N, 16 and 18 ft. wide, 52,693 sq.yd. pavement, 16,313 cu.yd. excav., 478.6 cu.yd. concrete; 21,000 ft. Sect. G-15d, 16 and 18 ft. wide, 39,956 sq.yd. pavement, 10,638 cu.yd. excav., 146 cu.yd. concrete; 30,635 ft. Sect. B, Chicago-Joliet Highway, 18 and 20 ft. wide, 61,972 sq.yd. pavement, 9997 cu.yd. excav., 33.6 cu.yd. concrete; 35,847 ft. Sect. C, 18 ft. wide, 72,120 sq.yd. pavement, 24,045 cu.yd. excav., 270.4 cu.yd. concrete; Will Co., 27,450 ft. Sect. D, Chicago-Joliet Highway, 18 and 20 ft. wide, 55,520 sq.yd. pavement, 20,124 cu.yd. excav., 276.4 cu.yd. concrete; Iroquois Co., Sect. 3, Dixie Highway. C. Older, ch. highway engr.

Illinois—Until June 18, by State Highway Comn., Springfield, paving 4768 ft. Peoria-Springfield Highway, 16 ft. wide, Sect. M, Mason Co., involving 8316 sq.yd. pavement and 5047 cu.yd. excav. Alternate bids will be received on Portland cement concrete, 3 and 4-in. monolithic brick, bituminous concrete with or without binder course, (Spec. C1, C2, C3 or CT). C. Older, ch. highway engr.

Illinois—Until June 18, by State Highway Comn., Springfield, improving roads in following counties:

Bond Co., 1783 ft. Sect. E, Route 6, 10 ft. wide, involving 2120 sq.yd. brick pavement, 3000 cu.yd. excav., 92 cu.yd. concrete in bridges and culverts, cost $9266;

Ford Co., 3100 ft. Sect. D, Route 1, 10 ft. wide, 3440 sq.yd. brick, 1161 cu.yd. excav., $14,971;

Bureau Co., 3456 ft. Sect. F, Route 4, 15 ft. wide, 5760 sq.yd. concrete pavement, 1850 cu.yd. excav., 62 cu.yd. concrete, $10,990; 4000 ft. Sect. G, Route 1, 15 ft. wide, 6667 sq.yd. concrete, 2466 cu.yd. excav., 48 cu.yd. concrete, $11,486;

Fulton Co., 4200 ft. Sect. S, Route 4, 16 ft. wide, 7466 sq.yd. concrete, 3592 cu.yd. excav., 65 cu.yd. concrete, $15,800;

Lake Co., 6060 ft. Sect. J, Route 6, 18 ft. wide, 12,120 sq.yd. concrete, 4462 cu.yd. excav., 47 cu.yd. concrete, $21,400;

La Salle Co., 5940 ft. Sect. K, Route 15, 15 ft. wide, 9900 sq.yd. concrete, 2566 cu.yd. excav., 34 cu.yd. concrete, $15,930;

Livingston Co., 20,547 ft. Sect. G, Route 3, 10 and 18 ft. wide, 25,250 sq.yd. concrete, 14,650 cu.yd. excav., 282 cu.yd. concrete, $56,538;

McHenry Co., 2121 ft. Sect. K, Route 15, 16 ft. wide, 3771 sq.yd. concrete, 1057 cu.yd. excav., 7 cu.yd. concrete, $8262; 2336 ft. Sect. L, Route 17, 16 ft. wide, 4152 sq.yd. concrete, 1294 cu.yd. excav., 39 cu.yd. concrete, $7828;

Macoupin Co., 3274 ft. Sect. H, Route 7, 10 ft. wide, 3638 sq.yd. concrete, 4000 cu.yd. excav., 44 cu.yd. concrete, $7433;

Mason Co., 4000 ft. Sect. B, Route 1, 16 ft. wide, 7111 sq.yd. concrete, 1022 cu.yd. excav., $11,804;

Menard Co., 2000 ft. Sect. E, Route 4, 16 ft. wide, 3556 sq.yd. concrete, 2709 cu.yd. excav., 6 cu.yd. concrete, $6380;

Morgan Co., 3259 ft. Sect. D, Route 1, 16 and 18 ft. wide, 5972 sq.yd. concrete, 1493 cu.yd. excav., 9 cu.yd. concrete, $12,878;

Ogle Co., 7254 ft. Sect. F, Route 10 and 11, 10 and 16 ft. wide, 11,798 sq.yd. concrete, 4476 cu.yd. excav., 13 cu.yd. concrete, $19,428;

Shelby Co., 3750 ft. Sect. I, Route 5, 16 ft. wide, 6667 sq.yd. concrete, 2773 cu.yd. excav., 11 cu.yd. concrete, $12,007;

Edwards Co., 1550 ft. Sect. D, Route 2, 10 ft. wide, 1722 sq.yd. gravel, 1500 cu.yd. excav., 22 cu.yd. concrete, $3430;

Macoupin Co., 5200 ft. Sect. I, Route 12, 24 ft. wide, earth paving, 2530 cu.yd. excav., 52 cu.yd. concrete, $2200;

Woodford Co., 12,750 ft. Sect. G, Route 1, 24 ft. wide, 8305 cu.yd. excav., 72 cu.yd. concrete, $5938; 12,000 ft. Sect. J, Route 11, 24 ft. wide, both earth paving, 9578 cu.yd. excav., 86 cu.yd. concrete in culverts. C. Older, ch. highway engr.

Wisconsin—Until June 10, by State Highway Comn., Green Bay, grading and gravel surfacing 7.7 mi. Shawano Wittenberg Rd., 15 ft. wide, Shawano Co.; grading, draining and concrete surfacing 3.78 mi. Appleton Dale Medina Rd., 16 ft. wide, involving 8717 cu.yd. grading and 35,555 sq.yd. 8 in. concrete, cost $90,000; Outagamie Co., grading and gravel surfacing 4 mi. Stiles Jct., Oconto Falls Rd., 15 ft. wide, involving 9884 cu.yd. grading, $25,000; Oconto Co., grading and concrete surfacing 5¼ mi. Green Bay Appleton Rd., 16 ft. wide, involving 10,400 cu.yd. grading and 48,812 sq.yd. 8 in. concrete, Brown Co., $115,000. Noted Nov. 28.

Wis., Racine—Until June 14, by Bd. Pub. Wks. paving portions Lake Ave., involving 4590 sq.yd. brick and 2766 lin.ft. cement concrete combined curb and gutter; Yout St., 13,895 sq.yd. brick, 7232 lin.ft. combined concrete curb and gutter; Prospect St., 3850 sq.yd. brick, 2762 lin.ft. cement concrete combined curb and gutter; Milwaukee Ave., 17,700 sq.yd. brick, 7740 lin.ft. combined concrete curb and gutter; 7th St., 4460 sq.yd. brick, 2400 lin.ft. cement concrete gutter; Hilker Pl., 1342 sq.yd. asphaltic concrete, 966 lin.ft. cement concrete combined curb and gutter; Howland Ave., 2763 sq.yd. asphalt macadam, 1812 lin.ft. cement concrete combined curb and gutter, 2379 cu.yd. excess grading, 2880 sq.ft. cement walk; 10th St., 3634 sq.yd. asphaltic concrete, 2436 lin.ft. cement concrete curb and gutter; Davis Pl. 805 sq.yd. asphaltic concrete, 966 lin.ft. cement concrete combined curb and gutter; Blake Ave., 8400 sq.yd. sheet asphalt, 4400 lin.ft. combined concrete curb and gutter; Howe St., 10,050 sq.yd. sheet asphalt, 5313 lin.ft. cement concrete combined curb and gutter; Main St., 1100 sq.yd. sheet asphalt, 492 lin.ft. cement concrete gutter; building Portland cement concrete curb and gutter on portions Buchanan St., 2678 lin.ft. combined curb and gutter, 498 lin.ft. cement gutter. Noted Feb. 20.

Iowa—Until June 11, by F. R. White, superv. state roads, Ames, improving 3862 lin.ft. of Sects. D, E and F of west road passing through grounds of Iowa School for Deaf at Council Bluffs, 18 ft. wide, involving 7724 sq.yd. vitr. brick, 7724 sq.yd. concrete, and 780 cu.yd. excav. About $24,000. Noted May 1 under "Council Bluffs."

Ia., Garner—Until June 12, by Bd. Supervs. Hancock Co., improving 5¼ mi. road, Sects. A, B, C, D and E, from here to Miller Rd., 10-24 ft. wide. About $12,000. Work involves grading, loading, hauling, spreading and rolling gravel surface. 4614 cu.yd. gravel and 16,757 cu.yd. excav. C. F. Merton, co. engr.

Ia., Iowa City—Until June 9, by Bd. Supervs. Johnston Co., grading 10.89 mi. and paving 1.09 mi. with rein.-con., monolithic or bituminous filled brick, Federal Aid Project No. 9, 18 and 24 ft. wide, involving 13,371 sq.yd. vitr. brick or concrete, 2153 lin.ft. curbing and guttering and 78,964 cu. yd. excav. About $72,800. A. F. Fischer, co. engr.

Ia., Red Oak—Until June 18, by Bd. Supervs. Montgomery Co., grading 15.93 mi. Federal Aid Project No. 16, 24 ft. wide, involving 209,976 cu.yd. excav. About $100,300. B. Conlon, co. engr. Noted Dec. 12.

Ia., Sidney—Until June 20, by City Council, paving Main and adjoining streets, involving 40,000 sq.yd. brick, asphaltic concrete or concrete. Archer & Stevens, New England Bldg., Kansas City, Mo., engrs.

Ia., Waterloo—Until June 10, by Bd. Supervs. Blackhawk Co., grading and paving with rein.-con., monolithic or bitumen filled brick 4.05 mi. Federal Aid Project No. 25, 18 ft. wide, involving 47,499 sq.yd. vitr. brick or concrete, 8276 lin.ft. 6 in. and 3160 lin.ft. 10 in. vitr. tile and 16,681 cu.yd. excav. About $130,500. C. M. Fisher, co. engr.

Minn., Duluth—Until June 10, by J. A. Farrell, city comr., grading and paving 3250 ft. 59th Ave., W., from Main to Elinor Sts., 18-32 ft. wide, involving 39,666 sq.yd. concrete and 14,000 lin.ft. concrete curbing. About $75,000. E. K. Coe, Engineer's Office, City Hall, engr.

Minn., Little Falls—Until June 18, by Comrs. Morrison Co., building 11.9 mi. Federal Aid Project No. 24, State Rd. No. 3, involving 47,900 cu.yd. excav., 13,000 yd. gravel surfacing, etc. About $60,000. A. J. Fenn, Little Falls, engr.

Minn., Minneapolis—Until June 16, by Comrs. Hennepin Co., grading 4 mi. Co. Rd. No. 9, Medina Twp. About $20,000. E. E. Terrell, co. surv.

Kan., Harper—Until June 10, by A. E. Crocker, clk., for 5265 sq.yd. brick or asphaltic concrete paving and 14,185 ft. combined curb and gutter. G. W. Ellis, Pratt, engr.

Streets and Roads (Continued)

Kan., Junction City—Until June 19, by Geary Co., building (a) 39,445 ft. Golden Belt Rd., 18 ft. wide, 2 course Portland cement concrete, (b) bridges and culverts on same; Federal Aid Project No. 10. M. W. Watson, c/o State Highway Comn., Topeka, acting engr.

Kan., Wichita—Until June 23, by Sedgwick Co., building 2 sections Federal Aid Project No. 24, (a) 31,455 ft., (b) 31,495 ft., both 18 ft. wide, brick. M. W. Watson, c/o State Highway Comn., Topeka, acting engr.

Neb., Lincoln—Until June 14, by T. H. Berg, city clk., paving and building storm sewers in 25th, 29th and Clinton Sts., involving 6035 sq.yd. asphaltic concrete on 5-in. concrete base, 23 sq.yd. concrete, 4820 lin.ft. concrete curb and gutter, 100 lin.ft. sidewalk, 327 cu.yd. earth excav., 70 lin.ft. 18-in. and 350 lin.ft. 24-in. sewer. G. W. Bates, engr.

Neb., St. Edwards—Until June 19, by E. G. Criss, city clk., paving 12 blocks Beaver St., involving 19,182 sq.yd. vertical fibre, asphalt or concrete on 5-in. concrete base, 6440 lin.ft. curb and gutter. Grant Fulton & Letton, Lincoln, engrs.

Mo., Excelsior Springs—Until June 12, by City Council, resurfacing 680 ft. Elms Blvd., 36 ft. wide, involving 3407 sq.yd. bituminous macadam, penetration method, cost $4360; 1200 ft. Kansas City Ave., 30 ft. wide, 4710 sq.yd. vitr. brick on old base, asphalt filler, $13,000. C. A. Shockley, 740 Reserve Bank Bldg., Kansas City, engr. Noted May 22.

Ark., Fayetteville—Until June 16, by Bd. Comrs. Washington Co. Rd. Dist. No. 2, building 52 mi. limestone macadam and 2 mi. bituminous macadam road through Winslow, Fayetteville and Goshen Twps. Separate bids will be received on steel bridges and culvert tile. Hamilton & Shreve, Fayetteville, engrs; advertised in this issue.

Tex., Canton—Until June 10, by Comrs. Van Zandt Co., surfacing and laying 19,388 cu.yd. iron ore gravel, and building necessary structures, etc., on 9.89 mi. Highway No. 15, known as Dixie Highway, 15 ft. wide. Work involves 62,330 cu.yd. unclassified earth excav., 704 cu.yd. concrete, 72,373 lb. reinforcing steel and 268 ft. 24-36 in. c.i. pipe. About $108,993. Hess & Skinner, South Western Life Bldg., Dallas, engrs. Noted Oct. 3.

Tex., Gonzales—Until June 11, by Comrs. Gonzales Co., clearing, grubbing, grading, graveling, etc., 17.18 mi. State Highway No. 3.

Okla., Yale—Until June 9, by C. F. Ford, city clk., building 20,000 sq.yd. asphalt paving and one 30 ft. concrete arch bridge. About $100,000. C. A. Wood, Stillwater, engr.

Utah—Until June 10, by State Highway Comn., Salt Lake City, building 6.3 mi. road from north city limits of Logan to Smithfield, 18 ft. wide, 8.13 mi. from south limits of Logan to Wellsville, 18 ft. wide, Cache Co., 4.81 mi. from Provo to north city limits of Spanish Fork, 18 ft. wide, Utah Co. Alternate bids on 6-8 in. plain cement concrete and bituminous concrete on 4-6 in. cement base. I. R. Browning, 1516 Harvard Ave., Salt Lake City, engr.

Utah—Until June 31, by State Highway Comn., Salt Lake City, paving 4.85 mi. 33rd St. S. from 56th St. to Magna St., 18 ft. wide, 6-8 in. rein.-con., Salt Lake Co. I. R. Browning, 1516 Harvard Ave., Salt Lake City, engr.

Utah—Until June 10, by State Rd. Comn., Salt Lake City, paving and grading 14.43 mi. road, 6-8 in. cement concrete or 2 in. bituminous top on 4-6 in. concrete base. I. R. Browning, 1516 Harvard Ave., Salt Lake, City, engr.

Utah, Salt Lake City—Until June 9, by Salt Lake Co., hard surfacing 6.88 mi. road from Bingham Highway to Redwood Rd., 18 ft. wide. Bids will be received on (1) cement-concrete, (2) bituminous concrete on concrete base, (3) bituminous concrete on crushed rock base, (4) tarvia macadam on concrete base, (5) tarvia macadam on crushed rock base. G. Bywater, co. engr.

Wash., Aberdeen—Until June 27, by City Council, building concrete sidewalks on Bway., G, H, I, K, L, 1st, 2nd, 4th, 5th and 8th Sts., 6 ft. wide, 45 blocks in all, involving 18,000 sq.yd. 4-in. concrete. A. H. Blood, city engr.

California—Until June 9, by State Highway Comn., 515 Forum Bldg., Sacramento, building 14.9 mi. road between Merced and easterly boundary Merced Co., involving 48,400 cu.yd. excav., 15,381 cu.yd. Class "A" Portland cement concrete pavement, etc.; 8.2 mi. road between Coalinga and Oil King School, Fresno Co., 26,000 cu.yd. excav., 14,599 cu.yd. Class "A" Portland cement concrete, etc. A. B. Fletcher, state highway engr.

California—Until June 16, by Highway Comn., Sacramento, grading and improving 2.8 mi. road between Freshwater Lagoon and Orick, 24 ft. wide, involving 2016 lin.ft. 12-24 in. concrete pipe, 65 cu.yd. Class "C" concrete, 114 monuments, and 38,610 cu.yd. excav.; 7.9 mi. road between Last Chance Slide and Cushion Creek, 24 ft. wide, 5138 lin.ft. 12-36 in. concrete pipe, 453 monuments, 380 cu.yd. Class "C" concrete and 236,400 cu.yd. excav. F. G. Sommer, Willett, engr.

Ont., Guelph—Until June 14, by T. J. Moore, city clk, for 22,000 sq.yd. paving. About $75,000. F. McArthur, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract to McGuire & McGoutry, Boston, paving Selwyn St. et al., involving 5900 sq.yd. asphalt on 7-in. concrete base, 3520 lin.ft. stone curbing, 23,315 sq.ft. concrete sidewalks, 2927 cu.yd. earth excav., cost $26,067; Cameron St., 7325 sq.yd. asphalt on 7-in. concrete base, 2240 lin.ft. stone curbing, 3767 cu.yd. earth, and 10 cu.yd. rock excav., $28,462.

★Mass., Boston—City let contract paving Main St., Charleston Dist., to W. J. Barry Co., 30 Fenwood Rd., $125,099. Work involves 28,000 sq.yd. granite block, 364 lin. ft. new stone curbing, and 92,720 sq.ft. concrete sidewalk, etc.

★Mass., Chicopee—Bd. Pub. Wks. let contract, to A. S. Rouillard, 14 Parshley St., improving various streets by building (a) concrete walks at $1.20 per sq.yd.; (b) concrete crosswalks, $1.25; (c) tar recoat, $.90; (d) cement concrete, $1.60; (e) excavating, $.35 per cu.yd. and (f) sand filling, $.35. Noted May 29.

★New York—State Highway Comn., Albany, let contracts completing roads in following counties: Nassau Co., 4.98 mi. No. 1342, Roslyn-Port Washington, to J. W. Mitchell, Port Washington, $121,200; 3.09 mi. No. 1343, Westbury-Hicksville, to Mallory & Walsh, Brooklyn, $80,003; 3.38 mi. No. 1344, Green Corner-Francis Pond, to T. F. Toohey, Inc., Flushing, $73,296; Wayne Co., 3.97 mi. No. 1407, Newark-Sodus, Part 1, to W. J. Semper, Watertown, $42,586; also repairing following: Montgomery Co., Repair No. 1171, Rd. 864, to H. Z. and L. Wemple, Fultonville, $4001; Westchester Co., Repair No. 1218, Rd. 503, to L. Petrillo, Mt. Vernon, $39,341; Repair No. 1220, Rds. 52 and 53, to J. Dimendo, 382 Mamaroneck Ave., Mamaroneck, $9016. Noted May 22.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids May 28, regulating, grading, curbing and laying sidewalks on (a) Dumont Ave.; (b) East 4th St. from Ave. I to J and excavating to sub-grade of 9 in. Ave. I from East 3rd to East 4th Sts.; regulating and paving with permanent asphalt on 6-in. concrete foundation, (c) East 4th St. from Ave. I to J and Ave. I from East 3rd to East 4th Sts.; (d) East 17th St.; (e) 67th St., from Sicilian Asphalt Paving Co., 41 Park Row, New York City, (a) $3819; (c) $15,404; (d) $13,785; (e) $9844; Cranford Co., 52 9th St., (a) $3922; (c) $15,566; (d) $15,181; (e) $9939; Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $3935; (c) $15,919; (d) $14,177; (e) $10,082; Grimm Constr. Co., 460 Herold Ave., Richmond Hill, (b) $4488; C. A. Myers, foot of Stagg St., (b) $4753; L. Mangeri, (b) $4849; Brooklyn Alcatraz Asphalt Co., 407 Hamburg Ave., (c) $15,787; (d) $15,631; (e) $9785. Noted May 22.

★N. Y., Brooklyn—E. Riegelman, boro. pres., let contracts regulating and repaving with permanent asphalt on 6 in. concrete foundation, Bay 22nd St., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $16,141; River St., to Brooklyn Alcatraz Asphalt Co., 407 Hamburg Ave., $47, 710; Warren St., to Cranford Co., 52 9th St., $100,736; 65th St., to Scott & Kurth, West New Brighton, S. I., $3221. Noted May 29th.

N. Y., New York—H. Bruckner, pres. Bronx Boro., received bids May 27, repaving with granite blocks on concrete foundation, (a) Southern Blvd.; (b) East 153rd St.; (c) East 154th St.; (d) Burnside Ave.; (e) Kinsella St.; (f) Wilkens Ave.; (g) Cypress Ave.; from O'Rourke Constr. Co., 150 Nassau St., (a) $184,586; (b) $27,533; (c) $10,741; (f) $47,381; (g) $60,805; Asphalt Constr. Co., 2197 Madison Ave., (a) $193,373; (d) $20,980; (f) $48,864; (g) $67,173; T. Callahan, (a) $198,878; (c) $10,923; (f) $48,652; S. S. Davis, (b) $27,588; (d) $23,731; (f) $40,158; C. Helbrok, (b) $28,165; (c) $11,171; (d) $21,629; (g) $60,824; P. J. Kerns, (c) $11,118; (d) $22,430; (f) $47,472; (g) $66,968; Burnside Contg. Co., 270 Burnside Ave., (b) $28,287; (c) $11,046; (d) $19,298; A. F. Del Balso, 1481 Hoe Ave., (e) $6038; C. Del Balsio, (e) $6194; Anita Constr. Co., (e) $6293; Uvalde Asphalt Paving Co., 1 Bway., (g) $65,724. Noted May 22.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contract regulating and repaving with sheet asphalt on concrete foundation, William and 7th Sts., to Sicilian Asphalt Paving Co., 41 Park Row, $31,534 and $6996 respectively; 59th St., to Cleveland Trinidad Paving Co., Flushing, $41,874; Amsterdam Ave., to Uvalde Asphalt Paving Co., 1 Bway., $78,978; East 120th St., to Asphalt Constr. Co., 2197 Madison Ave., $20,317. Noted May 22.

New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, received bids building 36,413 sq.yd. State Highway Route No. 1, from Windsor to Hightstown, 18 ft. wide, from Heyman & Goodman, 5 Exch. Pl., Jersey City, $154,453; C. H. Winans Co., 207 Broad St., Elizabeth, $165,268; C. H. & R. C. Pickworth, New York City, $166,723; 30,869 sq.yd. State Highway Route No. 4, Sect. 2, from Middletown to Betsy Ross, 18 ft. wide from Hugh Nawn Constr. Co., 1211 Chestnut St., Phila., $188,079; D. G. Aronberg, Norfolk, Va., $192,165; Langthorn Co., Inc., 2 West 45th St., New York City, $199,411.

★N. J., Plainfield—City let contract for paving various streets with brick, to Newark Paving Co., 133 1st St., Newark, $70,603; with concrete, to J. F. Burke Co., 309 Park Ave., $39,343.

★Pennsylvania—State Highway Dept., Harrisburg, let contracts building roads in counties as follows:

Blair Co., 13,623 ft. rein.-con. or bituminous, Antis Twp., to J. M. Hutchinson, Altoona, $102,520.

Butler Co., 33,229 ft. bituminous or rein.-con., Butler and Penn Twps., to Booth & Flynn, Ltd., 1942 Forbes St., Pittsburgh, $230,970.

Clinton Co., 4984 ft. rein.-con., Avis Twp., to Busch & Stewart, Trust Bldg., Williamsport, $37,342.

Crawford Co., 16,552 ft. bituminous or rein.-con., Cambridge Twp., to R. Swan, Jr., Co., 1 Jenkins Arcade, Pittsburgh, $118,347.

Dauphin Co., 33,917 ft. reinforced cement concrete, Dauphin Boro, Middle Paxton and Read Twps., to H. Nawn Contg. Co., 1211 Chestnut St., Phila., $294,077.

McKean Co., $53,372 ft. rein.-con., Otto, Keating and Foster Twps., to Warren-Moore Co., 13th and Market Sts., Phila., $443,913.

Venango Co., 9550 ft. rein.-con., Sugar Creek Twp., to Harris Contg. Co., Meadville, $60,002.

Westmoreland Co., 2085 ft. rein.-con., Adamsburg Boro., to G. S. White Co., Pittsburgh, $17,087. Noted May 8.

Pa., Barnesboro—Boro Council, c/o Cambria Co. Controller, Ebensburg, let contract building 3300 ft. brick road 18 ft. wide with concrete base and curb, extending northward toward Hastings, to Lord & Clark, Hastings, $35,108. Noted May 8th.

Pa., Pittsburgh—Comrs. Allegheny Co. received bids grading, paving and curbing 2050 ft. Main St., Baldwin Twp., from Library Rd. to Carrick Boro. line, 24 ft. wide, from M. Ott Co., 414 Warrington Ave., $34,135; J. H. McQuade, Bakewell Bldg., $36,925; R. Swan, Jr., Jenkins Arcade, $39,554. Noted May 8.

★W. Va., Beckley—Comrs. Raleigh Co. let contracts building 4 mi. Besoco-Odd Rd., 20 ft. wide, to G. T. Franklin, Beckley, $39,014; Surveyor—Marshes, Harper and Guyandotte Rds., to Henning & Hagedorn, Charleston, $100,000. Noted May 15.

Streets and Roads (Continued)

★W. Va., Parkersburg—Comrs. Wood Co. plan to build 5 mi. Parkersburg-Elizabeth and Northwestern Turnpikes, 16 ft. wide, involving 85,000 cu.yd. grading and 47,000 sq.yd. cement concrete surface. Work will be done by day labor. Noted May 22.

★W. Va., Spencer—Comrs. Roane Co. let contract building 5 mi. road in Walton Dist. to Board & Duffield, 1012-14 Virginia St., Charleston. About $50,000. Noted May 15.

★La., New Iberia—City let contract paving Main St. and Railroad Ave., to Southern Bitulithic Co., Weis Bldg., New Orleans, $119,198. Noted Apr. 3.

Ohio—State Highway Comn., Columbus, received bids May 26, building roads in counties as follows:

Ashtabula Co., Sects. "N, O and P," Cleveland-Buffalo Rd., 11.92 mi., grading and constructing gutter, from T. P. Fitzgerald, Ashtabula, $63,000.

Auglaize Co., Sect. "A-3" Wapakoneta-St. Marys Rd., 2.19 mi. grading, constructing bridges and culverts and paving with brick, Ball & Cook, Dayton, $82,522; Lewis & Copeland, Lima, $84,812; Scully Bros., Cincinnati, $96,277; paving with bituminous concrete on concrete foundation, Williams & Little, Franklin, $78,275; Ball & Cook, $78,650; H. P. Streicher Co., 319 Terminal Bldg., Toledo, $80,818; paving with plain concrete, Ball & Cook, $59,159; York & Studebaker, Greenville, $60,083; Lewis & Copeland, $61,481.

Sect. "B-1" Wapakoneta-St. Marys Rd., 2.29 miles, grading, constructing bridges and culverts and paving with brick on concrete foundation, Ball & Cook, $82,967; W. N. Crisain, Rockford, $85,378; Renick & Smith, Findlay, $85,378; paving with bituminous concrete on concrete foundation, Williams & Little, $78,663; Ball & Cook, $79,032; H. P. Streicher Co., $81,303; paving with plain concrete, Ball & Cook, $59,199; A. Huber, Tippecanoe City, $61,276; York & Studebaker, $61,502.

Sect. "B-2" Wapakoneta-St. Mary's Rd., 2.05 mi., grading, constructing bridges and culverts and paving with brick on concrete foundation, Ball & Cook, $73,525; Lewis & Copeland, $75,688; Scully Bros., $86,458; paving with bituminous concrete on concrete foundation, Williams & Little, $69,548; Ball & Cook, $69,886; H. P. Streicher Co., $71,952; paving with plain concrete, Ball & Cook, $51,930; Lewis & Copeland, $54,233; York & Studebaker, $54,647.

Columbiana Co., Sect. "E-1" Lisbon-Canton Rd., constructing 131 ft. bridge, 20 ft. wide, G. A. Stine, Niles, $13,056; N. R. Porterfield, Youngstown, $13,331.

Jefferson Co., Sect. "D" Steubenville-Hammondsville Rd., 3.14 mi. grading, constructing bridges and culverts, W. F. Payne, 810 North Limestone St., Springfield, $35,439; Summit Constr. Co., Akron, $35,669; Frazier & Daugherty, Bloomingdale, $35 909.

Medina Co., Sects. "P and Q" Cleveland-Wooster Rd., 4.73 mi. grading, constructing bridges and culverts and paving with bitumious macadam, G. S. Mellert & Co., Medina, $129,209; Highway Constr. Co., Elyria, $140,514; Hart & Kemp, Elyria, $143,083.

Monroe Co., Sect. "E" Barnesville-Woodsfield Rd., 3.148 mi. grading and paving with waterbound macadam, W. W. Patton, Woodsfield, $55,288.

Sect. "F" Barnesville-Woodsfield Rd., 4.074 mi. grading and paving with waterbound macadam, W. W. Patton, $57,921.

Morrow Co., Sects. "E and F" Mansfield-Mt. Gilead Rd., 4.10 mi. grading, constructing bridges and culverts and paving with plain concrete, Brewer & Brewer Sons, Chillicothe, $112,502.

Preble Co., Sect. "F" Dayton-Indianapolis Rd., building 120-ft. bridge, 18 ft. wide, Brookville Bridge Co., Brookville, $6,605; Capitol Constr. Co., Ruggery Bldg., Columbus, $7,503; Oregonia Bridge Co., Lebanon, $7,625.

Richland Co., Sect. "P" Mansfield-Ashland Rd., 3.38 mi. grading, constructing bridges and culverts and paving with plain concrete, J. F. Hipskind, Richmond, Ind., $90,792; H. S. Scott, Ashland, $90,935; paving with bituminous macadam, Galion Constr. Co., Galion, $113,979.

Sect. "A" Shelby-Ashland Rd., 1.98 mi., grading, constructing bridges and culverts and paving with bituminous macadam, Scott, Fike & McNabb Co., Ashland, $54,080; paving with plain concrete, Scott, Fike & McNabb Co., $44,326.

Sect. "B" Belleville-Lexington Rd., 1.92 mi., grading, constructing bridges and culverts and paving with bituminous macadam, Galion Constr. Co., $47,496.

Stark Co., Sects. "A and B" Lincoln Highway, 8.04 mi., grading, constructing bridges and culverts and paving with brick, Holmes Constr. Co., Millersburg, Sect. "A," $234,628; Sect "B," $155,768.

Van Wert Co., Sect. "F," Van Wert-Delphos Rd., 4.75 mi., grading, constructing bridges and culverts and paving with waterbound macadam, P. Shindledecker, Van Wert, $103,610; C. B. Rector, Muncie, Ind., $103,880; McArthur & Fox, Kenton, O., $110,212.

Sect. "G" Van Wert-Delphos Rd., 3.41 mi. grading, constructing bridges and culverts and paving with bituminous macadam, S. Putnam, Van Wert, $72,628; C. B. Rector, $74,242; McArthur & Fox, $78,323.

Sect. "H" Van Wert-Delphos Rd., 2.59 mi. grading, constructing bridges and culverts and paving with bituminous macadam, N. B. Putnam, Van Wert, $59,843; McArthur & Fox, $60,909; C. B. Rector, $60,965.

Williams Co., Sect. "C" Bryan-Wauseon Rd., 2.05 mi. grading, constructing bridges and culverts and paving with rein.-con., C. L. Straw, Paulding, $58,068; paving with bituminous concrete, Municipal Constr. Co., Gary, Ind., $67,261; Johnson, Van Wagner & Johnson, Tontogany, O., $67,827.

Medina Co., Sect. "A' Cleveland-Wooster Rd., 1 mi., grading and paving with bituminous macadam, Ohio Constr. Co., Elyria, $14,419; Doyle & Honahan, Springfield, $14,740; Highway Constr. Co., Elyria, $14,787. Noted May 15.

★O., Cleveland—City let contracts paving Champion Ave. from West 101st St. to West Blvd. and Ignatius Ave. from West Blvd. to West 105th St., to Cleveland Trinidad Paving Co., The Arcade, $12,259 and $16,863 respectively. Noted May 22.

★O., Cleveland—City let contract paving West 24th St. from Moore Ave. to Willeyville Allt., to Roehl Bros., West 25th St. and Clark Ave., $16,667; Aetna Rd. from Erie R.R. west, to Enterprise Paving Co., 8436 Bway Ave., $10,300. Noted May 22.

O., Cleveland—City received bids paving (a) Hodgeson Ave. from Fulton Rd. to West 44th St., (b) Independence Rd. from Fleet Ave. to city limits, from Roehl Bros., West 25th St. and Clark Ave., (a) $11,270; Baldwin Bros., 4500 Euclid Ave., (a) $11,746, (b) $16,555; Freshwater Paving Co., 11712 Detroit Ave., (a) $11,924; Rieley Bros., 357 The Arcade, (b) $16,390; A. M. Pejsa, 2359 East 93rd St., (b) $16,605. Noted May 22.

★O., Columbus—City let contracts, to Franklin Asphalt Paving Co., Columbus, grading, curbing, paving and laying water mains in 783 ft. Stanley Ave. from Parsons Ave. to eastern terminus, $7120; 913 ft. Linwood Ave. from Bryden Rd. to Main St., $8844; 1023 ft. Noble St. from Washington to Parsons Ave., $10,887; 1269 ft. 21st. St. from Broad St. to Franklin Ave., $9044; all asphalt. Noted May 29.

★O., Hamilton—City let contract building cement sidewalks in all parts of city, to W. J. Pabst, Hamilton. About $12,000.

★O., St. Marys—City let contract paving 1300 ft. East Spring St., to W. Howell, Wapakoneta, $18,161.

O., Toledo—City received bids paving (a) 1494 ft. Burnham Ave. from Sylvania to Maple Aves., (b) 1309 ft. Upton Ave. from Dorr St. to Avondale Ave., (c) Kingston Ave. from Navarre Ave. to Earl St., (d) Vermaas Ave. from Phillips to Cornelia Aves., (e) 1262 ft. Berkley Dr. from Sylvania to Berdan Aves., (1) rein.-con., (2) brick, (3) sheet asphalt, (4) wood block, from J. McMahon, 444 Melrose Ave., (a1) $18 992, (a2) $24,104, (d1) $23,520, (d2) $29,169, (d4) $31,859, (e2) $17,820; H. P. Streicher, 319 Terminal Bldg., (a3) $25,618; P. Watters, 323 Nasby Bldg., (b1) $16,877, (b2) $22,046; Russel & Jennison, 2463 Bway., (b4) $23,747, (c1) $16,149; (c4) $22,736, (e4) $19,965; J. Horan, Valentine Bldg., (c3) $21,108; Peters Bros., 237 Marion St., (e1) $14,264. Noted May 15.

★Mich., Grosse Pointe—Village let contract paving one side Grosse Pointe Blvd. from Fisher Rd. to Provencal Blvd., to Moran Constr. Co., Grosse Pointe. About $75,000. Work involves 17,600 sq.yd. 9 in. concrete pavement, concrete curb, etc.

★Illinois—State Highway Comn., Springfield, let contracts improving following roads: 3240 ft. Sect. G., Route 7, Marion Co., to H. H. Hall Constr. Co., East St. Louis, $7582; 3650 ft. Sect. D., Route 8, Coles Co., to A. C. Loomis Co., Mattoon, $13,726; 3370 ft. Sect. H., Route 2, Jersey Co., to E. Conners, Jerseyville, $4007; 4 bridges on Sect. D., Randolph Co., to P. Loesche, Red Bud, $6354. Noted May 15.

★Illinois—State Highway Comn., Springfield, let contract improving 7.24 mi. Sect. 9, 10 and H-15d, Dixie Highway, Will Co., to Chicago Heights Coal Co., Chicago Heights, $252,800. Noted May 15.

★Illinois—State Highway Comn., Springfield, let contracts, to H. Nelch, 921 East Jackson St., Springfield, improving Springfield-Peoria Highway, Sect. A-015d and N, $143,050; to Bates & Rogers, 47 Van Buren St., Chicago, Sects. B, C and D, $142,982; E, F, F-15d, O, G, H, C-15d, and P, $600,000; J, $137,474; to G. Welch, Beloit, Wis., Sect. I, $127,738; to Jensen & Schaefer, Pekin, Sect. L-15d and O, $137,862; to Federal Paving Co., 133 West Washington St., Chicago, improving Peoria-Henry Highway, Sect. B, $71,294; Sect. C, $67,057 and Sect. M, $80,441; to Cameron Joyce Co., Keokuk, Ia., Sect. G-15d, D and E, $108,000. Noted May 8.

★Wis., Appleton—Outagamie Co. let contract grading, draining and concrete surfacing 1.5 mi. Kaukauna-De Pere Rd., 16 ft. wide, involving 15,000 sq.yd. 8-in. concrete, to C. Gruenke, Appleton, about $35,000; ¾ mi. Kaukauna-Little Chute Rd., 16 ft. wide, involving 7500 sq.yd. 8-in. concrete, to J. McCarthy, Kaukauna, $15,000.

Wis., Milwaukee—Milwaukee Co. received lowest 3 bids for concrete paving and grading Howell Rd. No. 4, 16 ft. wide, from Milwaukee Genl. Constr. Co., 872 2nd Ave., $53,308; G. E. Czerwinski, 309 Mitchell St., $54,920; Blodgett-Clayton Constr. Co., M. & M. Bank Bldg., $55,060. Noted May 22.

★Wis., Milwaukee—Milwaukee Co. let contract asphalt resurfacing 1.1 mi. Kilbourn Rd. No. 1, 18 ft. wide, to White Constr. Co., 97 Wisconsin St., $21,840.

★Wis., Sheboygan—City let contract grading and paving with 4 in. vitr. brick, also constructing sidewalks with combined curb and gutter on 1.1 mi. North 9th St. and Wisconsin Ave., 18 ft. wide, to Pestler & Naumer, 1130 Ontario Ave., $12,352. Work involves 5350 sq.yd. vitr. brick and 2500 lin.ft. concrete curb and gutter. Noted May 22.

★Wis., Sheboygan—City let contract grading, paving, curbing and guttering 1.5 mi. Lighthouse Court and 2nd St., 18 ft. wide, to J. Brown Constr. Co., Pennsylvania Ave., $10,550. Work involves 5550 sq.yd. 2 course concrete and 3075 lin.ft. concrete curb and gutter. Noted May 22.

★Ia., Estherville—Comrs. Emmett Co. let contract grading 13¾ mi. roads, 24 ft. wide, to O'Hanlon & Reilly, 306 South 24th St., Omaha, Neb. About $26,744. Work involves 66,200 cu.yd. earth excav.

★Ia., Estherville—Comrs. Emmett Co. let contracts building Wallingford-Hoprig, Hoprig-Ringstead and Ringstead-Bancroft Rds. as follows; 6½ mi. to H. Hayworth, $0.40 per yd., 5½ mi., to B. Olson, $0.40 to $0.44 per yd. and 4 mi., to C. A. Torrence, $0.40 per yd. Contractors all of Estherville. Noted May 1.

Ia., Mason City—Comrs. Cerro Gordo Co. received bids grading, sub-grading and paving with concrete 8870 ft. road from here to Manly and Plymouth, 16-18 ft. wide, from Wright Constr. Co., Des Moines, $54,481; Empire Constr. Co., 203 Flynn Blk., Des Moines, $56,616. Work involves 18,877 sq.yd. 7-in. concrete, 3600 cu.yd. earth and 670 cu.yd. rock excav. Noted May 8.

★Minn., Minneapolis—Comrs. Hennepin Co. let contract paving 5½ mi. Lyndale Ave. from city limits to Ft. Snelling-Shakopee Rd., 18 ft. wide, to Genl. Contg. Co., 1254 Plymouth Bldg., $192,848. Noted May 15.

★Kan., Anthony—City let contract paving 8000 sq.yd. South Anthony Ave. from Main to Hayes Sts., rein.-con., to H. L. Cook, Ottawa, at $2.90 per sq.yd. Total cost, $23,200.

★Kan., Hutchinson—Reno Co. let contract building Sects. "B" and "C" of Santa Fe Trail, 18 ft. wide, to Stanley-Mackey Constr. Co., Hutchinson, (B) $100,823; Wheeler-Lebener Constr. Co., Hutchinson, (C) $89,441.

★Neb., Lincoln—City let contract paving Ryon Ave., 19th and T Sts., 25 ft. wide, to Abel Constr. Co., 318-19 Terminal Bldg., $22,265. Work involves 2735 sq.yd. asphaltic concrete, 4300 sq.yd. sheet asphalt, 60 sq.yd. concrete, 7035 ft. 5-in. concrete base, 60 lin.ft. concrete curb, 5440 lin.ft. concrete gutter and curb, and 927 cu.yd. earth excav.

Streets and Roads (Continued)

★**North Dakota**—State Highway Comrs. Bismarck, let building Federal Aid Project No. 31, to A. J. Jackson, Jamestown, $25,581.

Mont. Dillon—City let contract paving 26,458 sq.yd. Impvt. Dist. No. 5, to Cliffton, Applegate & Toole, 2 North Cedar St., Anaconda, $86,005. Noted Apr. 17.

★**Tex., Columbus**—Colorado Co. let contract building 17.12 mi. Highway No. 4 from Weimer through Columbus to Eagle Lake, 16 ft. wide, to Haden & Austin, 727 Kress Bldg., Houston, $111,702. Noted June 5.

★**Tex., Haskell**—Comrs. Haskell let contract improving 16,797 mi. Highway No. 39, 24 ft. wide, to C. Whitener, Spur, $26,106. Noted May 29.

★**New Mexico**—State Highway Comn., Santa Fe, let contract grading and surfacing 17 mi. Federal Aid Project No. 12, Chaves Co., to A. Olson and L. A. Burnham, Laverne, Oklahoma. Cost to exceed $100,000.

Idaho, Boise—City let contract building road, to Warren Bros. Co., Journal Bldg., Portland, Ore., $18,600. Work involves 1443 cu.yd. excav., 7157 sq.yd. bitulithic, 343 lin. ft. sidewalk, and 1033 lin.ft. curbing, etc.

★**Washington**—State Highway Bd., Olympia, let contract, to S. G. Kinder and W. A. Mowry, Bridgeport, clearing, grading, draining and surfacing 5.3 mi. Sunset Highway near Baird, Douglas Co., cost $43,491; to Genl. Constr. Co., 1324 Elm St., Spokane, 6.1 mi. Sunset Highway from Waterville east, Douglas Co., $69,692, 7.1 mi. Central Highway, Spokane and Lincoln Counties, $81,155, 6.8 mi. Pacific Highway from Kelso north, Cowlitz Co., $171,518; to W. J. Smith & Co., Ritzville, 8 mi. Sunset Highway east from Waterville, Douglas Co., $64,403. Noted May 8.

★**Wash., Walla Walla**—City let contract for 25,000 sq.yd. gravel bitulithic paving, guttering and curbing, to Warren Constr. Co., Journal Bldg., Portland, $1.98 per sq.yd. Total cost, $69,992.

★**Ore., Astoria**—City let contract paving 3.5 mi. Olney Rd. from cemetery dike to city limits, 16 ft. wide, 1½ in. asphaltic concrete on 6 in. concrete, to M. O'Reilly Co., Astoria, $76,639.

Ore., Eugene—City received bids paving 12th Ave., from Clark & Henry, Eugene, $24,590; G. Pyle, Eugene, $25,214.

Ore., North Bend—City received bids paving Porter Hill and Sherman St., from Moon & Co., North Bend, rock asphalt, $62,982; Scandia Co., 1 course concrete, $51,865, 2 course concrete, $48,227. Noted Feb. 27.

Ore, Portland—Multnomah Co. Comn. received bids May 22, improving 9500 lin.ft. Derby St., involving 324,603 cu.yd. excav., from Pacific Bridge Co., foot Salmon St., $115,376 plus $342 for concrete pipe and $.335 for excav.; Baker Bros., Bd. Trade Bldg., $106,099 minus $532 for concrete pipe, plus $.31 for excav.; Hampshire & Boss, Grants Pass, $118,855 for either kind of pipe, $.35 for excav.

★**Ore., St. Johns**—(Portland P. O.)—Comrs. Multnomah Co. let contract grading and paving New St. Johns Rd., to Baker Bros., Bd. Trade Bldg., Portland, $105,577. Work involves 324,903 cu.yd. mixed and common excav., laying 943 lin.ft. 12-18 in. pipe and 60 overhaul stations.

★**Cal., Chula Vista**—City let contract building 4 mi. road, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $120,000. Work involves 23,000 sq.ft. cement concrete paving, 544,000 sq.ft. bituminous concrete paving, 5500 sq.ft. cement sidewalks, 11,500 sq.ft. concrete gutters, 4000 lin.ft. cement curbs, etc.

★**Cal., Eureka**—Comrs. Humboldt Co. let contracts, to Elsemore & Jacobs, Eureka, grading 3.85 mi. road between Fernbridge and Ferndale, cost, $12,855; J. Lentell & G. M. Moore, 705 4th St., Eureka, grading 5.4 mi. Lord Ellis Rd. from north fork of Mad River to Low Gap, $22,986.

★**Cal., Fresno**—City let contract grading and paving with bitulithic 16 blocks Platt, Kerckhoff and Balch Aves., to California Road & Street Impvt. Co., Holland Bldg., Fresno. Noted Apr. 24.

Cal., Oakland—W. H. Leinert Co., Oakland, let contract grading, paving, guttering and building sewers in 2200 ft. Longridge Rd., 1500 ft. Rosemount Rd., 200 ft. Verrada Rd., 1200 ft. Alma Ave. and 700 ft. Chatham Rd., 24-32 ft. wide, to Bates & Borland, 12th St. and Bway. About $30,000. Work involves 11,600 lin.ft. each of concrete curbs, gutters and sidewalks.

★**Cal., Santa Barbara**—City let contract improving Montecito St., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $49,630. Work involves 152,000 sq.ft. 4 in. concrete pavement with 1½ in. Warrenite surface, 8000 sq.ft. concrete gutters, 8900 lin.ft. combined concrete curb and gutters, culverts, etc.

Que., St. Joseph d'Alma—Municipal Council let contract building macadam road, to J. Girard, St. Joseph d'Alma. About $20,000.

Ont., Cayuga—Halimand Co. let contract building 13 mi. macadam road, to McConnell & Hicklin, 6 Washington Ave., Toronto. About $96,000.

Railways

PROPOSED WORK

South Carolina—Atlantic Coast Line R. R., Wilmington, N. C., plans to build road bed and track, including fill and trestle across Indian Field Creek Swamp, from Harleyville to St. George. Project includes depot and yard trackage. About $140,000. J. E. Willoughby, 8 South 7th St., Wilmington, ch. engr.

Missouri—City of St. Louis plans to lay 12 mi. track on belt line from McKinley St. to Free Bridge. About $75,000. J. A. Hooke, dir. pub. utilities.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Texas**—Toyah Valley Sulphur Co. plans to build 15 mi. railway from Orla to its properties. M. J. Eppley, 800 Hennen Bldg., New Orleans, La., pres. and genl. mgr. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

Mich., Three Rivers—Dredging—Fairbanks, Morse & Co., c/o Sheffield Car Dept., soon receives bids for 120,000 yd. muck, sand and gravel dredging for river cutoff, ¼ mi. long, 104 ft. wide at bottom, 4½ ft. average depth of cutting. Fargo Eng. Co., 304 Commonwealth Bldg., Jackson, engrs.

N. D., Grand Forks—Drain—Grand Forks Co. Drainage Bd. plans to build 6 mi. Drain No. 10, Americus Twp. About $25,000. J. Ingram, co. engr.

Cal., Palmdale—Irrigation—Palmdale Irrigation Dist. plans to build irrigation system to include 2 storage reservoirs in Little Rock Creek, each impounding about 7000 acre-ft.; will also build concrete distributing pipe lines if State Irrigation Comn. approves project. About $600,000. B. Cole, Palmdale, engr.

BIDS DESIRED

Wis., Milwaukee—Excavation—Chicago, North Shore & Milwaukee R. R., 221 Grand Ave., receiving bids for excavation work for proposed new interurban terminal station, on 6th and Sycamore Sts. Total cost $100,000. A. W. Gerber, Edison Bldg., Chicago, archt.

Ia., Burlington—Drainage—Until June 17, by J. F. Weber, aud., Des Moines Co., building drainage channels, involving 125,077 cu.yd. excav., 1240 lin.ft. 12-in. tile and 1 bulkhead; advertised in this issue.

Ia., Red Oak—Excavation—See "Streets and Roads."

Utah, Springville—Drainage—Until June 7, by J. W. Alleman, secy., Utah Co. D. D. No. 1, trenching and laying of drainage tile, involving 159,250 ft. 8-24 in. vitr. drain tile and 73,210 cu.yd. earth excav. Caldwell & Richards, Vermont Bldg., Salt Lake City, engrs.

Wash., Woodland—Drainage—Until June 10, by Diking Impvt. Dist. No. 5, Kelso State Bank Bldg., Kelso, building drainage system in Cowlitz Co., involving 160 acres clearing and 213,235 cu.yd. ditches, canals and dikes. G. J. Poysky, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—Dredging—M. Hurlburt, comr. docks, Pier "A," Battery Pl., received bids May 28 furnishing all labor and material for dredging in West 46th St., North River, Contr. 1614, from F. A. Schomberg, $9680; Auten Eng. & Constr. Co., 29 Bway., $11,600; F. E. Jones, 17 Battery Pl., $11,840. Noted May 22.

Ia., Estherville—See "Streets & Roads."

Mo., Brunswick—Drainage—Garden of Eden D. D., c/o N. C. Field, pres., let contract building ditches to drain 12,000 acres, in Chariton Co., to McWilliams Dredging Co., Chicago. About $280,000.

Industrial Works

PROPOSED WORK

Mass., Chicopee—Torrington Mfg. Co. plans to build brick and timber addition to plant. About $50,000. Architect not selected.

Mass., Greenfield—M. J. Tetreault, Olive St., plans to build 1 story fireproof, sales stable and garage, on Olive St. and Clay Hill. About $35,000. Architect not selected.

Mass., Lawrence—Davis Fdry. Co., 63 Island St., soon receives bids building 1 story, 100 x 200 ft. brick and concrete addition to foundry, rein.-con. flooring, concrete foundation. About $50,000.

Mass., Northampton—Hampton Co., Easthampton, purchased site here and plans to build new plant. F. C. Johnson, pres. Architect not selected.

R. I., Providence—Page & Page, archts., 87 Weybosset St., soon receive bids building 1 story, 93 x 106 ft. brick and mill construction garage, rein.-con. flooring, concrete foundation, on Pine St., for M. Hall, c/o architect. About $30,000.

R. I., Providence—Z. Zawatsky, Point and Eddy Sts., plans to build 1-story, 50 x 100 ft., brick addition to service station and garage, rein.-con. flooring, concrete foundation. About $25,000.

R. I., Woonsocket—Brenner Bros., Island Pl., purchased site and plan to build garage and addition to warehouse. About $30,000. Architect not selected.

Conn., Hartford—Case, Lockwood & Brainard Co., 141 Pearl St., plans to build brick and concrete printing plant on Jewel and Ann Sts. About $60,000. Architect not selected.

Have you noted the remarkable increase in the number of bids desired?

The figures tell the story:

Bids desired 1918

May	2nd issue	91 items
May	9th issue	69 items
May	16th issue	89 items

Bids desired 1919

May	1st issue	129 items
May	8th issue	100 items
May	15th issue	132 items

These figures concern the number of Proposed Work items which were reported in the Construction News columns of the first three issues of May (1918 and 1919).

The fact that the latter figures greatly outdistance the former, is an indication of the good work of the staff of correspondents in all sections of the country.

After reading these figures don't you think you ought to

"Read Construction News for Profit"

Industrial Works (Continued)

Conn., Norwalk—Pioneer Braid Co., 251 West 90th St., New York City, soon lets contract building 2 story, 56 x 202 ft., brick and steel addition to factory, concrete foundation, here. About $60,000.

N. Y., Binghamton — Hires Condensed Milk Co., Port Dickinson, having plans prepared for two 1 story, 50 x 150 ft., concrete factories. Cost between $80,000 and $100,000. Address J. G. Brownlon, c/o Chamber of Commerce, Binghamton.

N. Y., Binghamton—Larrabee-Deyo Motor Truck Co., 23 Wasnington St., having plans prepared for extension to factory. About $200,000. E. M. Hanrahan, mgr.

N. Y., Brooklyn—M. Reilly and T. Latimer, 175 Pacific St., soon lets contract building 1 story, 60 x 100 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Pacific St. near Court St. About $35,000. L. A. Ebling and H. Maginson, 52 Vanderbilt Ave., New York City, archts.

N. Y., Carthage—Wilna Machine Co., 111 North Mechanic St., plans to build 2-story, 50 x 80 ft., brick and concrete factory. Cost between $25,000 and $30,000. Address W. G. Richardson, Carthage.

N. Y., Jamestown—Seabury Mfg. Co. preparing plans for 3-story 45 x 75 ft. mill construction addition to factory, concrete foundation, on Steele St. About $25,000.

N. Y., Johnson City—Cook, Holland & Russel soon let contract building concrete factory on Grand Ave. About $40,000.

N. Y., New York—C. H. Allen, 138 William St., soon lets contract building 7-story, brick and steel storage house, rein.-con. flooring, concrete foundation, at 119 Fulton St. About $75,000. Montgomery & Riggs, 105 West 40th St., archts. Noted May 1.

N. Y., New York—H. O. Cnapman, archt., 334 5th Ave., receives bids about June 10, building 7 story, 130 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, at 543-545 West 43rd St., for Park & Tilford, 529 West 42nd St. Noted May 15.

N. Y., New York—J. Eichler Brewing Co., 3582 3rd Ave., had plans prepared by A. G Koenig, archt. and engr., 405 Lexington Ave., altering 3 story, 62 x 84 ft. brick, rein.-con. and steel ice plant, rein.-con. flooring on 169th St. and 3rd Ave. About $37,000.

N. Y., New York—Greenwich Assn., Inc., c/o Ames & Co., 26 West 31st St., having plans prepared by G. and E. Blum, archts., 505 5th Ave., for 1-story, 125 x 150 ft., brick and terra cotta garage, brick foundation, on Grand and Tompkins Sts.

N. Y., New York—Hillman Co., 567 3rd Ave., having plans prepared by M. J. Harrison, archt., World Bldg., for 1-story, 99 x 125 ft., brick and steel garage, rein.-con. flooring, brick foundation, at 237-245 East 41st St. About $25,000.

N. Y., New York—J. W. O'Connor, archt., 3 West 29th St., receives bids about June 17, building two 9 story brick and steel warehouses, rein.-con. flooring, concrete foundation, at 29-31 South William St., for Terminal Warehouse Co., 17 South William St. About $100,000. J. H. Lynch, pres.

N. Y., New York—See "Buildings."

N. Y., New York—Springfield Tire Co., 200 West 57th St., having plans prepared by E. Necarsulmer, archt., 507 5th Ave., for 4-story, 100 x 115 ft., warehouse, and 1-story, 60 x 100 ft. service station, brick and steel, rein.-con. flooring, concrete foundation, on 10th Ave. and 54th St. About $100,000.

N. Y., New York—F. E. Vitola, archt. and engr., 56 West 45th St., soon lets contract building 5 story, 100 x 129 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 541-551 West Bway, for Cuneo & Posta, 73 Washington Sq. About $100,000. Noted Apr. 24.

N. Y., Phila.—F. X. Baumert Co., Antwerp, having plans prepared for brick and concrete factory here. About $30,000.

N. Y., Rochester—Powers Film Products, Inc., purchased property in blocks bounded by Dewey, Ridgeway and Knickerbocker Aves. and Primrose St., and plans to build additional plants. Cost including equipment, $500,000. P. A. Powers, pres.

N. J., Newark—Patton Paint Co., Chester Ave., plans to build 2-story, 61.6 x 121.6 ft., rein.-con. factory. About $65,000. J. H. & W. Ely, Farmers Bldg., archts. and engrs.

N. J., Newark—L. E. Waterman Co., 191 Bway., New York City, having plans prepared by Helmle & Corbett, archts. and engrs., 190 Montague St., Brooklyn, N. Y., for 6 story, 260 x 475 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Peddle St. near Johnson Ave., here.

Pa., Scranton—Lockwood, Greene & Co., archts., 101 Park Ave., New York City, soon let contract building 3-story, 72 x 140 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Glenn and Meyler Sts., for Scranton Lace Co. About $80,000. Noted May 15.

W. Va., Fairmont—West Virgina Metal Product Corp., incorporated with $2,500,000 capital stock, plans to build large structural steel mill.

W. Va., Parkersburg—Donovan Boiler Wks., plans to build 1 story, 120 x 130 ft. steel boiler works, foundry and shop. About $60,000.

Ga., Atlanta—Adair & McCarty Bros., Walton Bldg., having plans prepared by Lockwood, Greene & Co., engrs., Healey Bldg., for improvements to fertilizer plant, including new acidulating unit. About $25,000.

O., Cleveland—See "Buildings."

O., Cleveland—Columbia Steel & Shafting Co., Engineers' Bldg., plans to build 1-story, 147 x 157 ft., rein.-con., steel and brick warehouse, rein.-con. flooring, on East 55th St., near St. Clair Ave. About $150,000.

O., Columbus—Reibel & Sons, archts., New 1st Natl. Bank Bldg., soon receive bids building 3-story, 46 x 110 ft., brick bakery on North High St., for Clark Baking Co., 1435 North High St. About $85,000.

O., Dayton—Air City Garage & Tire Co., 16 South Jefferson St., plans to build 2 story, 80 x 132 ft., rein.-con. and brick garage, rein.-con. flooring, concrete foundation, on 5th and Perry Sts. About $100,000. Peters, Herman & Brown, 1129 Reibold Bldg., archts.

O., Dayton—Union Storage Co., East State St., plans to build 5 story, 78 x 100 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, on East State St. About $150,000. Frank Hill-Smith, Inc., East 3rd St., archts.

Ind., Ft. Wayne—Thieme Bros., Park Ave., having plans prepared building 90 x 157 ft. brick, steel and rein.-con. mill on Runyan Ave. About $150,000.

Mich., Detroit—Liberty Motor Car Co., foot Lycaste St., plans to construct plant on Charleroi Ave., to include 1-story, 120 x 600 ft. main assembly building, 1 story, 60 x 300 ft., experimental and stock building, 2-story, 50 x 200 ft. administration building, and 40 x 60 ft. heating plant, all rein.-con., brick and steel, with exception of administration building. Austin Co., 1954 Penobscot Bldg., engrs.

Ill., Aurora—Aurora Beacon News having plans prepared by Zimmerman, Saxe & Zimmerman, archts., 64 East Van Buren St., Chicago, for 3 story, 60 x 90 ft. rein.-con. and brick plant, rein.-con. flooring, concrete foundation, on Highland Ave. About $100,000.

Ill., Chicago—Gill Mfg. Co., 351 West 59th St., plans to build large manufacturing plant on South Chicago Ave. and 83rd St First unit to cost about $100,000. Architect not selected.

Wis., Ft. Atkinson—Creamery Package Co. soon lets contract building 5 story, 90 x 207 ft. brick and concrete factory. Cost between $150,000 and $200,000. M. Tullgren & Sons, 1st Natl. Bank Bldg., Milwaukee, archts.

Wis., Milwaukee—Ambrosia Chocolate Co., 331-35 5th St., plans to build 2-story addition to factory. About $30,000. C. F. Ringer & Son, University Bldg., archts.

Wis., Milwaukee—Beals & Torrey Shoe Co., 85-9 Buffalo St., having plans prepared by H. J. Esser, archt., 401 Camp Bldg., for 4 story, 50 x 200 ft., brick and mill construction factory, with 40 x 60 ft. wing. About $100,000.

Wis., Milwaukee—Layton Park Dairy, 1076 25th Ave., soon lets contract building 2 story, 40 x 50 ft. rein.-con. and brick, dairy rein.-con. flooring, concrete foundation. About $25,000. H. Voelz, 86 Michigan St., archt.

Wis., Milwaukee—Lincoln Motor Car Co., 820 3rd St., soon lets contract building 2 story, 60 x 108 ft. garage and service station, on 3rd and Clark Sts. About $40,000. H. J. Esser, Camp Bldg., archt.

Wis., Milwaukee—J. Pritzlaff Hardware Co., 33-57 West Water St., soon receives bids building 4 story, 40 x 60 ft. and 60 x 70 ft. brick and mill construction addition to factory, brick foundation. About $50,000. Klug & Smith, Mack Blk., engrs.

Wis., Sheboygan—Milo Product Co., c/o O. Loebel, plans to build 2 story, 50 x 80 ft. brick and rein.-con. factory, brick foundation, on Pennsylvania Ave. About $25,000.

Wis., Sheboygan—Northfield Co., 18th St. and Martin Ave., plans to build 3 story, 60 x 90 ft. brick, rein.-con. and steel factory, brick foundation on Martin St. About $70,000. Address E. W. Schultz, 1735 North 7th St.

Wis., Sheboygan Falls—Richardson Bros. plan to build 2-story, 60 x 85 ft., brick, rein.-con. and steel mill, on Main St. Cost between $50,000 and $60,000.

S. D., Sioux Falls—Brooks Tire & Repair Co. soon lets contract building 2-story, 100 x 106 ft. brick and rein.-con. garage. J. Schwarz, Paulto Blk., archt.

S. D., Sioux Falls—H. A. Homan, 321 North Main St., plans to build 2-story, 110 x 150 ft. garage, on 9th St.

N. D., Mandan—Western Auto Co. having plans prepared building 1-story brick garage. About $40,000. L. F. Smith, mgr.

Wyo., Pine Bluffs—See "Waterworks."

Mont., Billings—Montana Tractor Co., Lewistown, plans to build warehouse here. About $65,000. A. Bright, Billings, mgr.

Mo., St. Louis—Bd. Pub. Serv. soon receives bids building one 200 x 400 ft. and one 120 x 200 ft., concrete warehouses and 11 concrete freight platforms on municipal dock. Project includes installation of cranes and other conveying machinery. About $300,000. J. A. Hooke, city engr.

Mo., St. Louis—Bd. Estimate and Apportionment considering plan to issue $100,000 bonds to build garage. L. R. Bowen, city engr.

Mo., St. Louis—Universal Motor Truck & Tractor Engine Co., Syndicate Trust Bldg., having plans prepared by D. T. Timberlake, c/o owner, for group of 1 story, rein.-con. factory buildings, concrete flooring, at Suburban Garden. Cost to exceed $50,000.

Okla., Okmulgee—J. H. Rebold and associates soon receive bids building 5-story, 75 x 100 ft. brick, terra-cotta and stone, printing and office building, rein.-con. flooring, concrete foundation, on 5th and Seminole Sts. About $200,000. H. La Pierre, Parkerson Hotel, archt.

Colo., Grover—See "Waterworks."

Ariz., Phoenix—Arizona Packing Co. having plans prepared for plant on Temple Rd., 5 mi. east of here, to consist of 4 story, 200 x 250 ft. rein.-con. building and number of smaller buildings. About $500,000. F. Tribolet, secy.

Ore., Portland—Hartman & Stein plan to build 1-story, 78 x 100 ft., brick garage, on 5th and Everett Sts. MacNaughton & Raymond, Corbett Bldg., archts.

Ore., St. Johns—Portland Dock Comn. plans to build oil storage facilities at St. Johns Terminal. Cost between $50,000 and $60,000. J. B. Hegardt, engr.

Cal., Avalon—City election soon to vote on $88,000 bonds to build combined electric light and waterworks plant and $55,000 bonds for gas plant, on Catalina Island here.

Cal., Benicia—Kullman, Salz & Co., 603 Wells-Fargo Bldg., San Francisco, having plans prepared by J. A. Wilcox, engr., c/o owner, for 3-story, 103 x 154 ft., brick tannery, concrete foundation. About $60,000.

Cal., Fresno—San Joaquin Baking Co., San Benito and P Sts., having plans prepared by Glass & Butmer, archts., Cory Bldg., for 1 and 2 story, 125 x 300 ft., rein.-con. and brick bakery, concrete foundation on Los Angeles St. About $60,000. Noted May 22.

Cal., Huntington Beach—City having plans prepared by Olmsted & Gillelen, engrs., Hollingsworth Bldg., Los Angeles, for rebuilding gas plant here. Election will be held soon to vote on $40,000 bonds for project.

Industrial Works (Continued)

Cal., Imperial—J. W. Reed having plans prepared by A. F. Rosenheim, archt., 1118 Van Nuys Bldg., Los Angeles, for 1 story, 100 x 100 ft., packing house, concrete foundation.

Cal., Lodi—Earl Fruit Co. plans to build 1-story, 50 x 155 ft. addition to packing house. Address G. C. Sarl, 2914 McClure St., Oakland.

Cal., Los Angeles—C. H. Matson, harbor traffic mgr., recommended that City Harbor Comn. build cotton handling plant to include high density compress at Los Angeles Harbor (San Pedro). About $80,000.

Cal., Oakland—Parr Terminal Co., Oakland Mole, having plans prepared by W. Ball, engr., c/o owner, for 2-story, 100 x 545 ft. rein.-con. and timber warehouse on Key Route Basin. About $100,000.

Cal., Pasadena—Model Grocery Co., having plans prepared by J. J. Blick, archt., 414 Dodworth Bldg., for 3-story, 75 x 208 ft., rein.-con. and brick grocery and loft building, concrete foundation, on East Colorado St. About $50,000.

Que., Sherbrooke—J. Kayser & Co., Frontenac St., purchased site having 464 ft. frontage on Frontenac St., and plans to build rein.-con. factory.

Ont., Toronto—See "Buildings."

Ont., Toronto—I. M. Prentiss, 8 Rideout Ave., soon lets contract building concrete, stone and steel factory. About $60,000.

Ont., Toronto—W. Wrigley, Jr., Carlaw Ave., having plans prepared by B. H. Prack, archt., Lumsden Bldg., for brick and steel addition to factory. About $60,000.

BIDS DESIRED

Conn., Waterbury—Until June 6, by F. A. Webster, archt. and engr., 193 Homer St., building 2 story, 100 x 120 ft., brick fireproof garage and service station, rein.-con. flooring, concrete foundation, on North Main and North Willow Sts., for M. A. Doolittle, Watertown Ave. About $60,000. Noted May 8.

N. Y., New York—Until June 6, by Starrett & Van Vleck, archts. and engrs., 8 West 40th St., building 4-story rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, at 1996-2010 Park Ave., for R. T. Rane, Jr., Chicago. About $175,000. Noted May 15.

O., Cleveland—G. S. Rider Co., archts., 601 Century Bldg., receiving bids building 2-story, 130 x 150 ft., rein.-con., steel and brick warehouse, on East 39th St. and Superior Ave., for J. M. & L. A. Osborn Co., Superior Viaduct. About $300,000.

Mich., Marquette—Until June 16, by city, building 40 x 97 ft. concrete and brick hydroelectric power house, tail-race excav. in earth and rock; rein.-con. surge tank, 30 ft. diameter, 60 ft. high; concrete foundation with timber saddles for woodstave pipe line, 90 in. inside diameter, 1800 ft. long and 78 in. inside diameter, 285 ft. long; advertised in this issue.

Ill., Chicago—A. B. Coffin, archt., 39 West Adams St., receiving bids for 4-story, 90 x 166 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, on Van Buren St. and Cicero Ave., for Balden Mfg. Co., 2300 South Western Ave. About $150,000.

Wis., Milwaukee—Until June 15, by C. H. Tharinger, archt., building 4-story, 120 x 130 ft., brick and mill construction factory, for Tharinger Bros. Macaroni Co., 1466 Holton St. About $125,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Nashua—Nashua Mfg. Co. let contract building 7-story, 122 x 560 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, to Aberthaw Constr. Co., 27 School St., Boston. About $750,000.

★Mass., Attleboro—F. Mossberg Co., c/o W. R. Walker & Son, archts., 17 Custom House St., Providence, R. I., let contract building 1-story, 60 x 140 ft. brick and timber machine shop, rein.-con. flooring, concrete foundation, to E. O. Dexter, Main St. About $30,000. Noted May 22.

★Mass., Lowell—Hamilton Mfg Co., Jackson St., let contract building 4 story, 135 x 388 ft. brick and steel extension to mill, concrete foundation, to J. J. Prindeville Co., South Framingham. About $250,000.

★Mass., Pittsfield—Victory Textile Co., 4th St., let contract building 3 story, 80 x 280 ft. brick and timber factory, 1st floor rein.-con., concrete foundation, on West Housatonic St., to J. R. Hampson & Co., c/o owner. About $80,000. Noted Apr. 24.

★R. I., Pawtucket—McKenzie & McKay Co., Prospect St., let contract building 3-story, 60 x 160 ft. brick and mill construction mill, concrete foundation, to F. G. Rowley Co., Inc., 200 Central Ave. About $45,000.

★R. I., Providence—F. A. Decker Co., 390 Smith St., let contract building 1-story, 52 x 72 ft. service station and 2-story, 70 x 90 ft. garage, brick and timber, rein.-con. flooring, concrete foundation, on Smith and Orm Sts., to B. F. Smith Co., 22 Mason St., Pawtucket. About $40,000. Noted Apr. 10.

★R. I., Providence—Genl. Fire Extinguisher Co., West Exchange St., let contract building 3-story, 70 x 120 ft. pipe shop, and 2-story, 60 x 70 ft. addition to pipe bending plant, steel and brick, concrete foundation, to C. I. Bigney Constr. Co., 898 Westminster St. About $100,000.

★R. I., Providence—E. A. Smith Co., Chapel and Snow Sts., let contract building 1-story, 90 x 95 ft. brick and steel garage, service station and sales room, rein.-con. flooring, concrete foundation, to E. H. Bigney, 17 Custom House St. About $27,500.

★Conn., Bridgeport—E. M. Jennings, 277 Fairfield Ave., let contract building 5 story, 110 x 170 ft. brick and terra cotta auto sales, storeroom and garage, rein.-con. flooring, concrete foundation, on Harrison St., to T. J. Pardy Constr. Co., 15 Fairfield Ave. About $175,000.

★Conn., Waterbury—Amer. Brass Co., Grand and Meadow Sts., let contract building 1 story, brick and concrete addition to power house, rein.-con. flooring, concrete foundation, on Washington Ave., to H. R. Kent Co., 141 Bway., New York City. About $60,000.

★Conn., Waterbury—G. B. Wuestefeld Co., 192 York St., New Haven, let contract building 1 story, 70 x 142 ft., brick, concrete and steel garage, sales room and service station, rein.-con. flooring, concrete foundation, on South Main St., here, to Sullivan & McKeown, 843 Dixwell Ave., New Haven. About $40,000.

★N. Y., Brooklyn—Advance Rubber Co., 1717 8th Ave., will build 1 story, 20 x 130 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Gardner and Flushing Aves. About $75,000. Work will be done by day labor.

★N. Y., Brooklyn—F. Feldman, 321 Wyona St., will rebuild 1-story, 90 x 105 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Bergen St. and Eastern Parkway. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—H. Kohnstan, 537 Columbia St., let contract building 1-story, 60 x 100 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Columbia St., to Post & McCord, 101 Park Ave., New York City. About $30,000.

★N. Y., Brooklyn—M. Stinner, 217 Havemeyer St., will build 1-story, 75 x 100 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Wallabout St. and Marcy Ave. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—C. Wisson, 100 Bradford St., will build 1-story, 73 x 100 ft. brick and steel garage, rein.-con. flooring, brick foundation, on Sumpter St. and Stone Ave. About $25,000. Work will be done by day labor.

★N. Y., Falconer—Jamestown Mantel Co., Jamestown, let contract building 3-story, 70 x 240 ft., mill construction addition to factory, here, concrete foundation, to Jamestown Constr. Co., 60 River St., Jamestown. About $30,000.

★N. Y., Jamestown—Jamestown Tool & Die Wks. let contract building 1-story, 80 x 185 ft. mill construction machine shop, concrete foundation, on Blackstone St., to Warren Constr. Co., Gokey Bldg. About $35,000.

★N. Y., Long Island City—L. Gold, 44 Court St., Brooklyn, will build 2-story, 100 x 150 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Washington and 6th Aves., here. Work will be done by day labor.

★N. Y., Long Island City—See "Buildings."

★N. Y., Long Island City—J. Simons Co., 350 Bway., New York City, let contract building rein.-con. and brick blacksmith shop and garage, rein.-con. flooring, concrete foundation, on Nelson Ave., to Westinghouse, Church & Kerr, 37 Wall St., New York City. About $100,000. Cost plus percentage basis.

★N. Y., New York—Factory Constr. Co., 44 Court St., Brooklyn, will build 3 story, 95 x 175 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 323 West 90th St., here. About $100,000. Work will be done by day labor.

★N. Y., New York—Fifteenth St. Garage Corp., 412 5th Ave., let contract building 2 story, 100 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 534 West 39th St., to G. A. Carpenter, 484 West 14th St. About $75,000. Noted May 22.

★N. Y., New York—W. Fox Film Corp., 126 West 46th St., will build 3 story, 100 x 190 ft. brick, steel and rein.-con. film studio, rein.-con. flooring, concrete foundation, on 10th Ave. between 55th and 56th Sts. About $1,000,000. Work will be done by day labor under supervision of A. Allen, 128 Bway.

★N. Y., New York—Greenwich Assn Inc., c/o Ames & Co., 26 West 31st St., will build 1 story, 125 x 150 ft. brick and steel garage, on Grand and Tompkins Sts. Work will be done by day labor.

★N. Y., New York—F. W. Schwiers & Sons, 52 Vanderbilt Ave., will build 3 story, 100 x 100 ft. brick and steel warehouse, rein.-con. flooring, concrete foundation, on 11th Ave. and 48th St. About $100,000. Work will be done by day labor, under supervision of R. T. Lyons, Inc., archts., 52 Vanderbilt Ave.

★N. Y., New York—Stalwart Realty Co., 26 West 31st St., let contract building 2 story, 100 x 171 ft. brick, rein.-con. and steel garage, rein.-con. flooring, concrete foundation, on 110th St. and Lenox Ave., to Westinghouse, Church & Kerr, 37 Wall St. About $200,000. Cost plus percentage basis. Noted Apr. 10.

★N. Y., Watertown—Beebe's Island Power Corp. will build 7000 hp. electric generating plant, here. Cost between $30,000 and $50,000. Work will be done by day labor. Excavation under way.

★N. J., Hoboken—L. Newmann & Co., Willow Ave., let contract building 6 story, 50 x 65 x 140 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Ferry St. and Willow Ave., to Rheinstein & Haas, 21 East 40th St., New York City. About $200,000.

★Md., Baltimore—M. & S. Shoe Co., 500 East Lombard St., let contract building 3 story, 75 x 180 ft., rein.-con. and brick factory, brick and concrete foundation, on Oliver St. near Greenmount Ave., to Consolidated Eng. Co., 243 Calvert Bldg. About $75,000. Noted May 22.

★N. C., Gastonia—Dixon Mills, Inc., let contract building 1 story timber cotton mill, brick and concrete foundation, to J. D. Groudy, Charlotte. About $400,000.

★O., Cleveland—Christian, Schwarzenberg & Gaede, engrs., 1900 Euclid Ave., let contract building 4-story, 90 x 100 ft., rein.-con., steel and brick addition to factory, for Grabler Mfg. Co., 6565 Bway Ave., to S. W. Emerson Co., 1900 Euclid Ave. About $100,000. Noted May 1.

★O., Cleveland—Guide Motor Lamp Co., 11400 Madison Ave., let contract building 2-story, 60 x 180 ft., steel and brick factory and office, at 1500 West Madison Ave., to Minnick & Gibbons, 5309 Prospect Ave. About $40,000. Noted May 29.

★O., Cleveland—Jordan Motor Co., 1070 East 152nd St., let contract buildng 1 story, 40 x 60 ft., concrete, steel and brick power plant, to Hunkin-Conkey Co., 601 Century Bldg. About $40,000.

★O., Cleveland—Jordan Motor Co., 1070 East 152nd St., let contracts constructing 2 story, 30 x 90 ft. testing building and 2 story, 100 x 300 ft. assembly building, concrete, steel and brick, rein.-con. flooring concrete foundation, to Hunkin-Conkey Co., 601 Century Bldg., $60,000 and $50,000 respectively.

Industrial Works (Continued)

★O., Cleveland—Leonard Electric Mfg. Co., 433 Champlain Ave., let contract building 2 story, 86 x 115 ft., concrete, steel and brick factory, at 3907 Perkins Ave., to H. G. Slatmeyer & Son Co., 233 West Lakeside Ave. About $50,000. Noted May 22.

★O., Cleveland—Peerless Motor Car Co., East 93rd St. and Quincy Ave., let contract building 3 story, 40 x 80 ft., rein.-con., steel and brick addition to factory, to Masters & Mullen, 602 Electric Bldg. About $60,000. Noted May 15.

★O., Columbus—Bradford Shoe Co., 236 Neilston St., let contract building 4-story, 50 x 70 ft., mill construction factory, on Neilston St., to E. H. Latham, Grove St. About $50,000.

★O., Columbus—Henderson Tire & Rubber Co., Bucyrus, let contract building 2-story, 100 x 300 ft., rein.-con. rubber factory on Goodale St., here, to Moor Bros., 1358 Franklin Ave. About $100,000.

★O., Dayton—Dayton Fan & Motor Co., Ludlow St., let contract building 5 story, 82 x 150 ft., rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Monument and Meigs Sts., to Frank-Hill-Smith, Inc., East 3rd St. About $150,000.

★Ind., Evansville—Graham Bros., Citizens Bank Bldg., will build 1-story, 92 x 242 ft. brick mill. About $50,000. Work will be done by day labor.

★Ill., Chicago—R. H. Comey Co., 2440 Washburne Ave., let contract building 2 and 6 story, 125 x 200 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, at 2455 West 12th St., to J. L. Carnegie & Sons, 189 West Madison St. About $80,000.

★Ill., Chicago—A. I. Jordan, c/o J. A. Armstrong, archt., 11 South La Salle St., will build 7-story, 167 x 287 ft. mill construction warehouse, concrete foundation, on Ogden Ave. and Rockwell St. About $300,000. Work will be done by day labor. Noted May 8.

★Ill., Chicago—Mundie & Jensen, archts., 39 South La Salle St., let contract building 3 story, 67 x 194 ft., 2 story, 194 x 414 ft. and 1 story 81 x 108 ft. brick and timber piano factory, rein.-con. flooring, concrete foundation on Kedzie Ave. and 48th Pl., to R. F. Wilson & Co., 154 West Randolph St., for Melville Clark Piano Co., 25 East Jackson St. About $400,000. Noted Apr. 3.

★Ill., Chicago—Walker & Meyer, 1230 North Clark St., let contract building 6 story, 50 x 75 ft. rein.-con. warehouse, rein.-con. flooring, concrete foundation, to Leafgreen Constr. Co., 21 East Van Buren St. About $50,000.

★Wis., Ashland—C. Reiss Coal Co., c/o P. Reiss, 1225 North 7th St., Sheboygan, let contract building 2 story, 60 x 250 ft brick, rein.-con. and steel warehouse and coal shed, rein.-con. flooring, brick foundation, on Elm St., to Peppard & Fulton, Minneapolis, Minn. About $92,000.

★Wis., Milwaukee—Benfeldt Ice Cream Co., 2302 Clybourn St., let contract building 2-story, 40 x 80 ft., rein.-con. and brick factory, rein.-con. flooring, concrete foundation, to Raulf Co., 428 Grand Ave. About $40,000.

★Wis., Milwaukee — Hackendahl & Schmidt, 16th St. and St. Paul Ave., let contract building 1-story, 80 x 100 ft., brick and steel plant, concrete foundation, to Kroening Constr. Co., Majestic Bldg.

★Wis., Milwaukee—Mass Carbonator Co., 250 West Water St., let contract building 2-story, 60 x 100 ft. rein.-con. and brick factory, on 22nd and Clybourn Sts., to Foster Constr. Co., Caswell Blk.

★Wis., Milwaukee—Milwaukee Corrugating Co., 36th and Burnham Sts., let contract building 2 story, 125 x 240 ft. brick and steel factory, concrete foundation, to Klug & Smith, Mack Blk. About $150,000.

★Wis., Milwaukee—Quality Biscuit Co., 696 South Pierce St., let contract building 2-story, 56 x 130 ft., brick and mill construction addition to warehouse, to H. Schmitt & Son, 422 East North Ave. About $50,000.

★Wis., Milwaukee—United Storage Warehouse, 239 East Water St., let contract building 4-story, 60 x 150 ft., rein.-con. and brick warehouse, to S. M. Seisel, 1st Natl. Bank Bldg. About $100,000.

★Minn., Minneapolis—Gurley Candy Co., 56 Western Ave., let contract building 4 story, 50 x 64 x 132 ft., concrete and brick factory at 900 North 3rd St., to J. Leck Co., 316 South 7th St. About $60,000.

★Ark., Ft. Smith—W. J. Echols Co. let contract building 4 story, 120 x 130 ft. mill construction warehouse, to T. T. Riddick, Ft. Smith. About $64,000.

★Cal., Santa Paula—Limoneira Co. will build 1 and 2 story, hollow tile and concrete packing house, concrete foundation. About $150,000. Work will be done by day labor under supervision of Allison & Allison, 1405 Hibernian Bldg., Los Angeles, architects. Noted May 1.

★Ont., Welland—Imperial Oil Co., 181 Brock St., Sarnia, let contract building oil plant, to Schutz Bros., 35 Albion St., Brantford. About $40,000. Noted May 22.

Buildings

PROPOSED WORK

Mass., Amherst—Library—Massachusetts Agricultural College plans to build library on campus. About $100,000. Architect not selected.

Mass., Chicopee—Church—Church of the Assumption purchased site on Chapman and Springfield Sts. and plans to build brick church. About $50,000.

Mass., Chicopee—Church and School—St. Joachim Church Society plans to build church and school, on East Main, Maple and Belcher Sts. About $150,000. Architect not selected.

Mass., Easthampton—Bank—Hutchins & French, archts., 6 Beacon St., Boston, soon receive bids for extensive alterations in interior and building new marble exterior to 3 story, for Easthampton Savings Bank, 139 Main St. About $60,000.

Mass., Easthampton — Housing — West Boylston Mfg. Co., Hampton Mills, plans to build forty 2-story timber workmen's houses. About $150,000. G. A. Cook, secy.

Mass., Holyoke—Church—Perpetual Help Church, Prospect St., plans to build brick church on Chestnut and Hampshire Sts. About $100,000. Architect not selected.

Mass., Holyoke—Parish—St. Paul's Episcopal congregation, Appleton St., plans to build brick parish house. About $50,000. Architect not selected.

Mass., Holyoke—Theatre—C. W. Rackliffe, 257 Appleton St., and G. Hammond, plan to build fireproof playhouse on Chestnut and Appleton Sts. About $200,000. Architect not selected.

Mass., Holyoke—Y. M. C. A., 367 High St., plans to erect building on Maple and Essex Sts. About $125,000. Architect not selected.

Mass., Millers Falls—School—Montague Twp. plans to build 2-story, 6-room school here. About $60,000. Architect not selected.

Mass., Northampton — Colleges — Smith College, College Hall, plans to expend $700,000 to erect college buildings on campus. W. A. Neilson, pres. Architect not selected.

Mass., Northampton — Home—Dickinson Hospital, North Elm St., plans to build nurses' home. About $100,000. Architect not selected.

Mass., Pittsfield—School—Bd. Educ. plans to build school on Wahconah St., in Pontoosuc Dist. About $50,000. Architect not selected.

Mass., Springfield—Hotel—Clinton Hall Hotel Co., 108 Main St., plans to build large brick and steel addition to hotel. About $75,000. Architect not selected.

Mass., Springfield—Theatre—D. O. Gilmore, 414 Main St., plans to build new brick and concrete theatre, rein.-con. flooring, concrete foundation, to replace present Gilmore Theatre, on Main and Pynchon Sts. About $200,000. Architect not selected.

Mass., Taunton—Theatre—W. R. Walker & Son., archts., 17 Custom House St., Providence, R. I., soon receive bids altering Park Theatre on Court St., for Donovan Amusement Co., 24 Court St. Plans include new marble front, tile entrance, complete interior, etc. About $50,000.

Mass., Westfield—Hospital—Bd. Trustees Noble Hospital, West Silver St., plan to alter and build addition to hospital. About $50,000. Architect not selected.

Mass., Worcester—Chapel—Holy Cross College, College Park, plans to build memorial chapel on campus. About $150,-000. J. J. Carlin, pres. Architect not selected.

R. I., Central Falls (Pawtucket P. O.)—Convent—Sisters of Notre Dame, Broad St., soon let contract building 3 story, 45 x 65 ft. brick, concrete foundation. About $50,-000. W. F. Fontaine, 285 Main St., Woonsocket, archt.

R. I., Howard—Prison—State Penal & Charitable Comn., State House, Providence, having plans prepared by I. F. Hall, archt., 807 Union Trust Bldg., Providence, for new prison here. About $370,000.

Conn., Bridgeport — Bank — West Side Bank, 1418 State St., having plans prepared by L. Asheim, archt., 211 State St., for brick and steel, concrete foundation, on State St. About $100,000. W. P. Kirk, pres. Noted Jan. 23.

Conn., Bridgeport—Lodge, etc.—Sons of St. George Society, 176 Fairfield Ave., receives bids about June 20, building 2 story, brick and steel lodge and club house, rein.-con. flooring, concrete foundation, on Stratford Ave. About $60,000. E. G. Southey, 983 Broad St., archt. Noted Dec. 26.

Conn., Bristol—Business—M. P. Tirello, 5 Meadow St., purchased site on Park and Divinity Sts., and plans to build 3-story. About $50,000. D. F. Crowley, 192 Main St., engr.

Conn., Bristol—Church — St. Cassimer Church Society, West St., plans to build new brick church. About $100,000. Architect not selected.

Conn., Glastonbury—Bank—Glastonbury Bank & Trust Co., 36 Main St., purchased site on Main and Wells Sts. and plans to build bank. About $50,000. Architect not selected.

Conn., Groton—Infirmary—Odd Fellows Home of Connecticut, Groton, plans to build new infirmary at home here. About $75,000. Architect not selected.

Conn., Hartford — Conservatory—Hartford School of Music, 91 Elm St., purchased site on Collins and May Sts. and plans to build conservatory. About $60,000. H. Cheney, pres.

Conn., Hartford—Office—Hartford Fire Insurance Co., 125 Trumbull St., purchased site on Asylum St. and plans to build office. About $1,000,000.

Conn., Hartford—Hotel—New Hotel, Inc., 226 Kenyon St., purchased site on Trumbull St. and plans to build large hotel. About $1,000,000. C. E. Whitney, pres. Architect not selected.

Conn., New Britain—Hotel—Hotel Beloin, 91 Church St., plans to build extension to hotel, to provide about 30 new rooms and large banquet hall. About $50,-000. Address F. Beloin. Architect not selected.

Conn., New Haven—Hospital—New Haven Hospital, 330 Cedar St., plans to erect children's building, nurses' building, service building and private room pavilion, on Cedar St. About $1,000,000. W. H. Carmalt, 261 St. Ronan St., chn. Architect not selected.

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Buildings (Continued)

Conn., South Manchester—Store, etc.—E. J. Holl. Cheney Blk., plans to construct 1-story, 60 x 147 ft. store building, on Main and Pearl Sts., 2 story, 46 x 100 ft. garage in rear and 2 story, 37 x 90 ft. addition to building on Main St., brick and concrete, rein.-con. flooring, concrete foundation. B. A. Sellew, 756 Main St., archt.

Conn., Southington — Church—Methodist Episcopal Church Society, 20 Vermont Terrace, plans to build church. About $75,000. Architect not selected.

Conn., Waterbury—Home—City appropriated $50,000 bonds to build children's home. W. H. Sandland, mayor. Architect not selected.

N. Y., Binghamton—Church—St. Johns congregation, Vestal Ave. and Livingston St., having plans prepared by C. Lacey, archt., Binghamton, for new church. Cost between $75,000 and $150,000.

N. Y., Brooklyn—Hospital—New Zion Hospital, 2140 Cropsey Ave., Bensonhurst, had plans prepared by Shampan & Shampan, archts., 50 Court St., for 4 story, 48 x 135 ft., brick and steel, concrete foundation, on 46th St. and 17th Ave. About $250,000. L. E. Greenfield, pres.

N. Y., Brooklyn — Theatre — Avondale Bldg. Corp., c/o Shampan & Shampan, archts., 50 Court St., had plans prepared for 90 x 120 ft. brick and steel, brick foundation, (2500 seating capacity), on Kings Highway, Coney Island Ave. and East 12th St. About $250,000.

N. Y., Dundee—Library—Dundee Free Library had plans prepared by McCord & Ives, archts., Rochester, for 28 x 48 ft. brick and hollow tile inlaid with concrete filling. Cost between $70,000 and $80,000. L. B. Earnest, chn.

N. Y., Endicott—Business—H. E. Saylor having plans prepared for 5 story, 50 x 100 ft. brick, on Main St. and Washington Ave. About $60,000.

N. Y., Herkimer—Theatre—R. Earl, C. Moyer and C. T. Gloo soon receive bids building 60 x 120 ft., brick and concrete, on Main and Green Sts. About $75,000.

N. Y., Johnson City—School—City election June 17, to vote on $210,000 bonds to build 2 story, brick, on St. Charles and Elizabeth Sts. Address F. M. Smith, supt. schools.

N. Y., Lancaster—High School—Bd. Educ. having plans prepared by J. C. Blaby, archt., for 3 story brick addition. About $65,000.

N. Y., Middletown—Hospital—State Hospital Comn., Albany, had plans prepared by L. F. Pilcher, state archt., Albany, for 40 x 320 ft. chronic building, with 3 wings, brick, concrete foundation, for Middletown State Hospital, here. About $400,000.

N. Y., New York—Auditorium—Mount Sinai Hospital, 100th St. and Madison Ave. soon lets contract building 2 story, 100 x 120 ft., brick and steel, brick foundation. About $150,000. A. W. Brunner, 101 Park Ave., archt. and engr. Noted May 22.

N. Y., New York—Loft, etc.—G. Ker, Inc., 350 West 38th St., had plans prepared by G. H. Van Auken, archt., 1265 Bway., for 5 story, brick and steel loft and garage, rein.-con. flooring, concrete foundation, at 354 West 37th St. About $70,000.

N. Y., New York—Office and Loft—Severence & Van Allen, archts. and engrs., 4 West 37th St., receive bids about June 20, building 2 story, 28 x 83 ft., brick and steel, concrete foundation, at 37 Water St., for Baker, Carver & Morrell, 39 Water St. Noted Mar. 6.

N. Y., New York—Office—P. Chubb, 5 South William St., had plans prepared by A. C. Jackson, archt. and engr., 501 5th Ave., altering 6 story brick and steel, at 54 Stone St. About $75,000.

N. Y., New York—Office—Larimore & Co., 1 West 40th St., having plans prepared by Zipkes, Wolff & Kudroff, archts. and engrs., 25 West 42nd St. for 6 story, 34 x 100 ft. brick and steel, brick foundation, at 15-17 West 46th St. About $80,000.

N. Y., Watertown—School—Bd. Educ. having plans prepared for 24 room brick school on Cooper St., cost $300,000; 8 room brick addition to school on Lansing St., $75,000. E. W. Sayles, city engr. Noted May 29.

N. J., Newark—Bank—City Trust Co., Roseville Ave. plans to build bank on 50 x 100 ft. site. About $50,000. Architect not selected.

N. J., Trenton—Hospital—Bd. Freeholders Mercer Co. having plans prepared by H. F. Harris, engr., 759 Stuyvesant Ave., for tubercular hospital here. About $200,000.

Pa., Butler—School—Boro. of Windora, near here, having plans prepared by W. P. Hutchins, archt. and engr., Connestoga Bldg., Pittsburgh, for 2 story, 55 x 75 ft., fireproof, concrete foundation.

Pa., Phila.—Art Museum—H. Trumbauer, archt., Land Title Bldg., soon lets contract building 425 x 550 ft. concrete at Fairmont Park, for city.

W. Va., Fairmont—Dormitory—State Bd. Control, Charleston, soon receives bids building 2 story, brick at Normal School here. About $95,000. R. A. Gillis, Fairmont, archt.

Fla., Miami—Hotel—C. G. Fisher & J. J. Allison, Indianapolis, Ind., plan to build 6 or 7 story, 110 x 488 ft., rein.-con., at Alton Beach. Price & McLanahan, 908 Bellevue Court, Phila., archts.

Fla., Miami—Theatre—C. G. Fisher, 434 North Capitol Ave., Indianapolis, Ind., plans to build 2 story, 55 x 125 ft., rein.-con., at Alton Beach. Price & McLanahan, 908 Bellevue Court, Phila., Pa., archts.

Ala., Birmingham—Store—H. Abramson, 2122—2nd Ave., plans to build 50 x 140 ft., fireproof. About $100,000. Architect not selected.

O., Cincinnati—Office and Theatre—B. F. Keith Co., 519 Walnut St., receives bids in July building 12-story, 120 x 200 ft., concrete and steel, rein.-con. flooring, concrete foundation, on 5th and Walnut Sts. About $1,250,000. Rapp & Rapp, 190 North State St., Chicago, archts.

O., Cleveland—Commercial—J. Glick, 10022 Euclid Ave., plans to build 2 story, 80 x 270 ft., concrete, steel and brick, here. About $150,000. Architect not selected.

O., Cleveland—Mercantile, etc.—E. Zweig, 1384 West 6th St., having plans prepared by H. A. Cone, archt., 1328 Schofield Bldg., for 2 story, 40 x 115 ft., concrete, steel and brick mercantile building and garage, at 620 Frankfort Ave. About $50,000.

O., Cleveland—Commercial—W. Vretman, 413 Engineers Bldg., had plans prepared by Whitworth & Johnson, archts., 413 Engineers Bldg., for 2 story, 95 x 180 ft. concrete, steel and brick, concrete foundation, on West 117th St. and Lorain Ave. About $125,000. Noted May 15.

O., Springfield—Hospital—Ohio Masonic Home, Natl. Pike West, plans to build hospital. About $150,000. P. H. Dorn, supt.

O., Springfield—Office—Springfield Metallic Casket Co., Center St., plans to build 3 story, 52 x 150 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Center and Columbia Sts. About $60,000. R. C. Gotwald, Springfield, archt.

O., Willowby—School—Bd. Educ., c/o C. F. Kendall, Court House, Painesville, plans to build 2 story, 80 x 140 ft., rein.-con., steel and brick, here. F. C. Warner, 768 Hippodrome Annex Bldg., Cleveland, archt.

Mich., Cedar Bank (Forsyth P. O.)—School—State Bd. Control, Capitol, Lansing, plans to build State Training School, to include 2 story, 38 x 120 ft. administration building, 3 dormitories, each 2 story, 38 x 179 ft., with wings 38 x 74, and central heating plant, rein.-con., brick and stone, rein.-con. flooring, concrete foundation. About $500,000. B. Wickham, secy. E. A. Bowd, 127 Allegan St., W., Lansing, archt.

Mich., Ferndale—(Royal Oak P. O.)—High School—Village having plans prepared by G. Haase, archt., Kresge Bldg., Detroit, for 2 story, rein.-con., brick and steel. About $100,000. Noted Sept. 12.

Ill., Belleville—High School—Bd. Educ. having plans prepared for high school. Bonds for $198,000 voted for project. Noted May 15.

Ill., Chicago—Club—Illinois Women's Athletic Club, 17 North State St., having plans prepared by Marshall & Fox, archts., 721 North Michigan Blvd., for 12 story, 125 x 220 ft. brick and steel, concrete foundation, on Rush and Pearson Sts. About $1,000,000.

Ill., Chicago—Mercantile—Chicago Title & Trust Co., 69 West Washington St., soon lets contract building 6 story, 70 x 80 ft. brick and steel, concrete foundation, on Michigan Ave. and Lake St. About $200,000. J. Hunt, 30 North Michigan Ave., archt. Noted May 22.

Ill., Chicago—Office—Chicago Butter & Egg Bd., 136 West Lake St., plans to build 10-story, 55 x 80 ft., on South Water and Wells Sts. About $100,000. Lewis & Doherty, 35 North Dearborn St., archts.

Ill., Chicago—Theatre—Balaban & Katz, Central Park Theatre, having plans prepared by Rapp & Rapp, archts., 180 North State St., for 4 story, 125 x 175 ft. brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on 63rd St. and Cottage Grove Ave. About $1,000,000.

Ill., Chicago—Theatre, Stores, etc.—R. Levine, 6957 South Halsted St., receives bids about July 1, building 3 story, 175 x 175 ft. fireproof construction, rein.-con. flooring, concrete foundation, on Halsted and 70th Sts. About $225,000. J. L. Koster, 6957 South Halsted St., archt.

Wis., Chetek—School—Bd. Educ. receives bids in July, building 2-story, 54 x 94 ft., rein.-con. and brick, rein.-con. flooring, brick foundation. About $52,000. A. Babcock, clk. W. L. Alban, 347 Endicott Bldg., St. Paul, Minn., archt.

Wis., Clintonville — Bank — Dairyman's State Bank plans to build 2-story, 60 x 110 ft. brick, brick foundation on Main St. About $80,000. Architect not selected.

Wis., Janesville—Hospital—Mercy Hospital, 516 North Washington St., soon lets contract building 2-story, 50 x 90 ft., rein.-con., brick and steel addition, concrete foundation. About $75,000. Backes & Pfaller, M. & M. Bank Bldg., Milwaukee, archts.

Wis., Manitowoc—Club—Aerie Order of Eagles plan to build 3-story, 60 x 99 ft. brick and stucco, on 10th St. About $50,000.

Wis., Merrill—Church, etc.—Merrill Presbyterian congregation soon receives bids building 1 and 2 story concrete brick and stone church, school and manse. About $50,000. A. D. Miner, secy. Leibert & Leibert, 1st Natl. Bank, Milwaukee, archts.

Wis., Milwaukee—Business—Kesselman-O'Driscoll Co., 258 West Water St., having plans prepared by W. W. Ahlschlager, archt., 111 West Washington St., Chicago, for 3 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, on West Water and Wells Sts. About $50,000.

Wis., Milwaukee—Market—M. Tullgren & Sons, archts., 1st Natl. Bank, soon lets contract building 1 and 2 story, 125 x 300 ft. rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on 3rd and Garfield Aves. About $150,000. Owner's name witheld.

Wis., Milwaukee—Office—Vilter Mfg. Co., 872 Clinton St., having plans prepared by Westinghouse, Church, Kerr & Co., engrs., 37 Wall St., New York City, building 3-story, 70 x 120 ft., rein.-con. and brick. About $50,000.

Wis., Milwaukee—Store—Gimbel Bros. 3-5 Grand Ave., soon lets contract building 6 story, 75 x 130 ft. brick, steel and rein.-con., rein.-con. flooring concrete foundation. H. J. Esser, Camp Bldg., archt.

Wis., Montfort—School—Bd. Educ. having plans prepared by J. R. and E. J. Law, archts., 620 Gay Bldg., Madison, for 2-story, 76 x 100 ft. About $70,000.

Wis., Racine—Bank and Office—Racine City Bank, 1345 Washington Ave., had plans prepared by Van Ryn & DeGelleke, archts., Caswell Blk., Milwaukee, building 2 story, 40 x 85 ft., brick, concrete and steel, rein.-con. flooring, concrete foundation, at 1345 Washington Ave. About $75,000. W. G. Gittings, pres. Noted Feb. 20

Wis., Superior—School—Bd. Educ. soon lets contract building 3 story, 94 x 188 ft. About $250,000. L. A. Nichols, secy. F. E. Johnson, Wisconsin Bldg., archt.

Wis., Wausau—Theatre—G. Schochow, c/o Bijou Theatre, plans to build 1 story, 70 x 120 ft., brick, concrete and steel, rein.-con. flooring, concrete foundation. About $75,000. H. G. Lotter, 304 West Water St., Milwaukee, archt.

Ia., Clinton—High School — Bd. Educ. plans to build 2 story, fireproof, rein.-con. and brick. About $300,000. Miller, Fullenwider & Dowling, 6 North Michigan Ave., Chicago, archts.

Minn., Eveleth—Temple—Eveleth Lodge, No. 239, A. F. & A. M., soon lets contract building 2 story, 60 x 66 ft. rein.-con. and brick. About $50,000. E. H. Berg, Eveleth, archt.

Minn., Minneapolis—Office—Nonpartisan Leader, 312 Hackney Bldg., St. Paul, plans to build 6 story on 6th Ave., S. and 5th About $500,000.

Buildings (Continued)

Minn., Minneapolis — Theatre — J. W. Cohen, 238 Plymouth Bldg., Minneapolis, soon receives bids building 2 story, 132 x 157 ft., concrete, brick and steel, on 14th St. and Nicollet Ave. About $150,000. Buchner & Orth, St. Paul, archts.

Minn., St. Hilaire—School—C. Swanson, clk. bd. educ., receives bids about June 8, building 2 story, 57 x 90 ft. About $50,000. Sund & Dunham, 512 Essex Bldg., Minneapolis, archts. Noted May 8.

Minn., St. Paul—School—Bd. Educ. soon receives bids building 3 story, 40 x 65 ft., concrete and brick, brick foundation, on Van Dyke, Argyle and Chatsworth Sts. About $65,000. Foley Realty & Security Co., 209 Gilfillan Bldg., archts. and engrs.

Minn., Waseca—Hospital—City plans to build hospital. About $50,000. Architect not selected.

Kan., Anthony—School—Bd. Educ. soon lets contract building 2 story, 72 x 119 ft. rein.-con. and brick. About $100,000. W. Mampe, 559 Sheidley Bldg., Kansas City, Mo., archt.

Kan., Arkansas City — Church—Central Christian congregation soon lets contract building 2 story, 66 x 114 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation. About $75,000. W. L. McAtee, Arkansas City, archt.

Kan., McPherson — Science Hall — McPherson College having plans prepared by W. E. Hulse & Co., archts. Hutchinson, for Science Hall. About $60,000.

Kan., Wichita—Mausoleum—Amer. Cemetery Co., c/o G. A. Saxton, secy., 310 North Roosevelt Ave., having plans prepared by S. Lovell, archt., 30 North Michigan Ave., Chicago, for concrete and stone on 21st and Hillside Ave. About $100,000.

S. D., Alexandria—School—Bd. Educ. having plans prepared by Graber & Helleberg, archts., Columbus, Neb., building 2 story, brick, stone and rein.-con. About $65,000.

S. D., Erwin—School—Bd. Educ. having plans prepared by K. T. Snyder, engr., 933 Plymouth Bldg., Minneapolis, Minn., building 2 story, 65 x 134 ft., brick, rein.-con. and steel, rein.-con. flooring. About $100,000.

N. D., Beach—School—City purchased site and having plans prepared for 2 story, 82 x 115 ft. About $60,000. Architect not selected.

N. D., Bismarck—Memorial—State Legislature appropriated $200,000 to build memorial to soldiers and sailors on capitol grounds. Architect not selected.

Mo., Chaffee—Hotel—Lindsay Architectural Co., archts., 261-2 McCoy-Tanner Bldg., Sikeston, receives bids about July 15, building 4 story, 86 x 120 ft., rein.-con., fireproof, rein.-con. flooring, concrete foundation, here, for Union Bldg. Co., Chaffee. About $125,000.

Mo., Fulton—Exchange—City plans election to vote on $50,000 bonds to build municipal telephone exchange. W. R. Pemberton, clk.

Mo., St. Louis—Schools—Bd. Educ. plans to build nine 1, 2 and 3 story, concrete and brick schools. Work to extend through period of 5 years. About $5,429,900. R. M. Milligan, Bd. Educ. Bldg., archt.

Tex., Bowie—High School—Bldg. School Trustees plan to issue $150,000 bonds to build school.

Tex., Ft. Worth—Church—Mount Zion Baptist congregation plans to build church on Rosedale St. and Evans Ave. About $50,000.

Tex., Ft. Worth—Memorial—Tarrant Co. Memorial Assn. plans to construct memorial building. W. A. Hanger, pres.

Tex., Hallettsville—School—Independent School Dist. voted $65,000 bonds to build and equip school. F. Lacy secy.

Tex., Hillsboro—Church—Central Presbyterian congregation plans to build. About $50,000.

Okla., Oklahoma—Schools—Bd. Educ. plans to build Lincoln School, cost $90,500; Jefferson School, $90,500; Westwood School, $25,200; Lee Junior High School, $165,000; Junior High School Northeast, $165,000; Junior High School Northwest, $165,000; also additions to Putnam Heights School, $29,400; Culbertson School, $33,000; Lowell School, $29,400; Hawthorne School, $20,500; Whittier School, $29,400; Willard School, $24,100; Wheeler School, $29,400; Walnut Grove School, $13,000. Layton & Smith, 701 Southwestern Reserve Bank Bldg., archts.

Okla., Vinita—Court House—Craig Co. having plans prepared by Layton & Smith, archts., 701 Southwest Reserve Bank Bldg., Oklahoma City, for 3-story, 75 x 100 ft. brick, stone and rein.-con., rein.-con. flooring, concrete foundation. About $150,000.

Idaho, Nampa—Sanitarium—State Dept. Pub. Wks., Capitol, Boise, plans to add 2 new wings to State Sanitarium, here. About $100,000. Address J. K. White, Boise, comr.

Idaho, Payette—School—City voted $75,000 bonds, to build high school in Dist. No. 32. Noted Apr. 3.

Ariz., Mesa—High School—School Trustees having plans prepared by N. F. Marsh, archt., 211 Bway. Central Bldg., Los Angeles, for addition to school and auditorium. About $80,000. Noted May 8.

Wash., Seattle—Store—B. Farrar, c/o Burke & Farrar, New York Blk., plans to build 2 story, 60 x 80 ft., mill construction, concrete foundation, on 7th and Olive Sts. About $50,000. G. W. Lawton, Alaska Bldg., archt.

Ore., Corvallis—Laboratory—Bd. Regents State Agricultural College soon lets contract building 2 story, 56 x 220 ft. brick and mill construction laboratory, on college campus. About $130,000. J. V. Bennes, 1040 Chamber Commerce Bldg., Portland, archt. Noted Apr. 17.

Ore., Heppner—Home—B. P. O. E. of Heppner plan to build 2-story, 60 x 126 ft., brick. About $50,000. J. V. Bennes, Chamber Commerce Bldg., Portland, archt.

Ore., Heppner—Hotel—Heppner Hotel Co. plans to build 3 story, 62 x 126 ft., brick. About $80,000. J. V. Bennes, Chamber Commerce Bldg., Portland, archt.

Ore., Marshfield—Armory—State Legislature, Portland, soon receives bids building 2 story, 105 x 120 ft., brick, concrete foundation, here. About $50,000. Clausen & Claussen, Macleay Bldg., Portland, archts. Noted Mar. 13.

Ore., North Bend—Hotel—R. Banks and Simpson Estate Co., both of North Bend, are back of project to build hotel. About $100,000. J. A. Smith, secy. chamber commerce, interested.

Ore., Pendleton—Hotel—W. N. Matlock Estate having plans prepared by R. W. Hatch, archt., Despain Bldg., for 5-story, 50-room, brick addition to Hotel Pendleton, on Main and Water Sts.

Ore., West Linn—School—Bd. Educ. soon lets contract building 2-story, 78 x 130 ft. brick and concrete, concrete foundation. About $50,000. Tourtellotte & Hummel, McKay Bldg., Portland, archts.

Cal., Antioch—Hall, Fire House and Jail —City having plans prepared by B. G. McDougall, archt., Sheldon Bldg., San Francisco, for 2 story, concrete and brick on 3rd and H Sts. About $55,000. Noted May 22.

Cal., Fresno—Schools—City election June 12 to vote on $1,200,000 bonds to build high school, intermediate school and junior college; also $880,000 for elementary schools.

Cal., Hemet—School—Hemet Union High School Dist. plans to build school. About $75,000. O. B. Waite, principal.

Cal., Merced—Theatre—C. H. Douglas having plans prepared by A. W. Cornelius, archt., Merchants Natl. Bank Bldg., San Francisco, for 1-story, 75 x 150 ft., concrete or brick, on 17th and N Sts. About $50,000.

Cal., Modesto—Schools—School Trustees having preliminary plans prepared by J. J. Donovan, archt., Oakland, for grammar school and addition to high school. About $150,000. Bonds will be voted for project.

Cal., Orland—School—School trustees plan to purchase site and build addition to school to include gymnasium, auditorium and manual training departments. About $70,000.

Cal., Pasadena—See "Industrial Works."

Cal., San Francisco—School—Bd. Pub. Wks. having plans prepared by J. R. Miller, archt., Lick Bldg., for Jefferson School on 19th Ave. near Judah St. T. Reardon, chn.

Cal., San Francisco—High School—Bd Pub. Wks. having plans prepared by J. Reid, Jr., archt., 1st Natl. Bank Bldg., for high school on North Beach High School site. About $50,000.

Cal., Santa Ana—Hotel—Santa Ana Hotel Corp., Santa Ana, having plans prepared by M. Hunt, archt., Hibernian Bldg., Los Angeles, for hotel here. About $125,000.

N. S., Halifax—Church—Kay-Grove congregation had plans prepared by A. R. Cobb, Tramway Bldg., for 60 x 75 ft. concrete, brick and steel. About $80,000.

N. B., St. John—Detention Dept. Pub. Wks., Ottawa, soon lets contract for steel and brick immigration detention building. About $150,000.

Que., Cap de Madeleine—Academy and School—Roman Catholic School Comn. plans to build stone, brick and steel academy and school. Cost $50,000 and $8000 respectively. J. Bourque, secy.

Que., St. Felix de Kingsey—School Bd plans to build school. About $50,000.

Ont., Alexandria—Hospital—A. Chisolm, having plans prepared by K. G. Rea, archt., Beaver Hall Hill, Montreal, Que., for hospital. About $75,000.

Ont., Kingston—School—Bd. Educ. plans to build steel and brick, concrete foundation, on Princess St. About $100,000. Power & Dreaver, 81 Brock St., archt.

Ont., London—Store and Office—T. F. Kingsmill, 130 Dundas St., having plans prepared by W. G. Murray, archt., Dominion Savings Bldg., for 3 story, brick. About $100,000. Noted May 15.

Ont., Orillia—Memorial Hospital—Orillia Hospital Bd. having plans prepared by E. G. Bird, archt., 6 King St. W., Toronto, for 2 story, fireproof. About $80,000.

Ont., Toronto—Office, etc.—Western Canada Floor Mills Co., 74 King St., E., soon lets contract building office, warehouse and stables. About $50,000. Sproat & Rolph, 36 North St., archts.

Ont., Toronto—Theatre—Paramount Film Co., 21 Adelaide St., W., having plans prepared by J. M. Jeffrey, archt., Confederation Life Bldg., for concrete, brick and steel vaudeville and motion picture theatre on Victoria St. About $600,000.

Ont., West Hill—High School—Bd. School Trustees plans to build 3 story, brick and steel, concrete foundation. About $75,000. Address D. McLean.

BIDS DESIRED

R. I., Barrington—School—Until June 8, by town, building 2 story, brick and steel, concrete foundation. About $50,000. F. S. Peck, chn. comn. W. R. Walker & Son, 17 Custom House St., Providence, archts. Noted Apr. 10.

N. Y., Brooklyn—Theatre—Until June 6, by Carlson & Wiseman, archts., 220 Henry St., building 1 story, brick and steel, brick foundation, at 285 Flatbush Ave., for St. Marks Amusement Co. About $150,000. Noted Mar. 27.

N. Y., New York—Exchange—Until June 11, by McKenzie, Voorhees & Gemelin, archts. and engrs., 1123 Bway, building 4 story, 103 x 115 ft. brick and steel, brick foundation, on 167th St. and Grand View Pl., for New York Telephone Co., 15 Dey St. About $391,000. Noted May 8.

N. Y., New York—Office and Loft—Until June 7, by R. H. Almiroty, archt., 220 5th Ave., building 6 story, 27 x 100 ft. brick and limestone, brick foundation, at 31 West 57th St., for Sohmer & Co., 315 5th Ave. About $75,000. Noted May 22.

N. J., Camden—Bank—Until June 16, by P. Merz, archt., Pennsylvania Bldg., Phila., building 1 and 3 story, rein.-con., for Bway. Trust Co., 1009 Bway. About $200,000. Noted May 29.

S. C., Hartsville—High School—Until June 12, by J. W. Goodwin, chn. school comrs., high school building, 2 story, 100 x 150 ft., timber, with auditorium, also 80 x 401 ft. brick addition to grammar school on Coker St. C. C. Wilson, 804 Palmetto Bldg., Columbia, archt

Buildings (Continued)

Ill., Chicago—Hospital—T. R. Bishop, archt., 35 South Dearborn St., receiving bids building 2-story, 40 x 120 x 125 ft., brick and timber, L shaped, concrete foundation, at 8015 Luella Ave., for South Shore Hospital. About $65,000.

Ill., Chicago—Hospital—D. S. Klafter, archt., 64 West Randolph St., receiving bids building 6-story, 36 x 150 ft., rein.-con. addition, rein.-con. flooring, concrete foundation, on Hoyne and Monroe Sts., for West End Hospital, 2058 West Monroe St. About $100,000.

Ill., Oak Park—Bank—Puckey & Jenkins, archts., 6 North Michigan Ave., Chicago, receiving bids building 2-story, 60 x 95 ft. fireproof bank, rein.-con. flooring, concrete foundation, on Oak Park Ave. and North Blvd., for Avenue State Bank, 126 North Oak Park Ave. About $80,000. Noted Dec. 19.

Minn., Duluth—Store—Until June 12 by Oliver Iron Mining Co., Wolvin Bldg., building 2 story, 118 x 129 ft., rein.-con. and brick. About $65,000. S. S. Rumsey, Wolvin Bldg., archt.

Minn., Fergus Falls—Employees—State Bd. Control, St. Paul, receiving bids for 2 story, 45 x 140 ft., rein.-con. and brick employees' building at State Hospital. About $50,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. C. L. Pillsbury Co., 805 N. Y. Life Bldg., Minneapolis, engr.

Minn., Greenbush—School—Until June 9, by G. A. Brandt, clk. bd. educ., building 2 story, rein.-con. and brick, brick foundation. About $50,000. Foss & Foss, St. Cloud, archts. Noted Mar. 27.

Minn., Hastings—Dormitory—State Bd. Control, Capitol, St. Paul, receiving bids for 2-story, 50 x 120 ft., rein.-con., brick and stone. About $60,000. C. H. Johnston, 715 Capitol Bank Bldg., St. Paul, archt. Noted May 15.

Minn., Montevideo—Church—J. M. Mason, pastor Norwegian Lutheran congregation, Montevideo, receiving bids for 2½-story, 54 x 90 ft., brick and hollow tile. About $50,000. P. O. Moe, 3425 Harriet Ave., Minneapolis, archt.

Tex., Ranger—Church and Parsonage—Until June 15, by Methodist congregation, building 80 x 100 ft. concrete and brick. About $50,000. E. M. Wilson, pastor. R. H. Hunt, Dallas, archt.

Tex., Rosebud—High School—Until June 15, by Independent School Dist., rebuilding school destroyed by fire. About $75,000. R. G. Stillwell, secy. M. W. Scott & Co., 412½ Franklin St., Waco, archts.

Idaho, Lewiston—Administration—Until June 9, by E. A. Bryan, state comr. educ., Moscow, building Administration Bldg. at State Normal School, here. About $150,000. C. Richardson, Moscow, archt.

Ariz., Morenci—High School—Until June 17, by School Dist., building 1-, 2- and 3-story, rein.-con., concrete foundation. About $150,000. G. L. Wilson, Monrovia, Cal., archt. Noted Apr. 3.

Cal., Los Angeles—Hospital—Until June 16, by Bd. Supervs. Los Angeles Co., building 1 story psychopathic ward with 2 wings, 30 x 269 ft. each, rein.-con. and timber, rein.-con. flooring, concrete foundation at county farm. A. M. McPherrin, clk.

Ont., London—School—Until June 14, by W. G. Murray, archt., Dominion Savings Bldg., building 2 story, brick, concrete foundation, for Town Council. About $95,000.

Ont., St. Catharines—Schools—Until June 9, by A. E. Nicholson, archt., 46 Queen St., building two 1-story schools for School Bd. About $60,000. Noted May 8.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Roxbury (Boston P. O.)—School—City received bids May 27 building 2-story, brick, concrete foundation, on Dearborn St., from J. Bowen Co., 14 Custom House, Boston, $156,296; McGahey & O'Connor, 551 Columbia Rd., Boston, $164,748; C. S. Cunningham & Sons, 7 Water St., Boston, $169,786. Noted May 22.

ROAD WORK—COLUMBUS, TEX.

Bids were received by Commissioners of Colorado Co. for constructing Highway No. 4, from (A) Haden & Austin, 727 Kress Bldg., Houston; (B) M. M. Craven; (C) W. T. Montgomery, Alamo Bank Bldg., San Antonio. The unit bids were as follows:

	A	B	C
4 acres clearing and grubbing	$150.00	$125.00	$75.00
32,261.2 cu.yd. unclassified excavation	.30	33	.35
1,930.8 cu.yd. ditching	.30	.27	.30
23,236.5 cu.yd. borrow embankment	.24	.25	.28
5,000 cu.yd. stripping gravel pits	.25	.28	.30
598.6 cu.yd. team excavation	.40	.40	.40
196.4 cu.yd. hand excavation	.75	.85	.75
41,673 cu.yd earth overhaul	.02	.02	.02
140 stations scarifying old gravel	3.00	4.00	6.00
700 (1,000 gal.) sprinkling	2.50	5.00	3.50
114 hours extra rolling	2.50	4.00	3.00
10,112.0 cu.yd. gravel at pits	.10	11	.10
153.5 lin.ft. 24-in. c.-i. pipe	4.50	3.25	3.50
44.5 lin.ft. 18-in. c.-i. pipe	3.50	2.55	3.00
485 lin.ft. relaying pipe	1.00	.35	.25
8.81 mi. road machine work	400.00	240.00	450.00
99.58 cu.yd. 1:2:3 concrete pavement	20.00	19.90	22.00
25,591.7 cu.yd. gravel laid down at nearest delivery point	1.38	1.58	1.20
35,703.7 surfacing 1st ½ mi. hauling	.55	.52½	.60
35,703.7 placing surfacing	.08	.05½	.15
326,640.1 gravel overhaul	.10	.11	.10
302.3 class "A" reinforced concrete	20.00	22.00	25.00
32.82 class "B" reinforced concrete	20.00	20.00	20.00
25,704.7 lb. reinforcement	.07½	.06	.08
6,760 lin.ft. standard guard fence	.50	.50	.75
Extended totals	$111,702	$114,884	$118,480

ROAD WORK—KALISPELL, MONT.

Bids were received by Bureau Public Roads, U. S. Department of Agriculture, Missoula, for constructing North Fork of Flathead National Forest Road Project, Flathead Co., from (A) Carlson & Norman Co., Spokane, Wash.; and (B) Rich & Markhus, Prosser, Wash. The unit bids were as follows:

	A	B
101 acres clearing	$110.00	$150.00
2,860 cu.yd. rock excavation	2.75	2.00
2,860 cu.yd. rock excavation (exp. furn.)	2.60	1.80
103,500 cu.yd. common excavation	.65	.73
1,000 cu.yd. overhaul	.05	.05
29.5 mi. finishing earth road	150.00	200.00
825 cu.yd. class "C" concrete bridge abutments	40.00	30.00
825 cu.yd. cement rubble masonry bridge abutments	25.00	20.00
8,365 sq.ft. log cribbing bridge abutments	.50	.80
1,400 sq.ft. log cribbing whale cr. piers	.50	1.50
120 cu.yd. rock fill in log pier	3.50	2.00
330 cu.yd. class "C" concrete culvert H. W	50.00	30.00
730 cu.yd. dry rubble masonry culvert H. W	10.00	10.00
415 cu.yd. cement rubble masonry culverts H. W	23.00	20.00
2,130 lin.ft. 12-in. concrete pipe	3.90	2.50
1,000 lin.ft. 18-in. concrete pipe	6.64	3.75
100 lin.ft. 24-in. concrete pipe	9.82	5.50
260 lin.ft. 36-in. concrete pipe	19.56	7.00
18 lin.ft. 42-in. concrete pipe	30.00	7.50
18 lin.ft. 48-in. concrete pipe	30.00	8.00
2,130 lin.ft. 12-in. corrugated pipe	2.80	2.00
1,000 lin.ft. 18-in. corrugated pipe	4.19	3.00
100 lin.ft. 24-in. corrugated pipe	6.45	4.50
260 lin.ft. 36-in. corrugated pipe	8.75	7.50
18 lin.ft. 42-in. corrugated pipe	9.89	8.50
18 lin.ft. 48-in. corrugated pipe	11.43	10.00
2,130 lin.ft. 1 ft. x 2 ft. log culverts	2.00	1.00
1,000 lin.ft. 2 ft. x 2 ft. log culverts	2.50	1.25
100 lin.ft. 2 ft. x 3 ft. log culverts	3.50	1.40
260 lin.ft. 3 ft x 3 ft. log culverts	3.75	1.50
18 lin.ft. 3 ft. x 4 ft. log culverts	4.50	1.75
18 lin.ft. 4 ft. x 4 ft. log culverts	5.50	2.00
2 12-ft. span log bridge	60.00	200.00
1 10-ft. span log bridge	50.00	175.00
1 70-ft. span log bridge	1,400.00	2,500.00
1 60-ft. span log bridge	1,200.00	2,250.00
4 30-ft. span log bridge	500.00	1,000.00
2 24-ft. span log bridge	120.00	800.00
2 20-ft. span log bridge	100.00	500.00
7 16-ft. span log bridge	80.00	250.00
51 acres grubbing	240.00	200.00
51 acres grubbing (exp. fur.)	220.00	190.00
Extended totals	$124,004	$139,438

★Mass., Wellesley (Boston P. O.)—Dormitory—Wellesley College let contract building 4-story, 31 x 71 ft. brick and concrete, concrete foundation, on campus, to C. S. Cunningham & Son, 7 Water St., Boston. About $150,000. Noted May 22.

★Conn., New Haven—Bank—Pallotti-Andretta Co., 630 Chapel St., let contract building 3-story, 76 x 90 ft., brick, steel and concrete, rein.-con. flooring, concrete foundation, on Olive and Chapel Sts., to M. J. Gibbud Co., 109 Water St. About $100,000. Noted May 29.

★Conn., New Naven—Hospital and Chapel—St. Raphael Hospital, 1442 Chapel St., let contract building 4 story, 40 x 140 ft. brick and steel addition, rein.-con. flooring, concrete foundation, on Chapel St., to Sullivan & McKeown, 843 Dixwell Ave. About $65,000. Noted May 22.

★Conn., Wallingford—Office—R. Wallace & Sons Mfg. Co., Quinnipiac St., let contract building 3-story, 79 x 133 ft. brick and concrete, rein.-con. flooring, concrete foundation, to T. J. Pardy Constr. Co., 15 Fairfield Ave., Bridgeport. About $60,000. Noted Feb. 6.

★N. Y., Brooklyn—Synagogue and School—New Hebrew School, 505 Ashford St., will build 3-story, 46 x 70 ft., brick and steel, brick foundation, on Ashford St. and Sutter Ave. About $60,000. Work will be done by day labor Noted May 22.

Buildings (Continued)

N. Y., Cohoes—High School —Bd. Educ. received bids May 21, building high school, general contract from Hanrahan Bros., 336 Bwime Ave., Schenectady, $157,767; heating, from C. Dwyer, 18 Chuctanunda St., Amsterdam, $29,253. Noted May 1.

★N. Y., Endicott—School—Bd. Educ. let general contract building 3 story, 80 x 154 ft. addition to North Side School, to Kline & Criffin, Binghamton, $97,040; heating, to Shapeley & Wells, 118 Washington St., Binghamton, $11,771. Work to be done under supervision of Comad & Tiffany, architects, 515 Phelps Bldg., Binghamton.

★N. Y., Long Island City—Loft, etc.—L. Gold, 44 Court St., Brooklyn, will alter 4 story, 100 x 350 ft. brick and steel loft and factory building on Pierce and 8th Sts. Work will be done by day labor.

★N. Y., New York—Bath—I. Kobre will build 1-story rein.-con. and steel addition to turkish baths, on 111th to 112th Sts. and Lenox Ave. About $55,000. Work will be done by day labor.

★N. Y., New York—Institute—League of Political Educ., 15 West 44th St., will build 5-story, 100 x 125 ft., brick and steel, concrete foundation, on 43rd St. and Bway. About $150,000. Work will be done by day labor, under supervision of R. B. Smith, engr., 30 East 42nd St. Noted May 8.

N. Y., New York—Office—J. Cullman, 161 Front St., let contract altering exterior and interior of 7-story brick and steel, at 135 Front St., to Stuart-Willey Co., 1123 Bway. About $60,000. Noted May 29.

★N. Y., New York—Office—D. L. Elliman & Co., 1517 East 49th St., let contract building 10-story, 34 x 100 ft., brick and steel, concrete foundation, on 49th St., between Madison and 5th Aves., to H. Davis, 30 East 42nd St. About $150,000. Noted May 8.

N. Y., New York—Office—Lehn & Fink, 120 William St., let contract building 15 or 20-story brick and steel, rein.-con. flooring, concrete foundation, on Greenwich and Morton Sts., to G. R. Davis & Co., 30 East 42nd St. About $1,000,000. Cost plus percentage basis. Noted Apr. 10.

★N. Y., New York — Office—Merchant Marine House, Inc., 56 Beaver St., will alter 4½-story, brick and steel, at 56 Beaver St. About $125,000. Work will be done by day labor under supervision of Zeisler & Kerrigan, archts. and engrs. 53 Beaver St. Noted May 15.

★N. Y., New York—Stores—Level Realty Co., 935 Intervale Ave., will build group of 2-story, 60 x 115 ft. brick and steel stores, brick foundation, on Fordham Rd. and Grand Concourse. About $55,000. Work will be done by day labor.

★N. J., Elizabeth—Exchange—New York Telephone Co. 15 Dey St., New York City let contract building 3-story, 100 x 100 ft., brick and steel, concrete foundation, at 1196 East Grand St., here, to L. Hommedieu, 1 Madison Ave., New York City. Noted Apr. 24.

★Pa., Phila.—Stations—Dept. City Transit, 1211 Chestnut St., let contract building brick, steel and rein.-con. station on northeast and southwest corners of Kensington and Allegheny Aves., including removal of existing buildings on these sites. Contr. No. 565, to J. Connor, 1317 Arch St., $52,340; brick, steel and rein.con. station on southwest and southeast corners of Kensington Ave. and Somerset St., and removal of existing buildings on these sites. Contr. No. 564, to Standard Constr. Co., 1713 Sansom St., $57,575. Noted May 15.

★Pa., Yorkhaven—Library—City let contract building 2 story, 43 x 72 ft. brick and stone, brick foundation, to J. W. Hartley, York.

★W. Va., Princeton—School—Bd. Educ. Kanawha Dist. No. 1, Montgomery, let contract building 2-story, 88 x 128 ft., here, to Charleston Concrete Constr. Co., Charleston. About $90,000.

★W. Va., Weirton — Church — Sacred Heart of Mary congregation let contract building 2-story, 52 x 116 ft. brick, concrete foundation, to J. A. Romano, Burgettstown, Pa. About $75,000.

★O., Cleveland—Commercial—Avenue Co., 4500 Euclid Ave., let contract building 2 story, 56 x 96 ft., concrete, steel and brick, at 2024 East 46th St., to A. E. Banks, 1523 Oregon Ave. About $50,000. Noted May 29.

★O., Cleveland—Office—Jordan Motor Co., 1070 East 152nd St., let contract building 2 story, 100 x 125 ft., rein.-con., steel and brick, on East 152nd St., to Hunkin-Conkey Co., 601 Century Bldg. About $75,000.

★O., Columbus—Bank and Office—Franklin Loan & Savings Co., 347 South High St., let contract building 6 story, 25 x 90 ft., rein.-con., steel and brick, concrete foundation, on High and Main Sts., to J. W. Heckart, Ruggery Bldg. About $115,000. Noted May 1.

★O., Dayton—Theatre—Schwind Realty Co., Schwind Bldg., let contract building 100 x 120 ft., rein.-con., rein.-con. flooring, concrete foundation, on 1st and Main Sts., to Danis-Hunt Constr. Co., 1st and Webb Sts. About $150,000. Noted Feb. 27.

★Ind., Indianapolis — Asylum — Indiana Epileptic Village let contract building 1-story, brick addition, to Cornell Eng. Co., 2611 Cornell Ave. About $65,000. Noted Sept. 12.

★Ind., Lafayette—Art—State Bd. Agriculture, Capitol, Indianapolis, let contract constructing woman's art building at State Fair Grounds, to A. W. Stoolman, U. & I. Bldg., Champaign, Ill. About $110,000.

★Ill., Chicago — Bank — Independence State Bank, 1215 South Kedzie Ave., let contract building 3-story, 66 x 118 ft., fireproof, rein.-con. flooring, concrete foundation, on 12th St. and Kedzie Ave, to R. Sollit & Sons Constr. Co., 5 South Wabash Ave. About $125,000. Noted Mar. 27.

★Ill., Chicago — Church — Fourteenth Church Christ Scientist, c/o N. M. Dunning, archt., 310 South Wabash Ave., let contract building 1-story, 105 x 140 ft. stone and terra cotta, rein.-con. flooring, concrete foundation on Paulina and Sunnyside Aves., to C. B. Johnson & Son, 111 West Washington St. About $175,000. Noted May 1.

★Ill., Chicago—School—Catholic Bishop of Chicago, State and Superior Sts., let contract building 2-story, 110 x 135 ft. fireproof, rein.-con. flooring, concrete foundation, at 3825 South Washtenaw St., to Broline-Nolan Co., 8 South Dearborn St. About $75,000.

★Ill., Chicago—Stores and Offices—M. S. Plotke, 2519 North Clark St., let contract building 2 story, 100 x 125 ft. brick and timber, concrete foundation, on Sheridan Rd. and Montrose Blvd., to Barrett Constr. Co., 77 East Washington St. About $100,000.

★Ill., South Chicago—(Chicago P. O.)—Church—Worthman & Steinbach, archts., 155 North Clark St., Chicago, let contract for 1-story, 48 x 105 ft., brick and stone with steel trusses, concrete foundation, on East 103rd St. and Ave. H, for Bethlehem Lutheran Church, c/o archts., to W. Feigenbaum, 2505 West Division St., Chicago. About $75,000. Noted May 1.

Wis., Jefferson—Sanitorium—Bd. Supervs. Jefferson Co. received lowest bid building 1 and 2 story rein.-con. and brick, concrete foundation, from Appleton Constr. Co., Odd Fellows Bldg., Appleton, $85,500 Noted Dec. 26.

★Wis., Madison—School—Bd. Educ. let contract building 2 story, 61 x 110 ft., school, on 7th St., to J. Findorff. About $90,000.

★Wis., Milwaukee—Store—Shuster Dept. Store, 3rd and Garfield Aves., let contract building 2 story, 125 x 170 ft. rein.-con. and brick addition, to P. Riesen & Sons, 1018 Humboldt Ave. About $50,000.

★Wis., Milwaukee—Theatre—Rice & J. J. Schwartz, 2614 State St., let general contract building 1 story, 87 x 120 ft. brick and steel, rein.-con. flooring, concrete foundation, on 5th Ave. and Lincoln Sts., to P. Nagtegal, 11 32nd St. About $125,000.

★Wis., Plain—Church, etc.—St. Luke's congregation let contract building church, school, residence and rectory, to Wisconsin Constr. Co., Physics Bldg., Madison. About $90,000. Noted Sept. 12.

★Wis., Waukesha — High School — Bd Educ., Y. M. C. A. Bldg., let contract building rein.-con., brick and steel, rein.-con. flooring, concrete foundation, to G. L. Dwinnell, 424 College Ave.; about $186,000. Work includes remodeling old high school and building new one.

★Minn., Victoria—School—Bd. Educ. let general contract building 2-story, 54 x 108 ft., concrete, brick and steel, to C. W. Peterson, Luck, Wis. About $52,000. Noted Apr. 24.

N. D., Grand Forks—Theatre and Store—A. J. Kavanaugh received only bid building 3 story, brick, at 413-15 De Mers Ave., from Northern Constr. Co., 9 North 8th St. About $100,000. Noted Apr. 3.

★Mo., Joplin—Cathedral—Scottish Rites F. & A. M., let contract building 2-story, 125 x 150 ft., rein.-con., concrete foundation, on 5th and Byers Aves., to C. S. Bane, Frisco Bldg. About $250,000, cost plus percentage basis. Noted May 22.

★Mo., St. Louis—Hotel—Argonne Realty Co., 1407 North Bway., let contract building 5-story, 62 x 219 ft., rein.-con., steel and brick, rein.-con. flooring, concrete foundation, at 3664 Washington Ave., to F. C. Cornet, 3703 Washington Ave. About $250,000. Noted Mar. 20.

★Tex., Abilene—Science—School Bd. Simmons College, let contract building science school, to Harvey Wooldridge Co., Ft. Worth. About $83,000. Noted Apr. 10.

★Okla., Oklahoma — Office — Magnolia Petroleum Co. let contract building 5 story, brick, stone and rein.-con., rein.-con. flooring, at 7th St. and Bway., to C. M. Dunning Constr. Co., 2023 North Shartel St. About $200,000.

★Ariz., Phoenix—School—School Trustees let contract building 2-story, 80 x 210 ft., concrete, brick and hollow tile, concrete foundation, to Edwards & Wildey Co., 515 Black Bldg., Los Angeles, $159,000. Noted Feb. 13.

★Wash., Seattle—Store—H. F. Ostrander, Henry Bldg., let contract building 2 story, 108 x 113 ft., terra cotta and brick, at 220 Pine St., to W. T. Butler, Central Blvd. About $80,000.

Cal., Los Angeles—School—Bd. Educ. received bids building (a) 2 story, brick class room and auditorium building and 2 story manual training, domestic science and cafeteria building, (b) 1 story brick primary school, rein.-con. flooring, concrete foundation, on Nevin Ave., from K. R. Bradley, 1925 East 16th St., (a) $128,000, (b) $24,800; J. V. McNeil, 736 H. W. Hellman Bldg., (a) $136,900, (b) $27,500; J. P. Dawson, 702 Fay Bldg., (a) $139,416, (b) $26,218. Noted May 8.

★Cal., Quincy—Courthouse and Jail—Bd. Supervs. Plumas Co. let contract building 3-story, rein.-con., to E. W. Book, 2912 G St., Sacramento, $145,647. Noted May 22.

★Que., Chicoutimi—Church—Cathedral Church of Chicoutimi let contract building church, to A. C. Givoux, St. Casimir. About $175,000. Noted Mar. 20.

★Ont., Guelph—School—Bd. Educ. let contract building brick school, to Schutz Bros. & Co., 35-59 Albion St., Brantford. About $50,000. Noted May 1.

★Ont., Scarborough—School—School Bd let general contract building 3 story, fireproof, to Teagle & Son, 310 Davenport Rd., Toronto. About $62,000. Noted Mar. 20.

Federal Government Work

PROPOSED WORK

Mass., Boston—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3941. About $350,000.

R. I., Coddington Point—Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash ., D. C., plans to erect 100,000 gal water tank and tower, here; Spec. 3937. About $12,000.

Federal Government Work (Continued)

N. J., Cape May—Cell House and Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3943. About $38,000.

Pa., Ft. Mifflin—Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build 3000 gal. tank on 80 ft. tower, here; Spec. 3919. Bids will be received at local yard.

Pa., Phila. — Assembly Shop — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build extension to assembly shop at Aircraft Sta., here; Spec. 3927. About $700,000.

Pa., Phila.—Elevator Shafts—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build elevator shafts for ways No. 2 and 3, here; Spec. 3915. About $6000.

Pa., Phila.—Fire Escape—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at Navy Yard, here; Spec. 3932. About $2500.

Pa., Phila.—Storage Buildings with Cranes—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3942. About $350,000.

Md., Annapolis—Painting Towers — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to paint four 600 ft. radio towers, here; Spec. 3925. About $12,000.

Md., Baltimore—Dredging—U. S. Engr. Office. Custom House plans to dredge Curtis Bay Channel, Curtis Bay, involving deepening present 30-ft. channel to 35 ft. from main ship channel of Patapsco River to Baltimore & Ohio R.R. coal piers. About $250,000 appropriated for project.

Md., Indianhead—Power Plant—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans to build; Spec. 3924. About $200,000.

D. C., Anacostia—Aviation Field—Constr. Div., War Dept., 7th and B Sts., S. W., Wash., plans to build, here.

D. C., Wash.—Partitions—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build partitions in 5 story machine shop, here; Spec. 3912. About $46,500.

Va., Hampton Roads—Surfacing—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to surface aviation field, here; Spec. 3930. About $700,000.

Va., Hampton Roads—Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to erect 100,000 gal. water tank and tower, here; Spec. 3936. About $12,000.

Va., Quantico — Storehouse — Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build 12 metal storehouses, here; Spec. 3916. About $30,000.

W. Va., South Charleston—Steel Sash—Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to purchase steel sash for various buildings; Spec. 3914. About $118,000.

S. C. Charleston—Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3940. About $225,000.

S. C., Paris Island—Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to erect 100,000 gal. water tank and tower, here; Spec. 3935. About $12,500.

Fla., Pensacola — Incinerator — Bureau Yards and Docks, Navy Dept., Wash., D. C., plans to build, here; Spec. 3923. About $5000.

N. D., Bismarck—Dormitory—C. Sells, comr. Indian Affairs, Wash., D. C., rejected bids received Apr. 28, building dormitory, here, Noted May 1.

Wyoming—Road Work — Bureau Pub. Rds., Denver, Colo., soon lets contract grading 21.41 mi. Buffalo-Tensleep Natl. Forest Rd., in Washakie and Big Horn Counties, involving 89 acres clearing and grubbing, 112,600 cu.yd. earth and 8100 cu.yd. rock excav. and 8 log bridges; also 22.32 mi. Buffalo Tensleep Natl. Forest Rd. Project, Buffalo-Sour Dough Sect., 28 acres clearing and grubbing, 89,500 cu.yd. earth and 6900 cu.yd. rock excav., three 30 ft. and two 20-ft. timber bridges. J. S. Bright, dist. engr.

Tex., Ft. Worth—Wells—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to drill and case 2 wells, at Helium Production plant; Spec. 3929. About $9000.

Wash., Puget Sound—Officers' Quarters—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build 2 officers' quarters, here; Spec. 3944. About $30,000.

Wash., Walla Walla—Road Work—Dept. Interior, Wash., D. C., had plans prepared building Dixie Rd., from Walla Walla to Dixie, Walla Walla Co., 18 ft. wide. About $140,000.

Ore., Jacksonville—Road Work—Bureau Pub. Rds., U. S. Dept. Agriculture, 628 Post Office Bldg., Portland, plans to improve 2.4 mi. Hays Hill Rd., Siskiyou Nat. Forest Project, Jackson Co. About $52,500. L. I. Hewes, dist. engr.

Cal., San Diego—Pipe Line—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build gas pipe line system, here; Spec. 3939. About $89,000.

H. T., Pearl Harbor—Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3931. About $250,000.

BIDS DESIRED

Mass., Boston—Addition to Shipfitters' Shop—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3920. About $315,000; $10 deposit required for plans and spec.

R. I., Newport—Dredging—Until June 27, by U. S. Engr. Office, Newport, dredging in Pawtucket River; advertised in this issue.

N. Y., Brooklyn—Building, etc.—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing building "F" and altering stairway in main hospital; Spec. 3892. About $828,000. Noted May 15.

N. Y., Brooklyn—Heating Plant and Distributing System—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending heating plant and distributing system at Naval Hospital, here; Spec. 3891. About $830,000. Noted May 15.

N. Y., New York—Chimney—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building chimney for boiler plant; Spec. 3606. About $15,000; $10 deposit required for plans and spec. Noted Feb. 20.

N. Y., New York—Crane Runways—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building crane runways for shipbuilding slip No. 1 and for bulkhead handling and storage building. Spec. 3678.

N. Y., New York—Cranes—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes at Navy Yard, here; Spec. 3933. About $200,000; $10 deposit required for plans and spec.

N. Y., New York—Dredging—Until July 2, by U. S. Engr. Office, 39 Whitehall St., dredging in Shrewsbury River and Shoal Harbor and Compton Creek, N. J. Bids will be received on either or both jobs; advertised in this issue.

N. Y., New York—Elevators—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at shipbuilding way No. 1; Spec. 3934. About $15,000; $10 deposit required for plans and spec.

N. Y., New York—Fence—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building fence at Marginal Parkway, here; Spec. 3888. About $15,000; $10 deposit required for plans and spec. Noted May 8.

N. Y., New York—Rebuilding Shibpuilding Way—Until June 25 by Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding shipbuilding way No. 1, here; Spec. 3590. About $400,000; $20 deposit required on plans and spec. Noted Oct. 31.

N. Y., South Brooklyn—Boat Storage Building—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3889. About $85,000; $10 deposit required for plans and spec. Noted May 22.

N. J., Cape May—Roads and Walks—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Section Base, here; Spec. 3881. About $80,000; $10 deposit required for plans and spec. Noted May 8.

Pa., Phila.—Dike—Until June 10, by U. S. Engr. Office, Phila., building earth dike at Old Man Point, N. J.

Pa., Phila.—Pattern Shop—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3478. About $300,000; $20 deposit required for plans and spec. Noted Sept. 26.

Pa., Phila.—Steel—Until July 7, by Lighthouse Supt., Phila., furnishing fabricated steel for 72-ft. steel tower, delivered to Horseshoe Range West Group Lighthouse; advertised in this issue.

Md., Baltimore—Dredging—Until June 9, by U. S. Engr. Office, Custom House, dredging in Southwest Baltimore Harbor (Spring Gardens), involving deepening present 27-ft. channel to 35 ft. from main ship channel below Ft. McHenry to Ferry Bar, 27-ft. channel to be provided from Ferry Bar to Western Maryland R.R. terminal at Port Covington; existing anchorage basin to be cleared out and widened from 1000 to 1600 ft. Work involves 1,000,000 cu.yd. dredging. About $200,000 appropriated project.

D. C., Anacostia—Earth Fill—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., building earth fill, here; Spec. 3897. About $10,000; $10 deposit required for plans and spec. Noted May 22.

D. C., Wash.—Furnaces—Until June 13, by Dist. Comrs., Dist. Bldg., furnishing and delivering 8 hot-air furnaces.

D. C., Wash.—Laboratory—Until June 9, by U. S. Constr. Quartermaster, War College, Wash., Barracks, building 2-story, 44 x 121 ft. photographic laboratory. Noted Feb. 27.

D. C., Wash.—Pavement—Until June 18, by Bureau Yards & Docks, Navy Dept., paving with vitr. brick at Marine Barracks; Spec. 3913. About $3000; $10 deposit required for plans and spec.

D. C., Wash.—Sewage Disposal System—Until June 23, by Dist. Comrs., Dist. Bldg., building substructure for Rock Creek Pumping Sta., of sewage disposal system; advertised in this issue. Noted Apr. 24.

D. C., Wash—Wall—Until June 19, by Dist. Comrs., Dist. Bldg., reconstructing portion of wall on Canal Rd., between Aqueduct Bridge and Foundry Branch.

Va., Hampton Roads—Bridge—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building transfer bridge at Naval Operation Base, here; Spec. 3907. About $125,000; $30 deposit required for plans and spec.

Va., Hampton Roads—Buildings, Railroad, Sewerage and Water Systems—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Submarine Base, here; Spec. 3909. About $250,000; $30 deposit required for plans and spec. Noted May 29.

Va., Hampton Roads—Pier—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building merchandise pier, here; Spec. 3918. About $850,000; $30 deposit required for plans and spec.

Va., Newport News—Boiler—Until June 20, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., installing in post office and custom house, here.

Va., Quantico—Tank—Until June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building elevated steel tank, here; Spec. 3906. About $5000. Noted May 22.

Va., Quantico—Wharf—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3910. About $140,000; $10 deposit required for plans and spec. Noted May 29.

S. C., Charleston—Building—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building amusement building, here; Spec. 3908. About $37,000; $10 deposit required for plans and spec. Noted May 29.

Federal Government Work (Continued)

S. C., Paris Island—Dredging—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging, here; Spec. 3898. About $71,500, $10 deposit required for plans and spec.

S. C., Port Royal—Dredge—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 12-in. hydraulic dredge, here; Spec. 3898. About $71,000.; $10 deposit required for plans and spec. Noted May 22.

Ky., Louisville—Lock and Abutment—Until June 19, by U. S. Engr. Office, Louisville, building lock and abutment for Dam No. 45, Ohio River, at Addison, Ky.; advertised in this issue.

Wis., Tomah—Post Office—Until July 1; by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here. About $47,000.

Cal., San Diego—Administration Building, Roads and Walks—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3922. About $305,000; $30 deposit required for plans and spec.

Cal., San Diego—Distributing System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building electric distributing system, here; Spec. 3921. About $58,000; $10 deposit required for plans and spec.

SEWERS—BARBERTON, OHIO

Bids were received by city, May 17 (lowest 3), for constructing north end lateral sewers, from (A) W. J. Irwin & Son, Greenville; (B) W. H. Hunt, Akron; (C) Irving Nawig, Barberton. The unit bids were as follows:

	A	B	C
27,100 cu.yd. earth excavation, 0-6 ft. cut	$0.75	$1.18	$1.00
6,120 cu.yd. earth excavation, 6-12 ft. cut	2.10	1.25	1.30
485 cu.yd. earth excavation, 12-18 ft. cut	3.00	2.00	2.00
50 cu.yd. earth excavation, 18-22 ft. cut	4.00	5.00	2.50
100 cu.yd. rock excavation	4.00	5.00	3.50
100 lin.ft. 6-in. vit. pipe sewer, laid	.30	.10	.25
32,880 lin.ft. 8-in. vit. pipe sewer, laid	40	.19	.36
780 lin.ft. 10-in. vit. pipe sewer, laid	.45	.30	.60
2,160 lin.ft. 12-in. vit. pipe sewer, laid	.55	.40	.75
20 cwt. waterproof jointing compound	6.00	160.00	6.00
127 standard manholes, 0-8 ft. deep	60.00	50.00	60.00
26 standard manholes, 0-10 ft. deep	75.00	60.00	65.00
6 standard manholes, 10-12 ft. deep	90.00	80.00	75.00
7 standard manholes, 12-14 ft. deep	100.00	90.00	80.00
2 standard manholes, 14-16 ft. deep	110.00	125.00	...
1 standard manhole, 18-20 ft. deep	130.00	150.00	...
1 standard manhole, 20-22 ft. deep	150.00	150.00	...
5 lampholes	15.00	30.00	8.00
945 6-in. Y's on 8-in. pipe	1.00	.84	.85
10 6-in. Y's on 10-in. pipe	1.25	1.25	1.45
40 6-in. Y's on 12-in. pipe	1.50	1.60	1.75
20 8-in. stubs in place	1.00	.84	.45
8,200 lin.ft. 6-in. vit. pipe house connections	.25	.12	.37
950 6-in. vit. pipe specials	.60	.50	.60
60 cu.yd. concrete masonry, class 3	12.00	10.00	9.00
25 M ft.b.m. sheeting left in place	40.00	20.00	37.00
100 lin.ft. 8-in. underdrain	.40	.19	.25
25 cu.yd. gravel refill	3.00	2.50	1.50
200 hours common labor	.60	.50	.50
250 sq.yd. restoring brick roadway	3.00	4.00	2.25
300 sq.ft. restoring brick walks	.10	.30	.20
9,000 sq.ft. restoring cement walks	.15	.20	.20
8,100 sq.ft. restoring stone walks	.14	20	.15
100 lin.ft. restoring curbing	.25	.80	.50
50 cu.yd. cinder filling	3.00	.60	1.00
Extended totals	$75,010	$75,781	$76,797

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., New London—Dredging—U. S. Engr. Office received bids May 28, dredging in Greenwich Harbor, from J. P. Randerson, 51 State St., Albany, N. Y., $33,320; G. W. Sunderlin, 83 Fairfield Ave., Bridgeport, $44,880; C. F. Bickel Co., Inc., 30 Church St., New York City, $46,920. Noted May 8.

★N. J., Lake Denmark—Magazine Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contarct completing magazine storehouses No. 3 and 4, at Naval Ammunition Depot, here, to Speedwell Constr. Co., 22 University Pl., New York City. About $18,500 (45 days). Noted May 29.

★Pa., Phila.—Steam Distributing System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing steam distributing system at Navy Yard, here, to Almiral & Co., 1 Dominick St., New York City. About $212,318 (time as specified). Noted May 8.

★Pa., Phila.—Tunnel—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building tunnel for pipe, here, to E. C. Fish, 704 Real Estate Trust Bldg. About $90,275 (120 days). Noted May 8.

D. C., Wash.—Bridge—Comr. Indian Affairs, Dept. Interior, Wash., received bids May 26 building bridge over Santa Clara River, Shivwits Indian Reservation, Utah, from Omaha Structural Steel Bridge Co., 420 Bee Bldg., Omaha, Neb., $20,000; Steel Constr. Co., 1055 Beck St., Salt Lake City, Utah, $24,828; Monarch Eng. Co., West Colfax Ave. and Larimer St., Denver, Colo., $7394, exclusive of abutments and grading. Noted May 8.

★D. C., Wash.—Paving—Dist. Comrs. Dist. Bldg., let contract paving various streets and avenues, with sheet asphalt, to Cranford Paving Co., 2620 E St., N. W., $45,000. Noted May 29.

D. C., Wash.,—Paving Material—Dist. Comrs., Dist. Bldg., received bids May 21, furnishing cement during fiscal year beginning July 1, 1919 and ending June 30, 1920, from Natl. Mortar Co., 101 M St., N. E., $2.18 per bbl.; Security Lime & Cement Co., Colorado Bldg., $2.84 per bbl.; $.15 per sack, alternate paper packing, $2.49 per bbl., 5% discount 10 days; Rosslyn Steel & Cement Co., Woodward Bldg. cloth sacks, $2.84; bags $.15 $.05 per bbl., discount in 10 days.

Furnishing asphalt paving cement, from Standard Oil Co., Pratt & Commerce St., Baltimore, Md., $18.61 per ton, carload lots; Barber Asphalt Paving Co., Land Title Bldg., Phila., Pa., $40.09 per ton; U. S. Asphalt Refining Co., 90 West St., New York City, $19.90 per ton.

Furnishing sewer brick, from Thornton Fire Brick Co., Clarksburg, W. Va., $33.50 per M.; Leighton Fire Clay Co., McKeesport, Pa., $31 per M.

Furnishing asphalt paving block, (1) 2 x 5 x 12 in.; (2) 3 x 5 x 12 in., from Hastings Paving Co., 25 Broad St., New York City, (1) $95 per M.; (2) $129 per M., f.o.b. Wash.; Atlantic Asphalt Block Co., Inc., 100 Bway., New York City, (1) $100 per M.; (2) $134.50 per M., alternate f.o.b. Wash., (5) $97.25; (6) $120.50.

Furnishing terra cotta pipe, (1) 6 in.; (2) 12 in.; (3) 18 in.; (4) 21 in.; (5) 8 x 6 Y bends; (6) 12 x 6 Y Bends; (7) 18 x 8 in.; (8) 12 x 10 in.; (9) 15 x 10 in.; (10) 15 x 12 in.; (11 10 x 6 in. tees; (12) 12 x 6 in.; (13) 12 x 10 in. tees; (14) 6 in. ⅛ bends; (15) 6 in. ¼ bends; (16) 10 in. ⅛ bends; (17) 10 in. ¼ bends; (18) 12 in. ⅛ bends; (19) 12 in. ¼ bends, **from**

Amer. Sewer Pipe Co., 30 Church St., New York City, (1) $0.18; (2) $0.50; (3) $0.985; (4) $1.48; (5) $1.29; (6) $2.49; (7) $4.62; (8) $2.49; (9) $3.33; (10) $2.33; (11) $1.94; (12) $2.49; (13) $2.49; (14) $0.63; (15) $0.63; (16) $1.47; (17) $1.47; (18) $1.89; (19) $1.89.

East Ohio Sewer Pipe Co., (1) $0.14; (2) $0.50; (3) $1; (4) $2; (5) $1; (6) $2.90; (7) $5.50; (8) $2.90; (9) $3.90; (10) $3.90; (11) $2.30; (12) $2.90; (13) $2.90; (14) $0.54; (15) $0.54; (16) $1.26; (17) $1.26; (18) $2.16; (19) $2.16.

T. Somerville Co., Washington, D. C., (1) $8; (5) $0.75; (14) $0.30; (15) $0.34; (16) $1.10; (18) $140.

Evans Clay Mfg. Co., (1) $0.171 per ft.; (2) $0.60-75; (3) $1.175; (4) $2; (5) $1.064; (6) $2.43; (7) $4.70; (8) $2.43; (9) $3.384; (10) $3.384; (11) $1.596; (12) $2.43; (13) $2.43; (14) $0.684; (15) $0.684; (16) $1.596; (17) $1.596; (18) $2.43; (19) $.43. Noted May 8.

★Va., Hampton Roads—Air and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing high pressure air and water systems at Submarine Base, here, to Almiral & Co., Inc., 2 Dominick St., New York City. About $42,300 (120 days). Noted May 15.

Va., Hampton Roads—Medical Storage Building—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids May 26, building here, (1) (work complete) from H. S. Roberts, 1123 Bway., New York City, (1) $26,100, (90 days); (2) add $4000, (30) days); (3) add $3500. W. P. Thurston Co., 1103 East Main St., Richmond, (1) $28,000, (95 days); (2) $3800, (20 days); (3) $3300. Noted May 8.

Va., Hampton Roads—Motor Generator Sets and Switchboard—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids May 26, installing at submarine base, here. (1) (work complete) from General Electric Co., River Rd., Schenectady, N. Y., (1) $43,750 (150 days); Westinghouse Electric & Manufacturing Co., 803 Hibbs Bldg., Wash., D. C., (1) $47,133 (150 days); (2) $2350. Noted May 8.

Va., Hampton Roads—Steel Water Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids May 26, building 150,000 gal. steel water tank and tower at Naval Operating Base, here, (work complete), from Pittsburgh Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $10,780 (120 days), alternate, $11,580 (120 days); Chicago Bridge Iron Co., 30 Church St., New York City, $13,440, (130 days). Noted May 15.

W. Va., Charleston — Roof Decks — Bureau Yards and Docks, Navy Dept., Wash,. D. C., received bids May 26, building gypsum roof decks at Naval Ordnance Plant, here, (work complete) from Federal Cement Tile Co., 110 South Dearborn St., Chicago, (1) $198,000, (25 to 30 days); (2) $33,600, (10 days); (3) $47,000, (35 days). H. H. Robertson Constr. Co., 511 Wood St., Pittsburgh, Pa., (1) $239,211, (90 days); (1a) $42,413, (35 days); (2) $185,856, (87 days); (2a) $33,307; (3) $53,355, (54 days); (3a) $36,602; (3c) $16,752; (3d) $25,859, (8 days). Keystone Gypsum Fireproofing Corp., 47 West 24th St., New York City, (2) $168,500, (82 days); (2a) $33,000, (13 days). H. W. Johns-Manville, 296 Madison Ave., New York City, (3) $65,191, (5 to 45 days); (3a) $12,950, (18 days); (3b) $44,021, (64 days); (3c) $20,313, (26 days); (3d) $38,268, (44 days). Noted May 15.

★S. C., Charleston—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building fixed ammunition storehouse, here, to H. S. Roberts & Co., 1123 Bway., New York City. About $45,355 (140 days). Noted May 15.

★Fla., Pensacola—Crane—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract installing one 20-ton electric traveling bridge crane, in wet basin boat shed, here, to Chesapeake Iron Wks., Westport, Md., $9464. Noted May 22.

Federal Government Work (Continued)

Ia., Fairport—Laboratory—Comr. Fisheries, Dept. Commerce, Wash., D. C., received bids May 26 building laboratory at Biological Sta., here, from Walsh Constr. Co., 114½ West 3rd St., Davenport, $82,000; J. W. Hopp, 403 Granby Bldg., Cedar Rapids, $84,000; J. Soler, 5th and Cedar St., Davenport, $88,000. Noted May 1.

Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids May 29, building post office, here, (1) limestone; (2) sandstone, from Henry & Hatfield Constr. Co., 120 South Meridan St., Indianapolis, Ind., (1) $68,233, alternate $67,039; (2) $70,230, alternate $69,039; W. O'Neil & Son, Faribault, Minn., (1) $69,217, alternate $68,366; C. E. Goodhan, Chadron, Neb., (1) $76,000; (2) $73,500. Former bids rejected. Noted Apr. 10.

Mont., Hamilton—Road Work—Bureau Pub. Rds., Missoula, received bids May 22, grading 5.1 mi. East Fork Biterroot Nat. Forest Rd., involving 15 acres clearing, 9500 cu.yd. earth and 1000 cu.yd. rock excav., (a) log culverts, (b) corrugated pipe culverts, from E. V. Morrison, Darby, (a) $14,943; (b) $16,227; P. O'Connor, Missoula, (a) $15,076; (b) $16,026; Lord Constr. Co., Hamilton, (a) $14,821; (b) $16,385. Noted Apr. 10 under "Montana."

★Tex., Honey Grove—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building, here, to Cooper & Lund, 142 Market St., Newark, N. J., $42,230. Noted May 29.

★Tex., North Ft. Worth—Helium Production Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building helium production plant, here, to Central Contg. Co., 520 Beatty Bldg., Houston, $448,000 (120 days); also item (17) $1 per cu.ft., (16) $4 per running ft. Noted May 29.

★Idaho—Road Work—Bureau Pub. Rds., Missoula, Mont., let contract grading 10 mi. Galena Summit Sect. Long Valley Highway, to C. Gossi, Caldwell, $46,000; 23 mi. Banks-Smith's Ferry Sect. Long Valley Rd., to Morrison Knudson Co., Broadway, Boise, $140,000.

Idaho, Grangeville—Road Work—Bur. Pub. Rds., Missoula, Mont., received bids May 22, grading (a) 8 mi., (b) 23 mi. Kooskia Lowell Natl. Forest Rd. Project, from Carlson-Norman Co., Realty Bldg., Spokane, Wash., (a) $83,019; (b) $153,347; Rich & Markhus, Prosser, Wash., (a) $87,482; (b) $157,519; Lord Constr. Co., Hamilton, Wash., (a) $95,055; (b) $170,075. Noted May 8.

Idaho, Sand Point—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids May 22, building, here, (a) limestone, (b) sandstone, from W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., (a) $86,000; (b) $88,400; C. E Goodhand, Chadron, Neb., (a) $89,150. Noted Apr. 17.

★Washington—Road Work—Bur. Pub. Rds., Dept. of Agriculture, 628 Post Office Bldg., Portland, Ore., let contract improving 39.5 mi. highway on west side of Glacier Nat. Park, 12 ft. wide, to Carlson-Norman Co., Realty Bldg., Spokane, with concrete culverts and rock abutments, $150,000; metal culverts, $125,000.

Cal., Ft. Bidwell—School—C. Sells, comr. Indian Affairs, Dept. Interior, Wash., D. C., received only bid May 27, building school, here, from W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., $22,470 (160 days). Noted May 8.

P. I., Cavite—Power Plant Equipment—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids May 26, installing here, (1) (work complete) from Babcock & Wilcox Co., North Amer. Bldg., Phila., Pa., (2) $31,721; (2a) $12 per day. General Electric Co., (River Rd., Schenectady, N. Y.,) (3) $47,150 alternate; $47,400; (3a) $20 per day, Westinghouse Electric & Mfg. Co., Southern Bldg., Wash., D. C., (3) $47,366.50, (150 days); (3a) $25 per day; (4) $32,768, (150. days) (4a) $25 per day; (5) $1875. C. C. Moore & Co. submitted bid at Mare Island, Cal. Amounts not wired to Bureau, Wash., D. C. Noted May 15.

Miscellaneous

PROPOSED WORK

Playground — Charlestown (Boston, P. O.), **Mass.**—City having plans prepared improving Winthrop playground. About $15,000. C. E. Putnam, 33 Beacon St., Boston, engr.

Retaining Wall—Providence, R. I.—See "Industrial Works."

Pavilion—New Haven, Conn.—See "Buildings.'

Drydock—Oswego, N. Y.—Hinckly Towing Co. having plans prepared for drydock, marine railways and ship repair yard here. About $100,000.

Subway—Erie, Pa.—City plans to build Division St. Subway. About $27,000. New York Central R. R. will build abutments. E. G. Lynch, city engr.

Garbage Wagons—Danville, Ill.—City plans to purchase several horse drawn or motor driven garbage dump wagons. H. H. Edwards, city engr.

Pavilion — Great Falls, Mont. — Live Stock Assn. plans to build pavilion for show and selling purposes. About $25,000.

Oil Tanks—Miles City, Mont.—Montana Oil Co. plans to build one 12,000 gal. and two 16,000 gal. capacity oil tanks. About $15,000.

Telephone Lines—Miles City, Mont.—L. P. Teague is interested in company being formed to build telephone lines from here to Jordan, Broadus and Ashland. About $100,000.

Natatorium—Portland, Ore. — J. W. Couglin plans to build 100 x 100 ft. concrete natatorium to include 54 x 75 ft. tank, on Bway. and Madison St. About $50,000. W. W. Lucius, Lewis Bldg., engr.

Wharf—Newport Beach, Cal.—Newport Beach syndicate having plans prepared by P. Kressley, engr., Newport Beach, for 60 x 200 ft. timber wharf.

BIDS DESIRED

Castings, etc.—New York, N. Y.—Until June 11, by N. J. Hayes, comr. water supply, gas and electricity, Municipal Bldg., furnishing and delivering, unloading, stacking and storing, c.i. valves, valve box castings, valves, double nozzle fire hydrants.

Road Material—Ebensburg, Pa.—Until June 9, by H. T. Jones, controller Cambria Co., furnishing 15,000 gal. surface treatment for macadam roads.

Bakery Ovens—Lorain, O.—Essig Baking Co. receiving bids building 2 rein.-con., steel and brick ovens, rein.-con. flooring, concrete foundation. About $30,000. Noted May 15.

Asphalt—St. Paul, Minn.—Until June 9, by H. W. Austin, city purchasing agt., City Hall, furnishing 40 tons Trinidad asphalt.

Grain Tanks—Carthage, Mo.—Until June 15, by McDaniel Milling Co., building ten 30 x 120 ft. and four 30 x 100 ft. rein.-con. tanks. About $60,000. Architect not selected.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Dock, etc.—Chelsea (Boston, P. O.), **Mass.**—Winnisimmet Shipyard Co. will build new rein.-con. marine railway dock and repair basins. About $400,000. Work will be done by day labor. W. R. Green, pres.

★Tank—New Britain, Conn.—Landers, Frary & Clark, Commercial St., let contract building 6 x 28 ft. brick and rein.-con. tank and 14 x 23 ft. pump house, to J. H. Grozier Co., 721 Main St., Hartford. About $14,000.

★Manholes, etc.—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering 100 casting standard manhole heads, 600 of standard manhole covers, 200 standard receiving basin hoods and plates, 100 standard receiving basin covers, 100 flat corner grate bars, 75 flat straight grate bars, etc., to J. Fox & Co., 253 Bway., $7374. Noted May 15.

★Paving Material—New York, N. Y.—H. Bruckner, pres. Bronx Boro., let contract furnishing and delivering 200,000 gal. asphaltic road oil, to Standard Oil Co., 26 Bway., $9430. Noted May 1.

★Piles, etc. St. George, S. I., N. Y.—J. H. Delaney, comr. plant and structures, Municipal Bldg., New York City, let contract furnishing and delivering piles to St. George Terminal of Staten Island Ferry, E. R. Mill & Lumber Co., $32,194; hardware, to L. C. Hardy & Co., 114 Liberty St., New York City, $3023. Noted May 29.

★Platforms—Phila., Pa.—Dept. City Transit, 12-- Chesnut St., let contract furnishing and erecting platforms and connecting stations on Kensington Ave., at Allegheny Ave. and at Somerset St., Contr. No. 531, to F. J. Boas, 201 North Broad St.; cost $105,850. Noted May 15.

Water Pipe and Specials—Springfield, O.—City received bids May 27 furnishing 120 tons of (a) 6 in. pipe, (b) 16 in. pipe, (c) specials, from Amer. Cast Iron Pipe & Fdry. Co., Birmingham, Ala., (a) $50.80 per ton, (b) $51.80 per ton, (c) $105.8[illegible] per ton; Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, Va., (a) $50.80; U. S. Cast Iron Pipe Co., East Burlington, Burlington, N. J., (a) $51.

★Incinerator—Danville, Ill.—City let contract building incinerator plant to consist of two units of Superior garbage furnace, to J. W. Stokes. About $20,000.

★Dry Dock—Oakland, Cal.—Moore Shipbuilding Co., foot Adeline St., will build dry dock and 2 marine railways. About $2,500,000. Work will be done by day labor.

★Wharf—San Pedro, Cal.—Union Oil Co., 6th and Spring Sts., Los Angeles, will build 42 x 150 ft., creosoted pile wharf, "U" shaped, with legs 15 x 90 ft. each, to include timber deck and oil pipe lines. About $19,000. J. R. Reed, c/o owner, engr. Work will be done by day labor.

Tom L. Green, Consulting Engineer, Miami, Okla., would like to receive catalogs and prices from manufacturers of flush tank siphons, intermittent disposal plant siphons, sludge pumps, manhole covers and steps, sewage and water filtration equipment, oil and gas engines, pumps, motors and compressors, air receivers and other air lift equipment; also information pertaining to motors, starters, generators, panel boards and other electric equipment necessary to the installation of electric pumping and light plants.

Claiborne, Johnston & Co., Inc., 910 Garrett Bldg., Baltimore, Md., would like to receive catalogs and prices from manufacturers of equipment and supplies for engineering contractors.

Captain J. Neale, Civil Engineer-in-Chief's Dept., Room 1004, Admiralty, London, S. W. 1, England, would like to receive catalogs and prices from American manufacturers of engineering equipment and supplies.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 17.

Construction, Heating, etc.

Ossining, N. Y.

CONSTRUCTION WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8); and Pump House and Reservoir;

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

ELECTRIC WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.; at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: May 14, 1919.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., May 21, 1919.—Sealed proposals will be opened in this office at 3 p.m., June 18, 1919, for furnishing the labor required in the construction complete, with materials that will be furnished by the Government, of the United States Post Office Building at Clinton, S. C. Drawings and specifications may be obtained from the custodian of the site at Clinton, S. C., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Aoting Supervising Architect.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: June 10.

Highway Construction

Schoharie Co., N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 10, 1919, for Contract 202, for the construction of about 7¾ miles of highways, including clearing, grading, draining, building of culverts and guard-rails, around the Schoharie reservoir, in the Towns of Gilboa and Conesville, Schoharie county, Prattsville, Greene county, and Roxbury, Delaware county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Comimssioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: June 10.

Cast-Iron Pipe

THE CORPORATION OF WATERFORD, IRELAND

Tenders are hereby invited by the Corporation of the City of Waterford, Ireland, from American manufacturers for the supply of 13,000 lin.yd. of 15 in. diameter cast iron water pipes, to stand a vertical pressure of a column of water of 300 ft. The pipes to be delivered at the Quays, Waterford. Waterford is a free port.

Envelopes containing quotations to be endorsed "Water Pipes" and addressed to Thomas F. J. Higgins, Esq., Town Clerk, Town Hall, The Mall, Waterford, Ireland.

Dated this 2nd day of May, 1919.

OFFICIAL PROPOSALS

Bids: June 16.

Hydro-Electric Power Plant Construction

Marquette, Michigan.

Sealed proposals will be received by the City Commission of the City of Marquette at the office of the City Purchasing Agent, until 12 o'clock noon, June 16, 1919, for furnishing all equipment, tools, labor and material required for constructing the following specified improvements, such proposals to be publicly opened and read:

1. A hydroelectric power house, 40 x 97 of concrete and brick, including tail-race excavation in earth and rock;
2. A reinforced concrete surge tank thirty (30) feet diameter and sixty (60) feet high, including foundation;
3. Concrete foundations with timber saddles for a woodstave pipe line 90 in. inside diameter, 1800 ft. long, and 78 in. inside diameter, 285 ft. long.

Bids are to be submitted in two (2) ways:

First, on the work complete, contractor furnishing all materials.

Second, on labor and equipment, the City to furnish all materials, delivered f.o.b. Marquette, Michigan.

Separate proposals will be received for the power house building, embracing the superstructure above the main floor finished complete.

Proposals will be received for the foundation for the penstocks and separately for foundation of power house carried up to top of main floor ready to receive the brick superstructure and also including excavation for the tail-race.

Plans and specifications by Thomas W. Orbinson, Consulting Engineer, Appleton, Wisconsin, are on file at the office of Charles Retallic, Superintendent of the Department of Light and Power, Marquette, Michigan. Upon request, either or both sets will be mailed to prospective bidders on receipt of $25 for each set, which amount will be refunded on their return in good order.

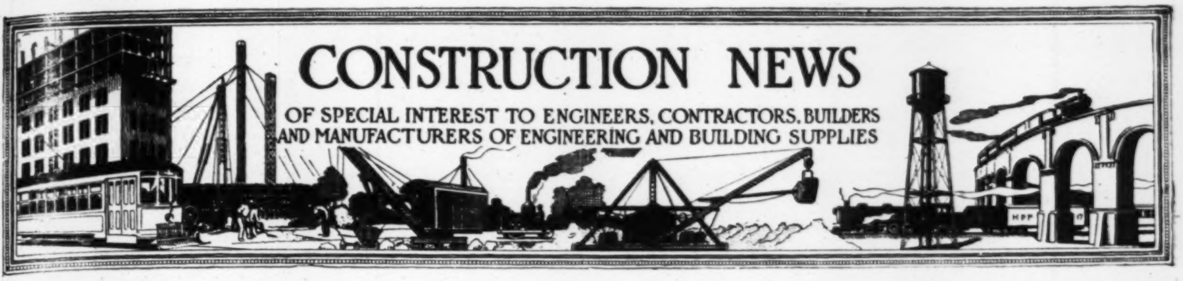
Proposals for said improvement must be made in separate, sealed envelopes, marked so as to indicate improvement referred to and must be accompanied by a certified check or draft in the sum of $500, payable to the City of Marquette, as a guarantee that if bid is accepted, contract will be entered into and its performance properly secured.

The Commission reserves the right to accept or reject any or all bids.

Separate proposals will be received from pipe manufacturers for furnishing, erecting and connecting up the woodstave pipe.

CITY OF MARQUETTE.
J. F. ANDERSON,
City Purchasing Agent.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., 2 o'clock P.M., June 12, 1919, for furnishing and placing rip rap stone at Craney Island Light Station, Va. Information upon application to the above Supt.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 15	Duluth, Minn.	May 29
June 16	Freeport, Pa. Adv. June 5 and 12.	June 12
June 18	Dearborn, Mich. Adv. June 12.	June 12
June 18	Beggs, Okla. Adv. May 29 and June 5.	June 5
June 18	Dearborn, Mich.	June 12
June 19	Gilboa, N. Y. Adv. June 5 and 12.	June 5
June 23	Lusk, Wyo. Adv. June 12.	June 12
June 24	Toledo, O.	June 5
June 25	Fountain Inn, S. C. Adv. June 5 and 12.	June 12
June 26	Morris Plains, N. J.	June 12
July 16	Decorah, Ia.	June 12

SEWERS

Bids Close		See Eng. News-Record
June 14	Brookhaven, N. Y.	May 29
June 14	Port Jefferson, N. Y. Adv. May 29 and June 5.	June 5
June 15	Kenora, Ont.	June 12
June 16	St. George, S. I., N. Y.	June 12
June 16	Lansing, Mich. Adv. June 12.	June 12
June 17	Portland, Me. Adv. June 5.	June 5
June 17	Oklahoma City, Okla.	June 12
June 18	Long Island City, N. Y.	June 12
June 19	Empro, Ont.	June 12
June 19	New York, N. Y.	June 12
June 20	Roselle Park, N. J. Adv. June 12.	June 12
June 23	Lansing, Mich. Adv. June 12.	June 12
June 23	Dundas, Ont.	June 12
June 24	Toledo, O.	June 5
June 25	Lima, O. Adv. June 5 and 12.	June 5
June 25	Jamesburg, N. J.	June 12
June 26	Greenwich, Conn. Adv. June 12.	June 12
June 27	Sherburn, Minn.	June 12
June 27	Deshler, Neb.	June 12
July 1	Wakefield, Neb.	June 12

BRIDGES

Bids Close		See Eng. News-Record
June 16	Manitowoc, Wis.	May 29
June 16	Valdosta, Ga. Adv. May 22, 29 and June 5.	May 22
June 17	Pineville, W. Va. Adv. June 5.	June 5
June 18	Red Oak, Ia.	June 5
June 19	Harrisburg, Pa. Adv. May 29.	May 29
June 20	Manitowoc, Wis.	June 12
June 20	Salem, Ore.	June 12
June 23	Osceola, Mo.	May 29

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 13	Ebensburg, Pa.	June 5
June 13	Hinton, W. Va.	May 22
June 13	Maine	June 12
June 14	Racine, Wis.	June 12
June 14	Sheboygan, Wis.	June 12
June 14	Scranton, Pa.	June 12
June 15	North Braddock, Pa.	June 12
June 15	Beaver Crossing, Neb.	May 29
June 16	Indianapolis, Ind.	June 12
June 16	Elk River, Minn.	May 22
June 16	Fayetteville, Ark. Adv. June 5 and 12.	May 29
June 16	Osceola, Neb.	June 12
June 16	Ebensburg, Pa.	June 5
June 16	Dublin, Ga.	June 5
June 16	California	June 5
June 16	Berlin, Wis.	June 12
June 16	South Orange, N. J.	June 12
June 16	Union, N. J.	June 12
June 16	Ainsworth, Neb.	June 12
June 16	Banham, Tex.	June 12
June 16	Sheboygan, Wis.	June 12
June 16	Irvington, N. J.	June 12
June 16	Arkansas	June 12
June 16	Chicago, Ill.	June 12
June 17	Cincinnati, O.	June 12
June 17	Britt, Ia.	June 12
June 17	Murfreesboro, Tenn.	June 12
June 17	Chester, Pa.	June 12
June 17	Humboldt, Neb.	June 12
June 17	Oklahoma City, Okla.	June 12
June 17	Jersey City, N. J.	June 12
June 17	Virginia	June 12
June 17	Buffalo, N. Y.	June 12
June 17	Ft. Collins, Colo. Adv. June 12.	June 12
June 17	Plymouth, Wis.	June 12
June 17	Henderson, N. C.	June 5
June 17	Sabetha, Kan.	June 12
June 17	Massachusetts	June 12
June 17	Enumclaw, Wash.	June 12
June 17	New York Adv. June 5 and 12.	May 29
June 17	Pennsylvania	May 29
June 17	Elbow Lake, Minn. Adv. June 5 and 12.	May 22
June 17	Luzerne, Minn.	May 22
June 17	Plymouth, Wis.	May 29
June 18	Helena, Mont.	June 12
June 18	Marion, Kan.	June 12
June 18	Baltimore, Md.	June 12
June 18	Pratt, Kan.	June 12
June 18	Moorehead, Minn.	May 22
June 18	New Mexico	May 29
June 18	Massachusetts	June 5
June 18	Illinois	June 5
June 18	Red Oak, Ia.	June 5
June 18	Little Falls, Minn.	June 5
June 19	Port Huron, Mich.	June 12
June 19	Attleboro, Mass.	June 12
June 19	Hampton, Ia. Adv. June 12.	June 12
June 19	Chicago, Ill.	June 12
June 19	Little Falls, Minn.	May 22
June 19	Junction City, Kan.	May 22
June 19	Brainerd, Minn.	May 29
June 19	Pittsburgh, Pa.	June 5
June 19	St. Edward, Neb.	June 5
June 19	Winfield, W. Va.	June 5
June 19	Pittsburgh, Pa.	June 5
June 19	Junction City, Kan.	June 5
June 20	Harrisonville, W. Va.	May 22
June 20	Newton, Ia.	June 12
June 20	Indianapolis, Ind.	May 29
June 20	Sydney, Ia.	June 5
June 21	Indianapolis, Ind.	May 29
June 21	Indianapolis, Ind.	June 5
June 21	West Allis, Wis.	June 12
June 21	Montreal, Que.	June 12
June 23	Wichita, Kan.	June 5
June 23	Jackson, Tenn.	June 5
June 23	Toledo, O.	June 5
June 23	Coatesville, Pa. Adv. June 12.	June 12
June 23	Geneva, N. Y. Adv. June 12.	June 12
June 23	North Adams, Mass. Adv. June 12.	June 12
June 23	California	June 12
June 23	Martinsburg, W. Va.	June 12
June 23	Duluth, Minn.	June 12
June 24	McPherson, Kan.	June 12
June 24	Grand Rapids, Minn.	June 12
June 24	McCook, Neb.	June 12
June 24	Marshall, Minn.	June 12
June 24	Washington	June 12
June 24	Greensburg, Pa.	June 12
June 24	Indianapolis, Ind.	June 12
June 24	Pennsylvania Adv. June 5 and 12.	June 12
June 24	New Mexico	May 29
June 24	Massachusetts	June 5
June 25	Washington	June 12
June 25	Athens, Ala.	June 12
June 25	Reading, Pa. Adv. June 12.	June 12
June 25	Trenton, N. J.	June 12
June 25	Aberdeen, Wash.	June 12
June 25	Madison, Minn.	June 12
June 26	Jersey City, N. J.	June 12
June 26	Arkansas Adv. June 12.	June 12
June 27	Hiawassie, Ga.	June 5
June 27	Indianapolis, Ind.	June 5
June 27	Aberdeen, Wash.	June 5
June 27	Litchfield, Minn.	June 12
June 27	Ohio	June 12
June 28	Litchfield, Minn.	June 12
June 28	East Liverpool, O.	June 12
June 28	Fairmont, W. Va.	June 12
June 30	Brunswick, Ga. Adv. June 5.	June 5
June 30	Kearney, Neb.	June 12
June 31	Salt Lake City, Utah	June 5
July 1	Marshall, Ark.	May 22
July 1	Benkelman, Neb.	June 12
July 1	New York Adv. June 12.	June 12
July 2	Grand Rapids, Minn.	June 12
July 2	Burlington, N. J. Adv. June 12.	June 12
July 2	Hayes Center, Neb.	June 12
July 3	Stockville, Neb.	June 12
July 5	Omaha, Neb.	June 12
July 5	Brunswick, Ga. Adv. June 5 and 12.	June 12
July 7	Indianapolis, Ind.	June 5
July 8	Elkins, Va. Adv. June 12.	June 12

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
June 16	Dover, Del. Adv. June 12.	June 12
June 17	Burlington, Ia. Adv. May 29 and June 5.	June 5
June 17	Manahawkin, N. J.	June 12
June 18	Portland, Ore.	June 12
June 18	Beaufort, N. C.	June 12
June 21	Thornwell, La.	June 12
June 25	Jackson, Tenn.	June 12
July 1	Edwardsville, Ill.	May 15

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
June 15	Manitowoc, Wis.	May 29
June 15	Sheboygan, Wis.	May 29
June 15	Milwaukee, Wis.	June 5
June 16	Marquette, Mich. Adv. May 29 and June 5.	June 5
June 16	New Orleans, La.	May 22
June 16	Reading, Pa.	June 12
June 30	Port Arthur, Ont.	June 12
July 1	Shawenegan Falls, Que.	June 12
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
June 14	Willard, Minn.	June 12
June 15	Anoka, Minn.	May 8
June 15	Rosebud, Tex.	June 5
June 15	Ranger, Tex.	June 5
June 15	International Falls, Minn.	June 12
June 15	Willmar, Minn.	June 12
June 16	Camden, N. J.	June 5
June 16	Los Angeles, Cal.	June 5
June 16	Wichita Falls, Tex.	June 12
June 16	Columbus, O.	June 12
June 16	Welland, Ont.	June 12
June 16	Moose Lake, Minn.	June 12
June 17	Newark, N. J.	June 12
June 17	Jersey City, N. J.	June 12
June 17	Wilmar, Minn.	June 12
June 17	Morenci, Ariz.	June 5
June 17	Ossining, N. Y. Adv. May 22, 29 and June 5.	May 22

Bids Close		See Eng. News-Record
June 17	Union Hill, N. J.	May 29
June 20	New York, N. Y.	June 12
June 20	Clinton, S. C.	June 12
June 21	Glen Lake, Minn.	June 12
June 23	Camden, N. J.	June 12
June 23	Newark, N. J.	June 12
June 23	Brighton, Colo.	June 12
June 23	Englewood, Colo.	June 12
June 24	Ossining, N. Y. Adv. June 12.	June 12
June 25	Two Rivers, Wis.	June 12
June 26	San Jose, Cal.	June 12
June 27	Russell, Minn.	June 12
July 1	Austin, Minn.	May 22
July 1	Bimidji, Minn.	June 12
July 1	Middletown N. Y.	June 12
July 1	Youngstown, Alta.	June 12
July 1	Raymond, Alta.	June 12
July 2	Huntington, W. Va. Adv. May 29, June 5 and 12.	May 29
July 2	Fargo, N. D. Adv. June 5 and 12.	June 12
July 4	West Bethlehem, Pa.	June 12
July 15	Fraserville, Que.	June 12
Aug. 1	Kenosha, Wis.	May 15

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
June 13	Furnaces — Washington, D. C.	June 5
June 16	Dredging — New York, N. Y. Adv. May 22, 29, June 5 and 12	May 22
June 16	Boiler—Cairo, Ill.	May 29
June 16	Boiler—Cincinnati, O.	May 29
June 18	Jetty Repairs—Galveston, Tex.	May 29
June 18	Dredging — Spec. 3898 — Paris Island, S. C.	June 5
June 18	Radio Building—Spec. 3902 —Cayey, P. R.	May 29
June 18	Post Office—Clinton, S. C. Adv. May 29 and June 5.	May 29
June 18	Buildings — Spec. 3908 — Charleston, S. C.	June 5
June 18	Crane Runaways — Spec. 3678—New York, N. Y.	June 5
June 18	Additions to Ship Fitters—Spec. 3920—Boston, Mass.	June 5
June 18	Building, Railroad, Sewer, Shop and Water Works System — Spec. 3909 — Hampton Roads, Va.	June 5
June 18	Storehouses—Spec. 3916—Quantico, Va.	June 12
June 18	Roads and Walks—Spec. 3881—Cape May, N. J.	June 5
June 18	Pavement — Spec. 3913 — Washington, D. C.	June 5
June 18	Pier—Spec. 3918—Hampton Roads, Va.	June 5
June 18	Bridge — Spec. 3907 — Hampton Roads, Va.	June 5
June 18	Wharf — Spec. 3910 — Quantico, Va.	June 5
June 18	Dredge—Spec. 3898—Port Royal, S. C.	June 5
June 19	Levee Work—St. Louis, Mo. Adv. May 22, 29 and June 5.	May 22
June 19	Wall—Washington, D. C.	June 5
June 19	Lock and Abutment — Louisville, Ky. Adv. May 22, 29, June 5 and 12.	June 5
June 20	Foundation — Baltimore, Md.	June 12
June 20	Boilers—Memphis, Tenn. Adv. May 22, 29 and June 5.	May 22
June 20	Boiler—New Port News, Va.	June 5
June 23	Steel, Forgings, Castings, etc.—Wheeling, W. Va. Adv. May 29, June 5 and 12	May 29
June 23	Dredging—New York, N. Y. Adv. May 22, 29, June 5 and 12.	May 29
June 23	Road Work — Holbrook, Ariz.	June 12
June 23	Sewage Disposal System — Washington, D. C. Adv. June 5.	June 5
June 24	Dredging—Portland, Me. Adv. May 29, June 5 and 12.	May 29
June 25	Piles and Lumber—New Orleans, La. Adv. May 29, June 5 and 12.	May 29
June 25	Cranes—Spec. 3933—New York, N. Y.	June 5
June 25	Elevators — Spec. 3934 — New York, N. Y.	June 5
June 25	Pattern Shop—Spec. 3478—Philadelphia, Pa.	June 5
June 25	Administration Building, Roads and Walks—Spec. 3922—San Diego, Cal.	June 5
June 25	Hospital — Spec. 3931 — Pearl Harbor, H. T.	June 12
June 25	Assembly Shop—Spec. 3927 —Philadelphia, Pa.	June 12
June 25	Pipe Line—Spec. 3939—San Diego, Cal.	June 12
June 25	Tank and Tower—Spec. 3935 —Paris Island, S. C.	June 12
June 25	Tank and Tower—Spec. 3937 — Coddington Point, R. I.	June 12
June 25	Tank Tower—Spec. 3936 —Hampton Roads, Va.	June 12
June 25	Rebuilding Shipbuilding Ways—Spec. 3590 — New York, N. Y.	June 5
June 25	Distributing System—Spec. 3921—San Diego, Cal.	June 5
June 25	Bulkhead — New Orleans, La. Adv. May 29, June 5 and 12.	May 29
June 27	Air Compressors—Florence, Ala.	May 29
June 27	Dredging—Newport, R. I. Adv. May 29, June 5 and 12.	June 5
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La. Adv. May 29, June 5 and 12.	May 29
June 30	Building Wing — West Point, N. Y. Adv. June 5 and 12.	June 12
June 30	Revetment Repairs — Milwaukee, Wis.	June 12
July 1	Post Office—Towah, Wis.	June 5
July 1	Fuel Oil — Washington, D. C.	June 12
July 2	Dredging—New York, N. Y. Adv. May 29, June 5 and 12.	June 5
July 7	Steel—Philadelphia, Pa. Adv. June 5 and 12.	June 5
July 7	Locks and Dam—Pittsburgh, Pa. Adv. June 12.	June 12
July 8	Gate—Operating Machinery —Cincinnati, O. Adv. June 12.	June 12
July 8	Post Office — Pittsburg, Tex.	June 12
July 8	Lighthouse — Philadelphia, Pa.	June 12
July 9	Post Office — Montevideo, Minn. Adv. June 12.	June 12

MISCELLANEOUS

Bids Close		See Eng. News-Record
June 15	Grain Tanks — Carthage, Mo.	June 5
June 16	Motors and Pumps—Galesburg, Ill. Adv. June 12.	June 12
June 16	Electrifying—Lackawanna, N. Y. Adv. June 12.	June 12
June 16	Water Meters—St. Paul, Minn.	June 12
June 17	Sewer Pipe—Chipley, Fla.	June 12
June 18	Pier, etc.—Chaumont, N. Y.	May 29
June 20	Pipes and Special Castings —Akron, O.	June 12
June 20	Paving Brick—Carrick, Pa.	June 12
June 27	Power Plant Equipment — Los Angeles, Cal.	June 12
June 30	Lever, Bridge — Junction, Kan.	June 12
June 30	Flood Prevention Project —Lebanon, Pa. Adv. June 12.	June 12
July 2	Water Tube Boilers and Stokers and Radial Brick Chimney—Lorain, O.	June 12

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton—Bd. Pub. Wks. soon receives bids laying new water mains in Snow, Summer, Cleveland and Saratoga Aves. About $22,000. J. A. Giles, comr.

Pa., McKeesport—City defeated $550,000 bonds for rehabilitation of waterworks system. Noted Mar. 20.

S. C., Andrews—City plans election to vote on $75,000 bonds to lay water mains in principal streets, bore deep wells, install well pumps and build pumping station. Tomlinson Eng. Co., Loan & Exch. Bank Bldg., Columbia, engrs.

Fla., Pensacola—City voted $15,000 bonds to extend and improve water system. J. L. Sweeney, city engr.

Ky., Louisville—Louisville Water Co., 435 South 3rd St., plans to improve waterworks system.

O., Springfield—City Manager recommended that city commission build 2300 ft 42 in. c. i. or steel conduit to increase water supply. About $38,000.

Mich., Grosse Pointe—Village soon lets contract furnishing material and laying 2120 ft. 6-in. water mains in University Pl., Kercheval Ave. and Cadieux Rd. M. L. Brown & Son, 821 Chamber of Commerce, Detroit, engrs.

Ill., East Moline—City plans election to vote on bonds to build new pumping station on 11th St. and 3rd Ave., to include 2 pumps for pumping sewage. About $28,000.

Wis., Racine—City soon lets contract laying water mains and sewers in Prospect St., Blake and Lake Aves., Hilker and Davis Places.

Neb., Indianola—City voted $32,000 bonds to extend waterworks system. Grant, Fulton & Letton, 505 Bankers Life Bldg., Lincoln, engrs.

N. D., Leeds—City plans to build 500,000 gal. steel tank on 100 ft. steel tower, 100,000 gal. rein.-con. reservoir and settling basin, brick pump house, 100 gal. per minute pump, with engine, 21 blocks of 6 in. c. i. mains, 14 fire hydrants, etc.

Wyo., Sheridan—City plans to install over 2200 water meters. About $60,000. H. M. Huntington, Sheridan, engr.

Cal., Haywood—City had estimate made by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for water system, to include wells and distributing system of heavy iron pipe, pumps, standpipes, etc. About $228,000. Election will be held to vote on bonds for project.

Ont., York—Township soon lets contract building 35,204 ft. 6 in. c.i. water mains in various streets. About $125,000. F. Barber, 40 Jarvis St., Toronto, engr.

BIDS DESIRED

N. Y., Lackawanna—See "Miscellaneous."

N. J., Morris Plains—Until June 26, by Dept. of Architecture, 142 West State St., Trenton, laying 6-10 in. water mains at State Hospital here. About $10,000. F. H. Bent, engr.

Pa., Freeport—Until June 16, by Freeport Water Works Co., completing concrete and structural work in connection with proposed water plant. J. R. Taylor, mgr. L. Hudson, 801 House Bldg., Pittsburgh, engr.

S. C., Fountain Inn—Until June 25, by Bd. Pub. Wks., building steel water tower and tank for waterworks system. Capacity of tank to be 50,000 gal. and height of tower 110 ft. from top of foundation piers to floor of balcony. D. M. Garrett, chn.; advertised in this issue.

Mich., Dearborn—Until June 18, by F. C. Roamer, village clk., building water mains involving 41,850 ft. 6-10 in. c.i. pipe and necessary valves, fittings and hydrants; advertised in this issue.

Ia., Decorah—Until July 16, by City Council, laying 11,400 lin.ft. 4 in. water mains, with necessary connections, valves, etc., also connecting with old mains where they intersect (contractor to furnish labor, lead and oakum). Bids will also be received for relaying 600 ft. 10 in. vitr. sewer pipe. M. D. Wells, city clk.; advertised in this issue.

Wyo., Lusk—Until June 23, by Town Council, furnishing and installing 24,130 ft. 4-10 in. c.i. pipe, Class "B" American Waterworks Standard. Hydrants and valves will be furnished by town, separate bids on which will be received at same time as foregoing; 45 fire hydrants, 60 4-14 in. valves, with valve boxes, American Waterworks Standards will be required. R. F Gray, town engr.; advertised in this issue

Waterworks (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Salem—City received bids June 6, laying 1200 ft. 36 in. c. i. pipe, from G. T. Rendle Co., East Boston, $29,281, T. A. Scott Co., 113 State St., Boston, $29,610, Boston Dredging Co., 172 Condor St., East Boston, $38,715. Noted May 29.

★**Conn., Hartford**—Bd. Contr. and Supply, Municipal Bldg., let contract building portion of Gully Brook Conduit, to A. W. Bryne, Hartford, $42,244. Noted May 29.

N. Y., Central Islip—State Hospital Comn., Capitol, Albany, received lowest 3 bids June 4, for waterworks system to serve additional buildings to be constructed at Central Islip State Hospital, here, from Baker, Dunbar, Allen & Co., Phila. Stock Exch. Bldg., Phila., $52,000, H. E. Fox Constr. Co., 81 East 125th St., New York City, $54,900, L. E. Kelly, New York City, $56,000. Noted May 15 under "Buildings."

N. Y., Newark—City received lowest 3 bids June 2, building gravity water supply system, Div. 1, earthen dam and dykes, from Lupfer & Remick, Ellicott Sq., Buffalo, $66,918, Brown, Low & Low Bros., $68,425, Foundation Co., 233 Bway, New York City, $69,067; Div. 3, laying (a) bell and spigot pipe, (b) universal pipe, from J. F. Leary Constr. Co., Cutler Bldg., Rochester, (a) $31,125, (b) $31,125; Foundation Co., 233 Bway., New York City (a) $38,280, (b) $24,474; B. Pizzimento, (a) $4,429, (b) $37,130; Div. 4, furnishing and delivering (a) bell and spigot c.i. pipe and specials, (b) universal pipe, from United States Cast Iron Pipe & Fdry. Co., 71 Bway., New York City, (a) $85,405, Warren Fdry. & Machine Co., 11 Bway., New York City, (a) $88,873, Camden Iron Wks., Camden, N. J., (a) $90,832, Universal Fdry. Co., (b) $115,707. Noted May 15.

★**N. Y., Newark**—City let contract building Div. 2 of gravity water supply system, filtration plant, to Norwood Eng. Co., $24,960. Noted May 15.

★**N. Y., New Hampton**—City let contract furnishing all labor and material for driving well, to A. J. Conlon, North 10th St., Newark, N. J. About $6500.

★**N. Y., New York**—J. H. Hayes, comr. water supply, gas and electricity, Municipal Bldg., let contract furnishing, delivering and laying 12-in. water main under East River from East 140th St. to North Brother Island, to Masterson Constr. Co., New York City. About $6900. Noted Apr. 10.

N. Y., Poughkeepsie — State Hospital Comn., Capitol, Albany, received lowest 3 bids building additions and altering water supply system, to include additional filter, changing watermain, building reservoir, etc., at Hudson River State Hospital, here, from Baker-Dunbar-Allen Co., Phila. Stock Exch. Bldg., Phila., $52,000; H. E. Fox Constr. Co., 81 East 125th St., New York City, $54,700; L. E. Kelly, 189 Montague St., Brooklyn, $56,000 Noted May 22.

★**N. J., Jersey City**—City let contract laying 72 in. steel water pipe between Boonton Reservoir and here, Sect. 1, duplicating existing syphons between Boonton reservoir and Passaic River at Lyndhurst, to J. T. Brady Co., 103 Park Ave., New York City. Sect. 2 not awarded yet. Noted June 5.

★**Cal., Avalon**—Santa Catalina Island Co., Pacific Electric Bldg., Los Angeles, let contract building 300,000 gal. concrete reservoir, grading 8 streets and building cement sidewalks on Metropole Ave., to Tyron & Brain, Merchants Trust Bldg., Los Angeles.

Sewers

PROPOSED WORK

Mass., Revere (Boston P. O.)—City having plans prepared for building sewer extensions to present system. About $15,800. J. Lockhart, city engr.

R. I., Pawtucket—City appropriated $83,350 bonds to build sewers in various streets. I. Gill, comr. pub. wks.

Conn., New London—City appropriated $200,000 bonds to build sewers in various streets. G. K. Crandall, city engr.

N. Y., Lake Placid—Village plans election soon to vote on $19,000 bonds to build 2700 ft. 15 in. sewer in Main St. H. T. Hull, village engr.

N. Y., Schenectady—City plans to issue $60,000 bonds to build surface water sewers in Palmer and Livingston Aves., Eastern Parkway and Union St.; sanitary sewers in Union and Wendell Aves., Nott and Summer Sts. L. Sebring, city engr.

N. J., Belleville—City plans to build Sect. 7 of Sewerage System. About $10,000. F. T. Shepard, city engr.

N. J., Lyndhurst—Bd. Comrs. plans to build 2 storm water drains in northwesterly section of town. About $35,000. T. F. Bowe, town engr.

Pa., Erie—City having plans prepared for 2 mi. Garrison Run Sewer, 1st section to consist of 6 ft. segmental block sewer. About $103,000. F. G. Lynch, city engr.

Pa., Wilkinsburg—Boro. soon lets contract building sewers in sections of Penn Ave., Anderson St., and Wallace and North Aves., involving 4831 ft. 8-24 in. pipe and 13 manholes; also constructing concrete culvert to enclose Nine Mile Run from southerly end of present culvert on Biddle Ave., southwardly a distance 390 ft., to connect same with Lamar Ave. culvert (about 15 ft. long), involving 405 ft. 10 and 12 ft. concrete culvert pipe. Frease & Spurling, 510-511 Carl Bldg., engrs.

W. Va., Parkersburg—City plans election to vote on $100,000 bonds to build sewage disposal plant.

Fla., Pensacola—City voted $50,000 bonds to extend and improve sewerage and drainage system. J. L. Sweeney, city engr.

O., Dayton—Montgomery Co. having plans prepared building sanitary sewerage system in Mt. Auburn Sewer Dist. F. Cellarius, 1001 Commercial Bldg., engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract furnishing all labor and material (except iron manhole rings and covers), building and finishing complete, together with backfilling, lateral sewers No. 3076, No. 3131, No. 3134, No. 3140, No. 3141, No. 3144, No. 3152, No. 3153, No. 3154, No. 3155, No. 3156, No. 3157, involving 30,858 ft. 12-24 in. vitr. crock sewers, 71 brick manholes, etc. C. W. Hubbell, city engr.

Mich., Ecorse—City having plans prepared by R. A. Murdock, engr. Ecorse, for complete sewerage system, involving several miles of lateral sewers with sewer outlet.

Wis., Clintonville—City plans to excavate and lay 1.9 mi. sewers in Main and Elm Sts., involving 1000 ft. 8-12 in. vitr. pipe. About $25,000. L. P. Pelishek, Clintonville, engr.

Wis., Oconto—City soon lets contract laying 2176 lin.ft. 10-18 in. sewers, including manholes, catch basins, etc. H. R. Albert, Green Bay, engr.

Ia., Aurelia—Town soon lets contract building Sect. 1, sewage disposal plant, consisting of tank, dosing chamber, sludge bed, filter beds, connection and discharge lines, Sect. 2, laying 8-12 in. sewer pipe. L. E. Christensen, clk.

Minn., Farmington—E. H. Dosey, village clk., receives bids in July building sewer and water extensions and paving about 20 blocks of streets. Druar & Smith, 513 Globe Bldg., St. Paul, engrs.

Minn., Walnut Grove—D. A. Melloy, city clk., receives bids in July building sewers and disposal tank. About $50,000. Druar & Smith, 513 Globe Bldg., St. Paul, engrs.

Neb., Friend—City receives bids about July 15, building sanitary sewerage system. About $30,000. Grant, Fulton & Letton, 505 Bankers Life, Lincoln, engrs.

Mo., St. Joseph—City voted $750,000 bonds to extend main sewers. Noted Mar. 27.

Ore., North Bend—City soon lets contract building sewer in Sherman Ave., cement or vitr. pipe. About $35,000. R. L. Cavanaugh, city engr. Noted Apr. 3.

Ore., Portland—City Council adopted resolution to build sewers in 2 sections of 64th Ave., 3 sections of 59th Ave., 2 sections of 56th Ave., 3 sections of 57th Ave., 2 sections of 58th Ave., 2 sections of Woodstock Ave., 1 section of 61st, 62nd, 63rd and 55th Aves.; also in 1 section of 42nd, 43rd, 55th, 56th and 57th Sts., and 2 sections of 44th St., 3 sections of 51st St. and 3 sections of 52nd St., vitr. or cement pipe. About $160,413. O. Laurgaard, city engr.

Ore., Seaside—City soon lets contract for complete sewerage and drainage systems in Hermosa Park. G. W. Boschke, city engr.

Que., Quebec—W. D. Baillarge, engr., City Hall, soon receives bids building drainage system on Beauport and Charlesbourg Rds. About $19,000.

BIDS DESIRED

Conn., Greenwich—Until June 26, by Joint Sewerage Comn., furnishing all labor and material for completing new 24 in. outfall sewer from junction of east side and west side trunk sewers to Joint Sewage Disposal Plant, on Grass Island for Greenwich Boro. and Sewer Dist. No. 6. A. S. Mead, clk.; advertised in this issue.

N. Y., Long Island City—Until June 18, by M. E. Connolly, pres. Queens Boro., building sewer and appurtenances in Monteverde Ave. from Grand St. to Hull Ave., 2nd Ward; Idaho St. from Queens to Laburnam Aves., 3rd Ward; Narcissus St. from Robinson to Bowne Aves., 3rd Ward.

N. J., Jamesburg—Until June 25, by Dept. of Architecture, 142 West State St., Trenton, building sewerage system at State Home for Boys, involving three 12 x 35 ft. tanks, 10 ft. syphon, 54 ft. stone filter bed, 32 ft. sludge bed and terra cotta pipe. F. H. Bent, engr.

N. J., Roselle Park (Elizabeth P. O.)—Until June 20, by Boro. Council, building sanitary sewers in Colfax, Roselle and Lincoln Aves., Filbert and Elm Sts., involving 5442 lin.ft. 8 in. sewer, 23 manholes and 352 branches. J. W. Higgins, boro. engr.; advertised in this issue.

Pa., Scranton—See "Streets & Roads."

Mich., Lansing—Until June 16, by J. A. Parson, city clk., building sewer in West and Memphis Sts., involving 3000 ft. 54-72 in. trunk sewer; advertised in this issue.

Mich., Lansing—Until June 23, by J. A. Parson, city clk., building sewer in 43rd Sewer and Drain Dist., involving 25,000 ft. 8-42 in. trunk and lateral sewers; advertised in this issue.

Minn., Sherburn—Until June 27, by E. E. Risley, village recdr., building general and joint sewer district and lateral sewers together with disposal plant, manholes and appurtenances, involving 30,300 ft. 8-18 in. sewer pipe. A Fick, Boone, Ia., engr.

Neb., Deshler—Until June 27, by city, building 8-12 in. vitr. sewer pipe in various streets. About $30,000. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Neb., Wakefield—Until July 1, by city clk., building 17,240 ft. of 8 in., 4943 ft. of 10 in., 3320 ft. of 12 in., and 1405 ft. 15 in. vitr. stone sewer pipe in various streets. About $30,000. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Okla., Oklahoma—Until June 17, by city, laying lateral sewers in Highland Park addition, involving 4800 ft. 8 in. vitr. pipe, etc. About $20,000.

Ont., Dundas—Until June 23, by Sewer Com., Town Hall, for sewage disposal works, sewage pumping station and force main, outfall sewer, sewage pumping machinery, sprinkler equipment, valves and piping, sanitary sewers, sewer pipes and specials. About $80,000. A. W. Draeseke, chn. C. R. Murdock, engr.

Ont., Embro—Until June 19, by A. Murray, engr., laying 5801 lin.ft. tile sewer with catch basins, and concrete wall (all complete).

Ont., Kenora—Until June 15, by J. E. Currie, city clk., building sewers. About $18,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Metropolitan Water & Sewer Bd. received bids June 6, building 3600 ft. 15-18 in. sewer extension, vitr. Akron pipe, Woburn and Stoneham Twps. from Rendle Stoddard Co., Chelsea, $17,694; G. M. Bryne Co., 166 Devonshire St., $19,200; Coleman Bros., Chelsea, $20,100. Work involves 300 cu.yd. concrete, 300 cu.yd. back fill of gravel.

★**Mass., Lynn**—City let contract building 24 in. concrete pipe drain with structures in Union St., to A. Baruffaldi, Somerville, $38,054. Noted May 15.

★**N. Y., New York**—H. Bruckner, pres. Bronx Boro., let contract building sewers and appurtenances in East 180th St., to J. E. Connolly, $3243; building combined sewers in Holland Ave., to Fenlack Constr. Co., 233 Bway., $365,375. Noted May 22.

Sewers (Continued)

★Pa., Erie—City Council let contracts for completion of Sects. 3 and 4 of Mill Creek Flood Control Project, to Scott Bros., Arlington Blk., Rome, N. Y., $589,068 and $451,458 respectively; Sect. 5, to Erie Concrete & Steel Co., 13th and Cranberry Sts., Erie, $46,091. Noted June 5.

Pa., Pittsburgh—City received bids laying sewers in Fall Way from Miles Way to existing sewer on Firth St., Harbor, Hetzel, Asylum, Bader, Admiral and Hillsdale Sts., from M. O'Herron, South 1st and McKean Sts., $10,671; C. Donatelli, Pittsburgh, $11,144; F. Diulus, 40 Boundary St., $12,588. Work involves 2970 ft. 15 in. pipe and 9 manholes. Noted May 29.

★Fla., Chipley—City will build sewerage system by day labor. About $50,000.

★Ind., Gary—City let contract building sewers in Sewer Dist. No. 39, to J. C. Sunderman, 2360 Connecticut St. About $13,000.

Mich., Detroit—Dept. Pub. Wks. received bids building sewers, etc., in Harper Ave., (a) Sect. A, (b) Sect. B, (1) brick, (2) concrete, from C. H. Bennett, 1008 Ford Bldg., (a1) $35,748, (b1) $16,758; Gawn Constr. Co., Cleveland, O., (a1) $36,636, (b1) $17,157; Walker & Teetart, Penobscot Bldg., (a1) $40,044, (a2) $38,340, (b1) $18,753. Wetherby Ave., (a) Sect. 1, (b) Sect. 2, concrete arch pipe, from Nash Bros., 10 South La Salle St., Chicago., (a) and (b) $990,479; J. F. Casey Co., Union Arcade, Pittsburgh, (a) and (b) $994,000; G. R. Cooke, Penobscot Bldg., (a) $499,310; Lynch Rd. Sewer, (a) Sect. 3, (b) Sect. 4, (1) brick, (2) concrete, from J. Connelly Constr. Co., Dime Bank Bldg., (a2) $249,200, (b2) $189,500; J. A. Mercier, 216 Hammond Bldg., (a1) $262,000, (b1) $215,820; J. Porath, 34 McGraw Bldg., (a2) $295,800, (b2) $248,900; Six Mile Rd. Sewer, (a) Sect. 1, (b) Sect. 2, (1) brick, (2) concrete, (3) concrete segmental block, from Hanna & Brandon, 1624 Dime Bank Bldg., (b2) $424,700, (b3) $422,000; Hoag & Dall, Commercial Bank Bldg., (a3) $379,500, (b3) $424,344; Coleman & Harding, 702 Kresge Bldg., (b2) $485,000. Following bids submitted for (a) 4109 ft. of Sect. 1, and (b) 4343 ft. of Sect. 2, Jaynes & Affeld, 1208 Ford Bldg., brick (a) $303,848, (b) $314,696, (b) same prices; J. Porath, 34 McGraw Bldg., concrete (a) $298,400, (b) $318,539; J. A. Mercier, brick, (a) $335,000, (b) $345,000. Noted May 15 and 22.

★Mich., Detroit—City received lowest bids furnishing all labor and materials (except iron manhole rings and covers), building and finishing complete together with backfilling lateral sewer (a) No. 3048, (b) No. 3051, (c) No. 3052, (d) No. 3053, (e) No. 3129, (f) No. 3130, (g) No. 3132, (h) No. 3133, (i) No. 3135, (j) No. 3136, (k) No. 3137, (l) No. 3138, (m) No. 3139, from Western Constr. Co., 1208 Ford Bldg., (a) $5580, (b) $5507, (c) $1837, (d) $1252, (f) $6161, (g) $1144, (h) $5697, (k) $5875, (l) $2845, (m) $11,881; Detroit Contg. Co., Penobscot Bldg., (a) $5711, (b) $5685, (c) $1893, (d) $1289, (f) $6950, (g) $1205, (h) $6000, (k) $6584, (l) $3500; Walker & Teeteart, St. Clair Ave., (a) $8300, (b) $8300, (e) $1999, (f) $10,300, (i) $1065, (j) $362, (m) $11,000; N. Mancini, Joseph Campau Ave., (c) $2583, (d) $1990, (e) $1742, (g) $1611, (i) $822, (j) $338; Liberty Constr. Co., Penobscot Bldg., (h) $7000, (i) $1300; R. L. Oakley, 486 Burlingame Ave., (k) $7200, (l) $3650; J. A. Mercier, 216 Hammond Bldg., (m) $11,480. Noted May 22.

★Wis., Plymouth—City let contract excavating and laying sanitary and storm sewers in 2.8 mi. Pleasant and Selma Sts., involving 4000 ft. 10-12 in. vitr. pipe, to A. Zurheide, 2507 North 15th St., Sheboygan. About $22,500.

★Minn., Duluth—See "Streets and Roads."

★Minn., Litchfield—F. O. Holm, village recdr., let contract laying 9825 ft. 8-10 in. sewer pipe, to E. Lenhardt, Litchfield, $11,810. Noted May 8.

★Kan., Junction City—City let contract extending sanitary sewerage system, involving 33,000 ft. 8-10 in. vitr. pipe, to Hamilton Bros., Waco, Tex., $37,589. Noted May 22.

Neb., Geneva—See "Streets and Roads."

★Wyo., Thermopolis—City let contract building storm sewers, to Security Bridge Co., 502 North 32nd St., Billings, Mont. About $29,737. Noted May 8 under "Streets and Roads."

★Ont., Stratford—City let contract improving 4400 ft. 42 in. and 2000 ft. 36 in. concrete circular pipe, to W. Davis, Caledonia St. About $33,000. Noted May 22.

Bridges

PROPOSED WORK

N. Y., Black River—See "Industrial Works."

N. Y., Schenectady—Schenectady Ry., 512 State St., has been authorized by Gov. Smith to use new gateway bridge across Mohawk River. Company plans to double track new bridge, continue tracks down State St., cutting off tracks now on Washington Ave. and along Scotia dyke. About $170,000. J. P. Barnes, genl. mgr.

N. J., Newark—Bd. Supervs. Hudson and Essex Counties, soon receives bids painting and cleaning Passaic River bridge and Hackensack River Bridge over Lincoln Highway. About $10,000.

Pa., Johnstown—City soon receives bids building concrete highway bridge over Conemaugh River on Haynes St., 225 ft. span. City approved $50,000 bond issue and Cambria Co. appropriated $25,000 for project. J. R. Crissey, engr.

Md., St. George Island—State Rds. Comn., 601 Garrett Bldg., Baltimore, soon receives bids building 984 ft. creosoted timber bridge, 14 ft. wide with 10 ft. clear roadway, over Potomac River, from mainland to St. Georges Island. About $10,000. J. N. Mackall, state engr.

S. C., Aiken—Comrs. Aiken Co. (Aiken) and Richmond Co., Ga., (Augusta) plan to build 150 ft. steel drawbridge over Savannah River, 16 ft. wide. About $75,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

Fla., Stuart—See "Streets and Roads."

Wis., Beloit—City voted $80,000 bonds to build bridge.

Wis., Manitowoc—Manitowoc Co. plans to build 174 ft. steel bridge on 14th St., 30 ft. wide, with earth approaches and concrete abutments. About $35,000. Work involves 800 cu.yd. rein.-con. and 2000 cu.yd. concrete. F. L. Alter, City Hall, engr.

Wis., Manitowoc—Manitowoc Co. plans to build steel or rein.-con. bridge over 21st St., 750 ft. long, 36 ft. wide, involving 1000 cu.yd. rein.-con. and 1500 to 2000 cu.yd. concrete, etc. About $50,000. F. L. Alter, City Hall, engr.

Wis., Washburn—City plans to build 300 ft. steel bridge over Sioux River, 50 ft. wide, to replace present wooden one.

Minn., Duluth—St. Louis Co. voted $1,350,000 bonds to build bridges in county; $840,000 will be sold at once to cover bridge work to be taken up during present year. R. W. Acton, co. engr.

Minn., Minneapolis—Comrs. Hennepin Co. plan to build 30 ft. rein.-con. bridge over Minnehaha Creek on Bloomington Ave., 40 ft. roadway. About $15,000. F. W. Cappelen, co. engr.

Cal., Marysville—Comrs. Yuba Co. having plans prepared for 10 rein.-con. bridges, 20-135 ft. long, in different parts of county. About $40,000. L. B. Crook, co. surv.

Cal., Napa—Comrs. Napa Co. having plans prepared by O. H. Buckman, engr., Napa, building 2 rein.-con. bridges, 1 across Walnut Creek and 1 across Nigger Creek, in Rd. Dist. No. 4. Cost between $5,000 and $10,000 each.

BIDS DESIRED

Mich., Port Huron—See "Streets and Roads."

Wis., Manitowoc—Until June 20, by Klug & Smith, engrs., 69 Wisconsin St., Milwaukee, building 396.9 ft. steel bridge on 10th St., 100 ft. draw, rein.-con. approaches, 24 ft. drive and 8 ft. walk. About $60,000. Noted Mar. 6.

Minn., Litchfield—See "Streets and Roads."

Ore., Salem—Until June 20, by Marion Co., building 1 rein.-con. culvert and 3 bridges, on Pacific Highway near Jefferson, involving 24,000 lb. reinforcing steel and 350 cu.yd. Class "A" concrete. U. G. Boyer, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Tonawanda—Bd. Pub. Wks. let contract building culvert over 18 [illegible] Creek, to Savage Constr. Co., 59 Walker [illegible] Buffalo. About $11,070.

★Pa., Greensburg—Westmoreland Co. let contract building 4 rein.-con. bridges, to J. Herman, Latrobe, and 2 rein.-con. bridges, to Groton Bridge Co., Main St., Groton, N. Y. Total cost $20,794.

Pa., Phila.—Dept. Pub. Wks. received lowest bids building bridges on House and Langford Aves., from C. P. Bower, Tulip and Somerset Sts., $196,903; F. J. Boas, 201 North Broad St., $214,337; J. McGraw Co., Commercial Trust Bldg., $223,0[illegible]; also repairing and painting bridges on (a) Baltimore Ave. over Cobbs Creek, (b) City Ave. over Schuylkill River, (c) Erie Ave. over Phila. & Reading R. R., (d) Penrose Ferry Rd., over Eagle Creek, from M. & J. McHugh, 892 North Market St., (a) $1492, (b) $41,569, (c) $5410, (d) $5430; W. A. Mundy, 228 South Alder St., (b) $41,070, (c) $5810, (d) $3465; Robbins Constr. Co., Lafayette Bldg., (b) $41,770. Noted May 29.

★W. Va., Charleston—Comrs. Kanawaha and Lincoln Counties let contract building superstructure of steel highway bridge over Coal River, below mouth of Alum Creek, to Virginia Bridge & Iron Wks., Roanoke, Va. About $22,800. Noted May 15.

★Ga., La Fayette—Bd. Comrs. Walker Co. let contract building rein.-con. bridges, to C. L. Smallwood, Chattanooga, Tenn. About $14,000. Noted May 8.

Mich., Detroit—City received bids building (a) 40 ft. clear span rein.-con. arch-bridge, 40 ft. wide, 34 ft. roadway with abutments 10 ft. 6 in. high with 5 ft. footings supported on 60 wooden piles, (b) 170 ft. rein.-con. retaining wall, 7 ft. high with 6½ ft. footing and gas pipe hand rail, from Corrick Bros., 507 Owen Bldg., (a) $11,475, (b) $7675; T. E. Currie, 20 McGraw Bldg., (a) $15,000, (b) $7300; States Eng. Co., 514 Free Press Bldg., (a) $15,212, (b) $8892.

★Minn., Ada—Comrs. Norman Co. let contract building 31 concrete and steel bridges over Judicial Ditch No. 56, Norman and Clay Counties, to Hussey Constr. Co. About $38,700. Noted May 29.

★Ark., Harrisburg—Comrs. Ozark Trail Rd. Impvt. Dist., Poinset Co., Marked Tree, let contract building four 50 ft. steel plate girder spans or steel truss spans, 18 ft. wide; two 50 ft. steel truss spans, 16 ft. wide; 400 lin.ft. concrete viaduct, 18 ft. wide; 112 lin.ft. I-beam spans, 16 ft. wide, and 95 cu.yd. rein.-con. culverts, to Larimer & Burget Bridge Co., Rand Bldg., Memphis, $43,547. Noted May 8.

Ariz., Cottonwood — State Highway Comn., Phoenix, received bids building bridge over Verde River, near here, (a) concrete, (b) steel, from H. Clarke Co., 1101 East 5th St., Los Angeles, (a) $35,977; Topeka Bridge & Iron Co., c/o R. V. Leeson, Phoenix, (a) $37,100; W. Ledbetter Co., Pacific Electric Bldg., Los Angeles, (b) $38,880; El Paso Bridge & Iron Co., El Paso & South Western Bldg., El Paso, Tex., (b) $45,843; Steel Constr. Co., Salt Lake City, (b) $46,300; Omaha Structural Steel Co., 48th and Leavenworth Sts., Omaha, (b) $61,600. Noted Apr. 24.

★Ore., Portland—State Highway Comn. let contract to Union Bridge Co., 55 Argyle St., building 6 rein.-con. bridges on Columbia River Highway, between Scappoose and Deer Island, cost $35,956, and 1 rein.-con. bridge over Tide Creek, Columbia Co., $8086; to Linn Co. Court, Albany, one 50 ft. steel I beam and concrete bridge and 850 lin.ft. timber trestle between Albany and Jefferson, Linn Co., $12,905. Noted May 29.

★Que., St. Croix—Lotbiniere Co. let contract building concrete and steel bridge between St. Edouard and St. Emelie, to H. Paris, Portierville. About $35,000. Noted May 22.

★Ont., Ottawa—Bd. Control let contract building rein.-con. bridge over Rideau River, on St. Patrick St., to McDougall Bros., Sparks St., $172,108. Noted Apr. 10.

Structural Steel

PROPOSED WORK

S. C., Aiken—See "Bridges."

Wis., Manitowoc—See "Bridges."

Wis., Washburn—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. J., Kearney—See "Buildings."

Pa., Johnstown—See "Bridges."

Minn., Minneapolis—See "Bridges."

Cal., Vallejo—See "Buildings."

BIDS DESIRED

Pa., Freeport—See "Waterworks."

Pa., Lebanon—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pa., Greensburg**—See "Bridges."

★**Cal., Modesto**—See "Industrial Works."

★**Ont., Ottawa**—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Boston—City having plans prepared paving Revere St., et al. About $12,000. J. Lockhart, city engr.

N. Y., New Hartford—Village plans election to vote on $40,000 bonds to pave various streets. Total cost $120,000. Property owners will bear balance of cost.

N. Y., New York—H. Bruckner, pres. Bronx Boro., rejected bids received May 27, repaving with granite blocks on concrete foundation Cypress Ave. from East 132nd to East 138th Sts. Noted June 5.

N. Y., Rochester—City plans to pave Ryan Alley, cost $10,600; Peckham St., $16,000; Ruppel St., $23,300; Fairview Ave., $32,900, all asphalt; also White St., $14,900; Karnes St., $15,500. C. A. Poole, city engr.

N. J., Elizabeth—City plans to improve Summit Rd. from Colonia Rd. to Park Ave. About $45,353. A. Collins, city engr.

N. J., Hoboken—City plans to improve Jackson St. from Newark to Paterson Aves., Jefferson St. from 4th to 7th Sts., Grand St. from 1st to 3rd Sts., Clinton St.; also Bloomfield St. from 5th to 14th Sts., all asphalt. J. O. Whittemore, city engr.

N. J., Jersey City—City plans to improve 10th St. between Grove and Eue Sts., granite block. About $10,000. C. A. Van Keuren, city engr.

N. J., North Bergen—Town Council plans to improve with bituminous 27th, 28th, 29th and 30th Sts., cost, $10,000 each, 33rd St., $20,000, Hudson and Bway. Aves., $20,000 each; with trap rock 34th and 35th Sts., $80,000; granite block Bergenline Ave., $100,000, Hamilton Ave., $25,000 and South St., $30,000.

Pa., McKeesport—City defeated $366,000 bond issue to improve various streets. Noted Mar. 20.

Pa., Scranton — City Council plans to grade, pave and curb with sheet asphalt on concrete base, Madison Ave. from Ash St. to Dunmore Boro. line, 9th Ward, about $7469; Birch St. from west fence line of Cedar Ave. to South Washington Ave., 11th Ward, $17,482; also grade, pave and curb with sheet asphalt and stone blocks on concrete base Richmond St. from east fence line of Boulevard Ave. to Boro. of Dunmore and city line, $30,381. W. Schunk, city engr.

W. Va., Morgantown—Monongalia Co., Grant Dist., plans election July 2, to vote on $325,000 bonds to build 11 mi. Fairmont Pike, 3 mi. River Rd., 4 mi. Lowesville Rd., and 10 mi. Dents Run Rd. L. Cox, Morgantown, engr.

W. Va., Point Pleasant—Mason Co. voted $70,000 bonds to improve roads in Wagoner Dist. and $65,000 bonds for roads in Graham Dist. Plans being prepared by G. E. Childs, engr., Point Pleasant. Noted May 15.

W. Va., Ripley—Comrs. Jackson Co. soon receive bids building Class "A" road through town of Ravenswood. About $21,000. J. S. Chase, Ripley, engr.

W. Va., Spencer—Comrs. Roane Co. soon receive bids building 12½ mi. road in Walton and Spencer Dists., 2 sections, surfacing 16 ft. wide; involving grading, furnishing materials and laying concrete pavement. About $208,000. Former bids rejected. H. R. Muldoon, Spencer, engr.

W. Va., West Union—Comrs. Doddridge Co. soon receive bids building 3 mi. Northwestern Turnpike, waterbound macadam. About $63,000. J. R. Wilson, Clarksburg, engr.

S. C., Abbeville—City plans to pave 5 mi. various streets, 30-40 ft. wide, vitr. brick, asphalt, concrete or bituminous concrete. About $180,000. W. A. Sanders, Anderson, engr.

S. C., Anderson—Anderson Co. voted $1,450,000 bonds to build and improve roads. Noted Mar. 20.

S. C., Chester—Chester Co. plans to relocate, grade, drain and surface 20 mi. road from here to Lockhart along Broad River, 30 ft. wide, estimated cost $50,000; 7 mi. road from here to Lowryville, 30 ft. wide, $35,000; 24 mi. road from here to Ft. Lawn along Catawba River, 30 ft. wide, $70,000; 10 mi. road from here to Blackstock, 30 ft. wide, $100,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Manning—Comrs. Clarendon Co. plan to surface with cement concrete 1 mi. Sumter-Manning Rd. from here across Pocotaligo River swamp, 16-20 ft. wide. About $30,000. J. E. Kelly, superv. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Orangeburg—Comrs. Orangeburg Co. plan to re-locate, grade, drain and surface 24.8 mi. road from St. Mathews to Bamberg, via Orangeburg, 30 ft. wide. About $140,000. J. J. Mackey, chn. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Pickens—Comrs. Pickens Co. plan to re-locate, grade, drain and surface 10 mi. road from here to Easley, 30 ft. wide. About $30,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Rock Hill—City plans to pave and surface 6 mi. various streets, 30-40 ft. wide, vitr. brick, asphalt, concrete or bituminous concrete. About $200,000. G. C. White, Durham, N. C., engrs.

S. C., Sumter—Comrs. Sumter Co. plan to relocate, grade, drain and surface 9 mi. road from here to Clarendon Co. line, 30 ft. wide, cost $18,000; 10.2 mi. road from here to Lee Co. line, 30 ft. wide, $20,000; 8.1 mi. road from here to Mayesville, 30 ft. wide, $20,000; 18.4 mi. road from here to Kershaw Co. line, 30 ft. wide, $30,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Union—Union Co. plans to relocate, grade, drain and surface 2 mi. road from here to Spartanburg Co. line via Buffalo and West Springs, 30 ft. wide. About $40,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Walhalla—Comrs. Oconee Co. plan to drain and surface 25 mi. road from Calhoun to Georgia state line via Westminister, 30 ft. wide; (Abandoned road bed of Southern Ry.). About $50,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Walhalla — Comrs. Oconee Co. plan to re-locate, grade, drain and surface, probably with top soil, 12 mi. road from Clemson College to here, via Seneca, 30 ft. wide. About $20,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., York—Comrs. York Co. plan to relocate, grade, drain and surface 7 mi. road from Rock Hill to Lancaster, cost between $28,000 and $30,000. T. W. Boyd, chn. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

Ga., Jefferson—Comrs. Jackson Co. soon receive bids building 4½ mi. Federal aid road. About $20,000. Mitcham & Wright, 712 Flatiron Bldg., Atlanta, engrs.

Ga., Lawrenceville—Gwinnett Co. having plans prepared by Mitcham & Wright, engrs., Flatiron Bldg., Atlanta, for 12 mi. Federal aid road.

Ga., Valdosta—Lowndes Co. voted $500,000 bonds to build roads. Federal Government will be asked to appropriate like amount. Noted May 15.

Fla., Orlando—City voted $300,000 bonds to pave streets.

Fla., Pensacola—City voted $25,000 bonds to grade, pave, repair and improve streets. J. L. Sweeney, city engr.

Fla., Stuart—City voted $60,000 bonds to improve streets and build bridges.

Ala., Birmingham—Bd. Revenue Jefferson Co. soon receives bids grading 4½ mi. road on Birmingham and Leeds Highway, between Lovick and Leeds, involving 15,000 cu.yd. rock and 21,000 cu.yd. earth excav. About $30,000. J. W. Gwin, pres. S. R. Batson, co. engr.

Louisiana—State Highway Dept., Maison Blanche Bldg., New Orleans, soon lets contract surfacing with bituminous concrete 1.66 mi. Alexandria-Base Hospital Highway, in Rapides Parish. D. Buie, state highway engr.

La., New Orleans—City having plans prepared curbing, sub-surfacing, draining and paving with wood block or small granite block, various streets in business section. About $1,449,999. T. L. Willis, city engr.

Ohio—State Highway Comn., Columbus, soon receives bids building roads in following counties:

Clinton Co., Sect. "Q" Cincinnati-Zanesville Rd., 9.16 mi., grading, constructing bridges and culverts and paving with waterbound macadam.

Delaware Co., Sect. "A-2" Delaware-Marysville Rd., 2.85 mi., grading, constructing bridges and culverts and paving with waterbound or bituminous macadam.

Sect. "B" Delaware-Marysville Rd., 5.02 miles grading, constructing bridges and culverts and paving with waterbound or bituminous macadam.

Union Co., Sect. "B" Canal Dover-Wooster Rd., 2.52 mi., grading, constructing bridges and culverts and paving with concrete or brick. Former bids rejected. Noted Apr. 17.

Ohio—State Highway Comn., Columbus, soon lets contract building roads in following counties:

Defiance Co., Sect. "E" Hicksville-Defiance Rd., 3.21 mi. grading, constructing bridges and culverts and paving with rein.-con., $84,489.

Delaware Co., Sect. "A-2" Delaware-Marysville Rd., 2.85 mi. 16 ft. wide, grading, constructing bridges and culverts and paving with waterbound or bituminous macadam, $61,017.

Sect. "B" Delaware-Marysville Rd., 5.02 mi., 16 ft. wide, grading, constructing bridges and culverts and paving with waterbound or bituminous macadam, $107,679.

Huron Co., Sect. "O" Oberlin-Norwalk Rd., 1.28 mi., 16 ft. wide, grading, constructing bridges and culverts and paving with monolithic brick, $48,677.

Lake Co., Sect. "J" Chardon-Madison Rd., 2.33 mi. 26 ft. roadway, 10 ft. pavement, grading, constructing bridges and culverts and paving with rein.-con., $58,742.27.

Montgomery Co., Sect. "D" Dayton-Chillicothe Rd., 2.63 mi. 26 ft. roadway, 16 ft. pavement, grading, constructing bridges and culverts and paving with bituminous macadam or plain concrete, $66,560.

Ottawa Co., Sects. "J" and "K-3" Toledo-Elmore Rd., 7.15 mi., 16 ft. wide, grading, constructing bridges and culverts and paving with concrete, $236,840.

Sect. "F" Oak Harbor-Genoa Rd., 1.99 mi., 16 ft. wide, grading, constructing bridges and culverts, and paving with concrete, $61,639.

Sect. "D" Oak Harbor-Genoa Rd., grading and resurfacing with bituminous macadam, $35,426.

Sandusky Co., Sect. "J" Fremont-Bellevue Rd., 5.76 mi., 20 ft. wide, grading, constructing bridges and culverts and paving with brick, bituminous macadam or bituminous concrete, $334,679; $294,101; $281,255.

Union Co., Sect. "B-1" Marysville-Kenton Rd., 2.88 mi., 16 ft. wide, grading, constructing bridges and culverts and paving with waterbound macadam, $46,608.

Geauga Co., Sect. "A-2" Cleveland-Kent Rd., 0.94 mi., 16 ft. wide, resurfacing with 3 in. bituminous macadam and grading, $10,730.

Lorain Co., Sects. "C-2" and "H" Ashland-Oberlin Rd., 3.29 mi., 16 ft. wide, grading, widening pavement and resurfacing with bituminous macadam, $41,869.

Trumbull Co., sections of the Youngstown-Warren Rd., Warren-Meadville Rd., and Chagrin Falls–Greenville Rd., about 20 mi. resurfacing, $11,311.

O., Columbus—City plans to grade, curb, lay water mains and pave 854 ft. Reinhard Ave., from Heyl Ave. to 21st St., 24 ft. wide, brick. Cost $15,590. H. A. Maetzel, city engr.

O., Dayton—Montgomery Co. plans to pave, curb and gutter 1708 ft. West 3rd St. from Baker St. to corporation line, 36 ft. wide, and 1480 ft. Springfield St., 40 ft. wide, involving 550,000 brick block on 14,000 sq.yd. 6 in. concrete base and 7300 ft. concrete curbing and guttering. About $160,000; ⅓ of which will be borne by county, ⅓ by city and ⅓ by property owners. S. Sharts, co. engr.

Streets and Roads (Continued)

O., Springfield—City plans to build cement sidewalks, curbs and gutters on portions of Columbia, Jefferson, Main, Pleasant, Plum, Shaffer, Sigler, Washington, Yellow Springs, Fair, Charles, East, Harrison, Isabella, Rice, Race, Summer, Water, Winter, High and Mulberry Sts. and Lagonda, Wittenberg, Dibert, Douglas, Homeview, Sheridan and Tibbetts Aves. O. E. Carr, city engr.

Ind., Indianapolis—Comrs. Marion Co. soon let contract grading, paving and building culverts on 15,840 ft. highway, 18 ft. wide, involving 31,680 sq.yd. concrete. About $106,847. J. J. Griffith, engr.

Ind., Terre Haute—City receives bids about July 30, resurfacing ½ mi. Wabash Ave. from 13th to 19th Sts. involving 16,000 sq.yd. wood block, 16,000 sq.yd. asphalt and 16,000 sq.yd. bituminous, etc. About $50,000. R. A. Koerner, city engr.

Mich., Charlevoix—Comrs. Charlevoix Co. plan to build between 5 and 6 mi. road involving 53,500 sq.yd. concrete pavement. State and Federal Governments will appropriate toward cost.

Mich., Detroit—Bd. Pub. Wks. soon receives bids paving with asphaltic concrete, Amherst or Medina curbstone, Solvay Ave. from north line West Jefferson Ave. to south line Fort St., 26 ft. wide, cost $40,190; Griffin Ave. from east line of Elmwood to easterly terminus, 24 ft. wide, $14,470. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving following alleys with 1 course concrete; alley between Walker, Adair, Franklin and Woodbridge Sts.; between Lillibridge St., Beniteau Blvd., Kercheval and Waterloo Aves.; between Riopelle, Orleans, St. Joseph and Illinois Sts.; between East Grand Blvd., Helen, Sylvester and Canfield Aves.; between Seminole, Iroquois, Sylvester and Canfield Aves.; between Fischer, Crane, Waterloo and Charlevois Aves.; between Ferry Park and West Grand Blvd. west of Lawton Ave.; between LaSalle Blvd., 14th St., La Mothe and La Salle Gardens; between Tillman, Williams, Stanley and McGraw Aves.; between Frederick and Kirby Aves., east of Chene St.; between Lawton, Grand River and Kirby Aves.; between Warren, Seyburn, Baldwin and Gratiot Aves.; between Woodward, Englewood and Woodland Aves. and John R St.; between Garfield and Forest Aves., parallel to Chene St.; between Riopelle, Orleans and Fort Sts. and Lafayette Blvd.; between Hibbard, Holcomb, St. Paul and Kercheval Aves.; between Rivard and Russell Sts., Frederick and Kirby Aves.; between Deming St. and Michigan Central R. R., parallel to Scotten Ave.; betwen Beaubien and St. Antoine Sts. and Kirby and Ferry Aves., 10-20 ft. wide, cost, $61,900.

Mich., Detroit—W. T. Dust, comr. parks and blvds., soon lets contract grading and paving 1100 ft. driveways in Roosevelt Park at entrance to Michigan Central Ry. Sta., 40-50 ft. wide, involving 9103 sq.yd. asphalt on 6 in. concrete base, 91 cu.yd. concrete, 3558 lin.ft. Medina curbing, 3931 cu.yd. excav., 1512 sq.yd. old paving, and 1000 lin.ft. old curb to be removed.

Mich., Ecorse—City having plans prepared by R. A. Murdock, engr., Ecorse, improving 1 mi. Cosme and Bway Aves., Levadie and Webster Sts., 24-26 ft. wide, 1 course concrete pavement, concrete curb with side drain.

Mich., Northville—City election June 16 to vote on $32,000 bonds to pave with concrete from end of present pavement on Seven Mile Rd. to Detroit City Hospital grounds, on Main St. to Oakland Co. line.

Mich., Port Huron—St. Clair Co. Rd. Comn. plans to improve 6¾ mi. State Rd. from Lynn Twp. to Capac, 7 mi. Fargo Rd. in Grant, Greenwood and Kenockee Twp., 3½ mi. Riley Center Rd., from Riley Center south to Riley Twp. and Mill Creek Rd. from Brockway south and west for distance of 4 mi. Plans include grading, surfacing with gravel, slag base with gravel top or penetration type and building drainage ditches, culverts and bridges. F. E. Beard, chn.

Ill., Belleville—Bd. Local Impvts. soon receives bids paving 900 ft. 14th Ct., 28 ft. wide. About $10,000. Noted May 22.

Ill., Edwardsville—Comrs. Madison Co. soon let contract paving 5 mi. Alton-St. Louis Rd., monolithic brick. W. E. Holden, co. supt. highways. Noted Dec. 26.

Wisconsin—State Highway Comn., Madison, soon lets contract building Prentice-Ladysmith Rd., Sawyer Co., Radisson-Couderay Rd., Washburn Co., and Spooner-Rice Lake Rd. Noted Apr. 3.

Wis., Clintonville—City plans to grade and pave 7.5 mi. Elm and Main Sts., 18 ft. wide, involving 9800 sq.yd. 2 course rein.-con. and 250 lin.ft. concrete curb and gutter. About $40,000. L. P. Pelishek, Clintonville, engr.

Wis., Kenosha—City soon lets contract for 7500 sq.yd. concrete paving on Ridge St.

Wis., Milwaukee—Dept. Pub. Wks. soon lets contract improving several streets and avenues.

Ia., Cresco—Bd. Supervs. Howard Co. soon receive bids grading and surfacing with gravel and building tile drains, intakes and guard rail on 10.4 mi. Federal Aid Project No. 31, 24 ft. wide, involving 26,030 cu.yd. gravel, 12,182 lin.ft. drain tile, 43,765 cu.yd. excav., etc. About $35,200. T. R. Perry, co. engr.

Ia., Independence—Buchanan Co. election June 23, to vote on proposition to pave entire primary road system and to form assessment districts along system, total length 45.47 mi. Districts will pay 25% of cost of construction. H. Tschirgi, co. engr.

Ia., Marion—Linn Co. election June 16 to vote on proposition to pave entire primary road system, and to form assessment districts along system, total length 97.58 mi. Districts will pay 25% of cost of construction. R. W. Gearhart, co. engr.

Minn., Duluth—St. Louis Co. election July 1 to vote on $7,500,000 bonds to build 210 mi. hard-surfaced roads under Babcock Law; 65 mi. will be started at once, 18 ft. wide, 1 course concrete. About $25,000 per mi.

Minn., Farmington—See "Sewers."

Minn., Pipestone—Comrs. Pipestone having surveys made for 12 mi. paving and 88 mi. grading and graveling, 20 ft. wide. About $950,000. Bonds for $200,000 voted toward work. E. Keeler, Pipestone, engr.

Minn., Rochester—City soon lets contract paving 11th Ave., Center St., alley in Collins' Sub-Div. in Block 30, alley in Block 37 in Original Plat, alley in Block 18 in Original Plat. A. F. Wright, clk.

Neb., Friend—City plans to pave 8 blocks Main St. About $100,000. Grant, Fulton and Letton, 505 Bankers' Life, Lincoln, engrs.

Neb., Milford—City receives bids about July 15, paving 6 blocks Main St., 72 ft. wide. About $120,000. A. H. Edgren, Lincoln, engr.

Montana—State Highway Comn., Helena, rejected bids for Federal Aid Projects Nos. 5, 6 and 7, in Big Horn and Dawson Counties.

Mont., Hardin—Comrs. Big Horn Co. plan to grade 31 mi. Crow Agency-Busby Rd., cost $20,000; 22 mi. Hardin-St. Xavier Rd., $20,000. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Miles City—Custer Co. election Sept. 2 to vote on $350,000 bonds to build roads. J. H. Bohling, Jr., co. clk.

Mont., White Sulphur Springs—Meagher Co. voted $150,000 bonds to improve roads. E. R. Lausted, White Sulphur Springs, engr.

Mo., Charleston—Mississippi Co. receives bids about July building 15 mi. road from here to Bird's Point, concrete. About $330,000. C. E. Swank, Sikeston, co. engr.

Mo., Clayton—St. Louis Co. plans to hard surface sections St. Charles Rock, Manchester, Gravois and Lemay Ferry Rds., 18-24 ft. wide, vitr. brick, concrete or bituminous concrete. About $3,000,000. W. Elbring, co. engr.

Tex., Dallas—Dallas Co. plans to build permanent highways. Bonds for $6,500,000 voted for project. J. F. Witt, co. engr.

Tex., Ft. Worth—City soon lets contract improving Galveston Ave., South Main St., and north and south approaches of Jennings Ave. viaduct. F. J. Von Zuben, city engr.

Tex., Henderson—Rusk County voted $800,000 bonds to build roads.

Tex., Jasper—Jasper Co. soon lets contract improving, grading and gravel surfacing 29.3 mi. State Highway No. 7 from Bohler's Ferry to Jasper and Newton, 16 ft. wide; cost $176,283; 10 mi., from Angelina Co. line to point 10 mi. southeast, 16 ft. wide, involving 30 acres clearing and grubbing, 600 cu.yd. concrete and 30,[illegible] cu.yd. earth excav., $53,900. C. P. Hunter, Jasper, engr.

Tex., San Angelo—Comrs. Tom Green Co. plan to build roads. About $200,000.

Tex., Stamford—City voted $20,000 bonds to improve streets.

Okla., Oklahoma—City plans to grade, pave and improve 2000 ft. Lottie Ave. from 13th to 20th Sts., 20 ft. wide, involving 10,000 sq.yd. asphalt, 4000 lin.ft. concrete curbing, 3500 cu.yd. earth excav., cost $30,000; grade and improve, also install sewers and water mains in 1500 ft. 5th St., from Western to McKinley Sts.; 40 ft. wide, involving 5000 sq.yd. bituminous concrete, 4400 lin.ft. concrete curbing, etc. About $25,000. J. W. Bennett, city engr.

Colo., Ft. Collins—City plans to pave streets in College Ave. Paving Dist. About $101,087. W. C. Check, city engr.

Ariz., Clifton—Comrs. Greenlee Co. plan to improve 4.2 mi. Clifton-Franklin Highway, involving 50,000 cu.yd. excav. (15% rock), 44,000 sq.yd. surfacing, 1950 lin.ft. concrete pavement, 1000 cu.yd. rubble masonry, 15,000 lin.ft. storm ditch, etc. About $97,372.

Ariz., Phoneix—Maricona Co. voted $4,000,000 bonds to build 272 mi. hard-surfaced roads. County will receive $500,000 additional bonds as its share of Federal Aid funds. The above sums will be available over period of 5 years. R. C. Perkins, co. engr. Noted Apr. 24.

Wash., Aberdeen—City soon lets contract grading, clearing, building plank sidewalks and cement culverts on Summit, Fleet and Fairfield Sts., and alley in Block 11. P. F. Clark, clk.

Wash., Camas—City soon lets contract grading and paving Pearl and Beeson Sts., bitulithic concrete or asphaltic concrete, estimated cost, $13,151; also building vitr. or concrete sewer in Pearl St., $1574. C. E. Farr, city clk.

Wash., Hoquiam—City plans to clear, grub and pave Monroe St. and Perry Ave., concrete. W. A. Jackson, city engr.

Wash., Seattle—Bd. Pub. Wks. soon lets contract paving and building sewer in King St., et al, involving 28,400 sq.yd. (a) brick, (b) 9 in. concrete pavement and 1260 ft. 12 in. sewer pipe. Estimated cost (a) $199,720, (b) $156,957. A. H. Dimock, city engr.

Wash., Woodland—City soon lets contract grading and hard surfacing 1st St., 3rd and Buckeye Sts., and Bozorth Ave. L. Foff, clk.

Oregon—State Highway Comn., Portland, soon lets contract grading and paving roads in following counties: Coos Co., Marshfield-Cedar Point Rd., involving 10,000 cu.yd. excav., Cedar Point-Coquille Rd., 23,000 cu.yd. excav.;

Grant and Wheeler Counties, Fossil-Dayville section John Day Highway, Unit No. 1, 13 mi. long, 91,000 cu.yd. excav., Unit No. 2, 12.5 mi., 74,000 cu.yd. excav., Unit No. 3, 12 mi., 91,000 cu.yd. excav., Unit No. 4, 11.5 mi., 103,000 cu.yd. excav.;

Benton Co., 9 mi. from Monroe, north, 29,000 cu.yd. excav.;

Baker Co., Sag Sect. Baker-Cornucopia Highway, 16,500 cu.yd. excav., 9700 cu.yd. rock surfacing;

Yamhill Co., 2 mi. from Grande Ronde to Butler Store, macadam;

Multnomah Co., 2.43 mi. from Bertha to Washington Co. line;

Curry Co., 6.94 mi. Hubbard Creek-Brush Creek Rd., 150,000 cu.yd. excav.;

Umatilla Co., 8.15 mi. Cabbage Hill-Kamela Rd., 97,000 cu.yd. excav., 21.4 mi. from Pendleton to Echo, 221,000 cu.yd. excav.;

Clackamas Co., 3.8 mi. Aurora-Canby Rd., 36,000 cu.yd. excav.;

Washington Co., 6.7 mi. Forest Grove-Gaston Rd., 16,000 cu.yd. excav.;

Douglas Co., Yoncalla Sect., 7.7 mi. macadam, 2.7 mi. grading, 10,000 cu.yd. excav., 16,000 cu.yd. rock surfacing, 4.5 mi. Roseburg-Wilbur Rd., 8000 cu.yd. rock surfacing, 19,000 cu.yd. excav., 3.25 mi. Leona-Drain Rd., 19,000 cu.yd. excav., 6800 cu.yd. rock surfacing.

Jackson Co., Pacific Highway from Green Springs to Mt. Summit, 10.9 mi. grading, 91,000 cu.yd. excav., Green Springs Mt. Rd. to Jenny Creek, 8.15 mi. grading, 32,000 cu.yd. excav. H. Nunn, Salem, state highway engr.

Streets and Roads (Continued)

Ore., Portland—City soon lets contract building artificial stone or asphaltic sidewalks on concrete foundation, not less than 3 in. in depth, on 77th St. S. E. from north line 55th Ave. S. E., planking portions of streets occupied by Portland Ry., Light & Power Co.; B'way St. from East 45th St. to Sandy Blvd.; artificial stone asphaltic concrete sidewalks, 3 in. concrete foundation, on Roosevelt St. from 22nd to 23rd Sts.; East 9th St. from Alberta to Webster Sts.; Webster St. from East 9th St. extending north to east line East 9th St.; from north line Webster St. to south line Summer St., asphaltic concrete pavement Nos. 1 and 2 on crushed rock base, concrete pavement Nos. 1 and 2. G. R. Funk, city aud. O. Laurgaard, city engr.

Cal., El Centro—Imperial Co. election July 1, to vote on $1,500,000 bonds to pave 120 mi. highways with concrete. G. R. Wade, Brawley, engr.

Cal., Hanford—City plans to pave crosstown streets. About $300,000.

Cal., Reedley—City voted to pave 30 blocks of G, 10th, 11th, 9th and 12th Sts. and alleys.

Cal., Santa Ana—Comrs. Orange Co. receive bids in July, paving 3.8 mi. Santa Ana Canyon Rd., concrete. E. L. McBride, Santa Ana, engr.

Cal., Santa Rosa—Comrs. Sonoma Co. voted $1,640,000 bonds to pave 204 mi. roads with concrete and build concrete and corrugated iron culverts.

Cal., Upland—City receives bids in about 6-10 weeks, improving 3½ mi. Euclid Ave., 23 ft. wide. Plans include 4 in. concrete pavement, cement and stone curbs and gutters, also repairing same amount macadam pavement. About $100,000. T. R. Woodbridge, City Hall, engr.

Que., St. Boniface—Town plans to build gravel road. About $25,000. G. Henry, Parliament Bldg., Quebec, engr.

Ont., Brantford—Bd. Wks. soon lets contract for 50,000 sq.yd. concrete pavement, 12,000 sq.yd. bituminous resurfacing on concrete base already laid and 6000 sq.yd. bituminous for concrete resurfacing on concrete base already laid. About $150,000. H. Simpson, chn. T. H. Jones, city engr.

Ont., Ottawa—Bd. Control recommended that City Council pave following streets with asphalt: Slater St. from Bay to Bronson Aves., Wilbrod St. from Nicholas to Charlotte Sts., Goulburn Ave. from Osgoode to Somerset Sts., and Murray St. from Cumberland to King Edward Ave. A. E. McCallum, City Hall, engr.

Ont., Sandwich—Town having plans prepared by C. McColl, engr., Windsor Gas Bldg., Windsor, grading, shaping and paving 1½ mi. Center St. from Sandwich to Huron Sts., 26 ft. wide, asphalt, concrete or brick. About $50,000.

Ont., Tecumseh—Town having estimates made by R. W. Code, engr., Bd. Trade Bldg., Windsor, for 70,200 sq.yd. concrete pavement. About $150,000. F. G. Belleperche, clk.

Sask., Saskatoon—City soon lets contract paving 1902 ft. Saskatchewan Crescent from Traffic Bridge to existing pavement on Saskatchewan Crescent South at Lorne Ave. About $25,000. C. J. Yorath, comr.

BIDS DESIRED

Maine—Until June 13, by State Highway Comn., Augusta, grading, draining and bituminous macadam surfacing, state aid highway, beginning at Mill St. and extending along Pleasant St. 3011 ft. to Main St., Brunswick Twp. P. D. Sargent, ch. highway engr.

N. H., Irvington—Until June 16, by Town Comrs., Town Hall, paving and curbing McAllister, Dupont, Ens, Paine, Chestnut and Union Aves., Nerbit Terrace and Banta Pl. Work involves 11,600 sq.yd. asphalt, 20,733 sq.yd. concrete, 12,023 lin.ft. concrete curbing and 21,500 cu.yd. excav. I. J. Casey, Jr., Town Hall, engr.

Massachusetts—Until June 17, by State Highway Comn., Boston, building 15,400 ft. bituminous macadam road, 18 ft. wide, Tewksbury and Wilmington Twps. A. W. Dean, state highway engr.

Mass., Attleboro—Until June 19, by city, for 1 mi. bituminous road. Bids will be received for both asphalt penetration and gravel mixed surfacing. H. J. Goodale, supt. pub. wks.; advertised in this issue.

Mass., North Adams—Until June 23, by J. L. Temple, comr. pub. wks., improving 4600 sq.yd. concrete roadway on Zylonite Rd.; 1700 sq.yd. concrete roadway and 600 sq.yd. brick on Beaver St.; 4500 sq.yd. bituminous macadam top surface, to be laid over old water bound macadam, on Beaver St.; 1300 lin.ft. concrete combination curb and sidewalks on Beaver St.; advertised in this issue.

New York—Until July 1, by State Highway Comn., Capitol, Albany, improving highways in following counties: Albany Co., 3.93 mi.; Herkimer Co., 2 highways, 5.84 mi. and 5.67 mi.; Oneida Co., .45 mi.; Putnam Co., 3.33 mi; Saratoga Co, 2 highways, 9.06 mi. and 1.52 mi.; Suffolk Co., 2 highways, 6.59 mi. and 4.98 mi.; completing highways in following counties: Cattaraugus Co., 6.98 mi.; Cayuga Co., 2 highways, 3.89 mi. and 4.39 mi.; Cortlandt Co., 6.07 mi.; Erie Co., 6.03 mi.; Franklin Co., 1.99 mi.; Hamilton Co., 5.01 mi.; Jefferson Co., 4.05 mi.; Madison Co., 5.65 mi.; Niagara Co., 8 mi.; Schenectady Co., 5.62 mi.; Wayne Co., 5.85 mi.; also repairing highways in Rensselaer and Ulster Counties. F. S. Greene, comr.; advertised in this issue.

N. Y., Buffalo—Until June 17, by Dept. Pub. Wks. paving Crescent Ave., from Parkside Ave. to Colvin St., Armin Pl. from northeast curb of Seneca St. to 734 ft. northeast, Fay St. from Walden to West Shore Aves., Poultney St. from Kensington to Hutchinson Aves., Stevens St. from north curb of East Ferry St. to 700 ft. northerly, all 26 ft. wide, Ross Ave. from end of present pavement to northwest curb line of Ontario St., 24 ft. wide, repaving Pennsylvania St. from Prospect Ave. to Niagara St., 32 ft. wide, Lathrop St. from Bway. to Sycamore St., 30 ft. wide, River St. from Erie to Genesee Sts., 42 ft. wide. A. W. Kreinheder, comr.

N. Y., Geneva—Until June 23, by Bd. Pub. Wks., paving High, West and Brook Sts., involving 8750 lin.ft. curbing and guttering, 5400 cu.yd. excav., 175 lin.ft. header and 10,000 sq.yd. brick, asphalt or concrete, etc. H. K. Seyboldt, supt.; advertised in this issue. Noted May 29.

N. Y., New York—Until June 19, by Park Bd., Municipal Bldg., for all labor and materials for paving and repaving with asphalt mastic, walks of Central and other parks in Manhattan Boro. F. D. Gallatin, pres.

N. Y., S. I., St. George—Until June 16, by C. D. Van Name, pres. Richmond Boro., repairing with wood block roadway of Bway. from Union St. to Henderson Ave. and from Castleton Ave. to Cary Ave. and Richmond Terrace from Sharpe to Lafayette Aves. and from Westervelt to York Aves.

N. J., Burlington—Until July 2, by Bd. Freeholders Burlington Co., building Camden Co. line-Marlton-Medford Rd., Evesham Twp., sheet asphalt surface on macadam foundation, involving 31,680 sq. yd. surface pavement. H. Hawkins, Jr., clk.; advertised in this issue. Noted Apr. 24.

N. J., Jersey City—Until June 17, by City Comrs., improving Hutton St. with sheet asphalt. Former bids rejected. Noted May 22.

N. J., Jersey City—Until June 26, by Bd. Freeholders Hudson Co., improving Paterson Turnpike, North Bergen Twp., with granite block. About $80,000. Noted Mar. 20.

N. J., South Orange—Until June 16, by Village Trustees, paving 35,000 ft. Valley St., 50 ft. wide, 30 ft. curb to curb, cost $35,000; 15,000 ft. Irving Ave., 50 ft. wide, 27 ft. curb to curb, involving 2850 lin.ft. curbing, 4470 cu.yd. pavement, 90,000 sq. yd. 6 in. concrete base, 11,500 lin.ft. sidewalk, and 1400 cu.yd. excav., etc., about $16,000. I. T. Redfern, South Orange, engr.

N. J., Union—Until June 16, by Town Council, improving Palisade and Hudson Aves. About $25,000. Noted May 1.

Pennsylvania—Until June 24, by State Highway Comn., Harrisburg, building roads in counties as follows:

Blair Co., 1269 lin.ft. rein.-con.

Columbia Co., 10,870 lin.ft. bituminous surface course on concrete foundation and Hillside vitr. brick, 9122 lin.ft. bituminous surface course on concrete foundation.

Dauphin Co., 12,725 lin.ft. bituminous surface course on concrete foundation or rein.-con., 24,765 lin.ft. rein.-con.

Lancaster Co., 21,506 lin.ft. bituminous surface course on concrete foundation or rein.-con.

McKean Co., 31,548 lin.ft. one course rein.-con. foundation or vitr. brick.

Northumberland Co., 9641 lin.ft. bituminous surface course on concrete foundation or rein.-con.; 25,693 lin.ft. rein.-con. and Hillside vitr. brick. L. S. Sadler, state highway comr.

Pa., Chester—Until June 17, by North Chester Realty Co., c/o Supt. Street and Public Improvements, City Hall, for 10,170 sq.yd. asphaltic concrete paving, 5340 sq. yd. granite paving block relaid, 29,700 sq.yd. bituminous macadam, 4050 sq.yd. waterbound macadam, 13,675 sq.yd. concrete foundation for paving, 5800 cu.yd. excav., 4500 cu.yd. embankment, 3300 lin. ft. concrete curbing. J. H. Brown, vice pres.

Pa., Coatesville—Until June 23, by City Council, paving various streets. Work involves 28,625 sq.yd. bituminous pavement on cement concrete base, 1375 sq.yd. bituminous pavement on existing base, 4500 sq. yd. vitr. brick pavement to be relaid, 4300 sq.yd. vitr. brick or stone block pavement along tracks and 3000 lin.ft. cement concrete curbing. Bids will be received on sheet asphalt, asphaltic concrete, Warrenite, Filbertine, amiesite and bito-slag pavement. C. A. Niles, city engr.; advertised in this issue. Noted Jan. 16.

Pa., Greensburg—Until June 24, by J. S. Sell, controller Westmoreland Co., improving 1.75 mi. Latrobe-Kingston Rd., Derry Twp., 0.33 mi. Beatty-Spur Rd., Unity Twp., and 0.37 mi. Jeannette-Penn Rd., Penn Twp. Bids will be received for brick pavement on concrete base, with integral concrete curb; also for rein.-con., using brick on all grades above 6%.

Pa., North Braddock (Braddock P. O.)—Until June 15, by Boro. improving Poplar Way from Bowers to South Sts., involving 2133 sq.yd. brick paving and 1800 cu.yd. excav. G. F. Siefers, boro. engr.

Pa., Reading—Until June 25, by city, paving and building appurtenant work in various streets. Work involves 17,000 sq.yd. sheet asphalt, 9000 sq.yd. vitr. brick and 650 sq.yd. wood block. E. B. Ulrich, city engr.; advertised in this issue.

Pa., Scranton—Until June 14, by Dept. Pub. Wks., paving curbing, etc., portions of Academy, Olive, Poplar, River and Pine Sts., Columbia, Fourth, Mattes and Taylor Aves., Forest, Dupont and Buenzil Courts; also building Grimes Court lateral sewer and pipe drain sewers in 20th Ward. R. W. Allen, dir. dept. pub. wks.

Md., Baltimore—Until June 18, by City Paving Comn., grading, curbing and paving Crooked Lane from Fayette to Lexington Sts., involving 340 sq.yd. old granite block relaid with cement filler on 5 in. concrete base, Washington Pl. from Centre St. to Mt. Vernon Pl., 1540 sq.yd. Hillside vitr. brick block with cement filler on 5 in. concrete base, Contr. No. 164; Brevard St. from Wilson St. to North Ave. and 2 alleys running west therefrom, 2910 sq.yd. 6 in. cement concrete, Contr. No. 165; Arch St. from Redwood to Saratoga Sts., Vine St. from Poppleton to Arch Sts., Pierce St. from Schroeder to Pearl Sts., Penn Alley from Myrtle Ave. to Arch St., 11,920 sq.yd. 6 in. cement concrete, Contr. No. 166. R. K. Compton, 214 Lexington St., chn. and consult. engr.

Virginia—Until June 17, by State Highway Comn., Richmond building 2.69 mi. road from Ryan Mills to Coleen, 16 ft. wide, Project No. 33, Nelson Co.; 4.27 mi. road from Fairfield to Timber Ridge Church, 16 ft. wide, Project No. 33, Rockbridge Co., both waterbound macadam; also one 30 ft. rein.-con. bridge, 20 ft. wide, 1600 ft. approaches, over Snow Creek between Spottsylvania and Carolina Counties, Project No. 49. G. P. Coleman, state highway comr.

W. Va., Elkins—Until July 8, by Comrs. Randolph Co., building 19 mi. roads and streets in Leadville Dist.; work to be let in sections. T. Pritt, clk. Advertised in this issue.

W. Va., Fairmont—Until June 28, by Comrs. Marion Co., building 1.50 mi. cement concrete road in Paw-Paw Dist. A. G. Martin, clk.

Streets and Roads (Continued)

W. Va., Martinsburg—Until June 23, by Comrs. Berkeley Co. resurfacing 13 mi. Martinsburg-Winchester Turnpike, 16 ft. wide, involving 61,600 sq.yd. waterbound macadam local stone. About $18,000. J. W. Sperow, Martinsburg, engr.

W. Va., Wheeling—Until June 30, by Comrs. Ohio Co. grading 1 mi. Liberty Dist. Rd., 18 ft. wide, with concrete. About $40,000 W. O. McCluskey, Jr. Wheeling, engr

Ga., Brunswick—Until July 5, by Glynn Co. paving 4.4 mi. Federal aid highway from city line to Picric Acid plant. P. E. Twitty, clk. E. R. Conant, consult. engr.; advertised in this issue.

Ga., Brunswick—Until July 5, by City Council for about 105,000 sq.yd. pavement on various streets. N. D. Russell, clk., E. R. Conant, consult. engr.; advertised in this issue.

Ala., Athens—Until June 25, by Comrs. Limestone Co., grading, draining and surfacing with gravel 9.97 mi. Bee Line Highway, State Trunk Rd. No. 1, between Decatur and Tennessee State line. Work involves 38,224 cu.yd. earth excav., 17,597 cu.yd. gravel surfacing, 8.42 mi. clearing and grubbing, 225 cu.yd. Class A and 45 cu.yd. Class C concrete, 18,252 lb. steel reinforcement and 550 ft. terra cotta pipe. W. S. Keller, c/o State Highway Dept., Montgomery, engr.

Tenn., Murfreesboro—Until June 17, at office of J. T. Rather, secy. city bd. comrs., for (1) 15,500 sq.yd. asphaltic concrete pavement, 400 lin.ft. vitr. brick headers, 500 cu.yd. earth excav., 1000 sq.yd. new macadam foundation, (2) 5510 lin.ft. 18-30 in. concrete combination curb and gutter, 4000 sq.ft. 24 in. concrete gutter, 500 sq.ft. concrete sidewalk., 12 catch basins, 60 ft. storm water culverts (without c.i. covers), (3) 2850 ft. 6-20 in. vitr. clay pipe sewer, (4) 570 ft. 2 in. galvanized pipe laid, 1600 ft. No. 6 B & S single conductor 5000 volt armored cable installed and 16 sidewalk outlets for cable. G. B. Howard & Co., 148 4th Ave., N., Nashville, engrs.; advertised in this issue.

Ohio—Until June 27, by State Highway Comn., Columbus, building 3 mi. Eaton Pike from Dayton to Johnsville Rd., 16 ft. wide, Montgomery Co. Work involves 3000 cu.yd. grading and 28,160 sq.yd. 8 in. rein.-con. paving. S. Sharts, co. engr.

O., Cincinnati—Until June 17, by Dir. Pub. Serv., improving 950 ft. Hopple St. from Colerain Ave. to east approach of Hopple St. Viaduct, 50 ft. wide, involving necessary alterations to water distributing system, cement sidewalks, etc. F. King, city engr.

O., East Liverpool—Until June 28, by E. J. Smith, dir. pub. serv., improving East 5th St. and Pennsylvania Ave., involving 8024 sq.yd. brick block on concrete base, storm sewers, etc.; Brady Alley, 162 cu.yd. grading, 601 sq.yd. brick block pavement, storm sewers, etc.; Bway from East 4th to East 6th Sts., 3839 sq.yd. brick block on concrete base, storm sewers, etc. Noted June 5.

Ind., Indianapolis—Until June 16, by Bd. Pub. Wks., resurfacing 420 ft. North St. from Meridian to Pennsylvania Sts., 40 ft. wide, involving 1866 sq.yd. pavement, cost $6498; 2557 ft. Shelby St. from first alley south of Prospect St. to Pleasant Run, 40 ft. wide, 11,460 sq.yd. pavement, 560 ft. limestone curbing, $21,178; 750 ft. North St. from Noble to Penn Sts., 27 ft. wide, 2250 sq.yd. pavement, $11,369. Bids will be received on vitr. brick, wood block, asphalt or bituminous concrete.

Ind., Indianapolis—Until June 24, by Comrs. Marion Co., grading, paving and building culverts on Alexander Ave., 5356 ft., from Sherman Dr. to Emerson Ave., 50 ft. wide, involving 29,755 sq.yd. vitr. brick, cost, $38,464; also 1013 ft. Sherman Ave. from English Ave to Pleasant Run Creek, 60 ft. wide, 6753 sq.yd. concrete.

Mich., Port Huron—Until June 19, by D. D. Worcester, rd. mgr. St. Clair Co., improving 3½ mi. Smith Creek-Sunnyside Rd., 16 ft. wide. Plans include grading, surfacing and building drainage ditches, culverts, bridges, etc. Bids will be received on Class B gravel and Class C slag base with gravel top or penetration type.

Wis., Berlin—Until June 16, by city, for paving 7000 sq.yd. with concrete.

Wis., Plymouth—Until June 17, by J. Donohue, engr., York Bldg., Sheboygan, grading and paving 4.8 mi. Reed and Selma Sts., 18 ft. wide, for city. Work involves 23,500 sq.yd. vitr. brick, asphalt or concrete, 13,000 lin.ft. concrete curb and gutter, and 4500 cu.yd. grading. Cost between $35,000 and $45,000.

Wis., Racine—Until June 14, by city, paving, curbing and guttering Buchanan St., Portland cement concrete.

Wis., Sheboygan—Until June 16, by C. U. Boley, city engr., grading and paving 2.1 mi. North 10th St. from Superior to Jule Aves., 20 ft. wide, involving 12,000 sq.yd. asphalt and 6000 lin.ft. concrete curb and gutter, cost $20,000; 1.9 mi. Jefferson Ave. from North 7th to East Water Sts., involving 4500 sq.yd. concrete and 2900 lin.ft. concrete curb and gutter, $15,000. Noted May 29.

Wis., Sheboygan—Until June 14, by C. U. Boley, city engr., grading and paving 1.6 mi. North 6th St., from Pennsylvania Ave. to Water St. and North 4th to 9th Sts., 18 ft. wide. About $14,000. Work involves 3950 sq.yd. concrete and 1850 lin.ft. concrete curb and gutter. Noted May 29.

Wis., West Allis—Until June 21, by Bd. Pub. Wks., grading Cornwall Ave. from 77th to 81st Aves., and from 78th to Summit Aves.

Ia., New Hampton—Until June 19, by H. W. Tank, aud. Chickasaw Co., grading, tiling and surfacing with gravel, etc., Federal Aid Project No. 35, part of New Hampton-Waterloo and New Hampton-Cresco Rds., involving 29,772 ft. 6-12 in. tile, 32,925 cu.yd. gravel loading, 66,000 cu.yd. gravel hauling and 61,654 cu.yd. excav., grading and incidental work on Sects. F, G, and west ½ of H of New Hampton and Lawler Co. Rd., involving 2 mi. finished grade requiring 6585 cu.yd. excav.; advertised in this issue.

Ia., Newton—Until June 20, by city, paving and curbing 75,000 sq.yd. road, brick, asphalt, concrete or asphaltic concrete. E. G. Finch, clk.; advertised in this issue.

Minn., Blue Earth—Until June 23, by J. J. Herring, aud. Faribault Co., grading and graveling Federal Aid Project No. 36, State Rd. No. 1, involving 156,808 cu.yd. excav., loading and hauling 29,197 cu.yd. grading and surfacing material, 15 rein.-con. culverts, etc. Work will be divided in 3 sections and separate bids will be taken on each section of grading and work incidental thereto, or for grading and surfacing and work incidental to each. R. J. Short, Blue Earth, engr. Noted Apr. 10.

Minn., Grand Rapids—Until June 24, by Comrs. Itasca Co., building 8.95 mi. Federal Aid Project No. 52, State Rd. No. 6, 24 ft. wide. Work involves 54 acres clearing, 44 acres grubbing, 36,390 cu.yd. excav., 10,500 cu.yd. graveling, etc. O. J. Lidberg, Grand Rapids, engr.

Minn., Grand Rapids—Until July 2, by Comrs. Itasca Co., grading 10 mi. Federal Aid Project No. 52, 24 ft. wide. About $30,00. O. J. Lidberg, Grand Rapids, engr.

Minn., Litchfield—City receiving bids paving 10 blocks of streets. About $50,000. L. P. Wolff, 1001 Guardian Life Bldg., St. Paul, engr.

Minn., Litchfield—Until June 28, by A. O. Palmquist, aud. Meeker Co., grading and surfacing Federal Aid Project No. 40, involving 134,760 cu.yd. excav., loading and hauling 16,900 cu.yd. grading and surfacing material, one 90 ft. and one 16 ft. span bridges, etc. Work will be divided in 3 sections and separate bids will be received on each section of grading and work incidental thereto, or for grading and surfacing and work incidental to each. R. P. McNamara, Litchfield, engr. Noted Apr. 10.

Minn., Madison—Until June 25, by Comrs. Lac Qui Parle Co., grading and graveling 20 mi. and graveling 30 mi. Federal Aid Projects Nos. 54, 55 and 56, 24 ft. wide. About $200,000. R. Fredrik, Madison, engr. Noted Apr. 10.

Minn., Marshall—Until June 24, by R. D. Houdersheldt, aud. Lyon Co., improving 9 mi. Federal Aid Project, State Rd. No. 6. Plans include grading, graveling, grubbing, 89,884 cu.yd. excav., 107,969 cu. [illegible] overhaul, 1408 ft. 12-24 in. culverts, etc. D. W Webster, Marshall, engr.

Kan., Marion—Until June 18, by city, paving 2 streets, concrete or brick. H. A Rowland, McPherson, engr.

Kan., Pratt—Until June 18, by [illegible] W Ellis, city engr., for 53,600 sq.yd. vitr. brick paving, 22,524 lin.ft. concrete curb and guttering, catch basins, storm drains, etc.

Neb., Ainsworth—Until June 16, by village, for 19,240 sq.yd. concrete or brick pavement, 6520 lin.ft. curb and gutter, 4800 ft. soft steel protection plates. Cost concrete $62,000, brick, $85,000. W. E. Standeven, 414 Bee Bldg., Omaha, engr.

Neb., Benkelman—Until July 1, by F Woodward, clk. Dundy Co., grading sand clay surfacing and building culverts on 12.7 mi. Max-Doane Rd., 24 ft. wide, involving 95,000 cu.yd. earth excav., [illegible] lin ft. 18-30 in. concrete pipe, 318 cu.yd. concrete, etc. About $46,000. G. E. Johnson, c/o State Highway Dept., engr

Neb., David City—Until June 16, by M J. Bouse, clk. Butler Co., paving 1360 ft. road from here to Oceola, 16 ft. wide, involving 7993 sq.yd. concrete on 7½ in. concrete base, 1940 lin.ft. 12-36 in. concrete or corrugated iron culverts, 115 cu.yd. concrete, etc. About $25,000. G. E. Johnson, c/o State Highway Dept., Lincoln, engr.

Neb., Hayes Center—Until July 2, by E E. Gurrett, clk. Hayes Co., grading and improving 16 mi. Hamlet-Imperial Rd., in Hayes and Chase Counties, 24 ft. wide, involving 104,000 cu.yd. earth excav., 788 lin.ft. 18-24 in. concrete pipe and 84 cu.yd. concrete, etc. About $43,000. G. E. Johnston, c/o State Highway Dept., Lincoln, engr. Noted Feb. 13 under Nebraska.

Neb., Humboldt—Until June 17, by W. G. Lydick, city clk., paving 17,000 yd. various streets. J. R. Mullen, Fall City, engr.

Neb., Kearney—Until June 30, by G. E Hasse, clk. Buffalo Co., grading and sand clay surfacing 20.4 mi. Kearney-Pleasanton Rd., 24 ft. wide, involving 170,000 cu.yd. earth excav., etc. About $75,000. G. E Johnson, c/o State Highway Dept., Lincoln, engr.

Neb., McCook—Until June 24, by city, paving vertical Main and B Sts., involving 29,574 cu.yd. fibre brick on concrete base, asphalt filler, 9602 cu.yd. excav., 1806 ft. 5 in. concrete curb, 360 ft. double gutter, 10,682 ft. combined 5 in. curb and 30 in. gutter, 778 ft. combined 5 in curb and 48 in. gutter, 4875 ft. 10-36 in. storm sewer, 28 manholes and 70 catchbasins complete. Archer & Stevens, 609 New England Bldg., Kansas City, Mo., engrs. Noted Mar. 20.

Neb., Omaha—Until July 5, by F. Dewy, clk., Douglas Co., grading and improving 23.7 mi. Lincoln Highway, 24 ft. wide, involving 90,500 cu.yd. earth excav. and 872 lin.ft. 18-48 in. concrete pipe culverts, etc. About $46,000. G. E. Johnston, c/o State Highway Dept., Lincoln, engr. Noted Feb. 13 under Nebraska.

Neb., Stockville—Until July 3, by A. G. Williams, clk., Frontier Co., grading and building culverts on 12.1 mi. Curtis-Stockville Rd., 24 ft. wide, involving 75,000 cu.yd. earth excav. and 788 lin.ft. 18-48 in. corrugated pipe culverts. About $28,000. G. E. Johnson, c/o State Highway Dept., Lincoln, engr.

S. D., Millbank—Town Clk. is receiving bids for 10,000 sq.yd. concrete paving. L. P. Wolff, 1001 Guardian Life Bank Bldg., St. Paul, Minn., engr.

N. D., Bottineau—Until July 8, by Comrs. Botineau Co. building 8.01 mi. earth road. W. H. Robinson, c/o State Highway Dept., Bismarck, engr.

Montana—Until June 18, by State Highway Comn., Helena, gravel surfacing 4 mi. Sect. 1, Tongue River Rd., Custer Co. About $20,000. P. D. Pratt, state highway engr.

Montana—Until June 18, by State Highway Comn., Helena, gravel surfacing 4.74 mi. Red Trail west of Wibaux, 5.68 mi. east of Wibaux, 4 mi. Tongue River Rd. south of Miles City, 3.84 mi. Forsyth-Ashland Rd. south of Forsyth, 4.13 mi. Yellowstone Trail south of Livingston, 4.25 mi. Chinook-Malta Rd. east of Chinook and earth surfacing 6.13 mi. Grass-Range-Roundup Rd. south of Grass Range. P. D. Pratt, state highway engr.

Streets and Roads (Continued)

Arkansas—Until June 16, by State Highway Dept., Little Rock, grading and surfacing 26 mi. road, 22 ft. wide, in Rd. Impvt. Dist. No. 12. Work involves 234,800 sq.yd. asphaltic macadam surfacing, 16 ft. wide, 750 cu.yd. rein.-con., 140,000 cu.yd. earth excav., 70 acres clearing and grubbing, 960 lin.ft. 18-24 in. pipe culvert and 259,870 cu.yd. stone. E. E. Mashburn, Cotton Plant, engr.

Arkansas—Until June 26, by Comrs. Rd. Impvt. Dist. No. 1, Jefferson and Lincoln Cos., at office of State Highway Dept., Little Rock, building 19 mi. gravel roads, 14 ft. wide. Work involves 47 acres clearing and grubbing, 85,600 cu.yd. earth excav., 1.45 mi. grading machine work, 1328 lin.ft. 16-30 in. rein.-con. pipe, 1025 cu.yd. class A and 392 cu.yd. class B concrete, 80,200 lb. steel reinforcing bars, 40,250 cu.yd. gravel, three 80 ft. steel spans and 1655 lin.ft. wooden pile bridges, etc. Moreland & Bennett, Pine Bluff, engrs.; advertised in this issue.

Tex., Bonham—Until June 16, by Comrs. Fannin Co., improving, grading and surfacing 7.121 mi. State Highway No. 5, from Ector to Grayson Co. line, 16 and 24 ft. wide. About $52,714. A. J. Goode, Bonham, engr. Noted May 22.

Okla., Oklahoma—Until June 17, by city, grading and improving 1500 ft. 13th St. from Kentucky to Pennsylvania Sts., 30 ft. wide, involving 4200 sq.yd. asphalt on 6 in. concrete base, 2900 lin.ft. concrete curbing, 2500 cu.yd. earth excav., cost, $75,000; 5th St., from Western to Pennsylvania Sts., 20 ft. wide, involving 5000 sq.yd. bituminous concrete on 6 in. concrete base, 4350 concrete curbing, 3500 cu.yd. earth excav., $30,000. J. W. Bennett, city engr.

Colo., Ft. Collins—Until June 17, by city, for 37,710 sq.yd. rein.-con. pavement, 5984 cu.yd. earth excav., 4469 lin.ft. concrete curbing, etc. W. B. Check, city engr.; advertised in this issue.

Ariz., Bisbee—City is receiving bids paving 35,000 sq.yd. Tombstone Canyon, Main, Bressey and Gulch Sts., 4 in. concrete or macadam. P. H. Halleck, Box 1103, city engr. Noted Apr. 24.

Washington—Until June 24, by State Highway Comn., Olympia, paving 7 mi. Pacific Highway from Forest to Toledo, Post Rd. No. 27, Lewis Co.; 4.5 mi. Sunset Highway from Spokane to Lincoln Co. line, Post Rd. Project No. 22, both concrete. J. Allen, c/o State Highway Comn., engr.

Washington—Until June 25, by State Highway Comn., Olympia, paving 7.7 mi. Pacific Highway from Mt. Vernon to Snohomish Co. line, Post Rd. No. 30, Skagit Co.; 3.2 mi. Olympic Highway from Montesano west, Post Rd. Project No. 26, both concrete, Gray Harbor Co. J. Allen, state highway engr.

Wash., Aberdeen—Until June 25, by City Council, paving, curbing and building sidewalks on 7 blocks of Wiskah St. from K to Washington Sts., 48 ft. wide. Work involves 13,830 sq.yd. concrete, 4470 lin.ft. concrete curbing and 4050 lin.ft. concrete sidewalk. About $52,700. A. H. Blood, city engr.

Wash., Enumclaw—Until June 17, by City Council, improving various streets, involving 15,144 sq.yd. concrete sidewalk, 32,678 lin.ft. concrete curbing, 14,303 cu.yd. earth excav. and 4897 cu.yd. gravel. C. E. Magnuson, clk.

Wash., Seattle—Until June 16, by Comrs. King Co., building 2 mi. J. B. McDougall Rd., 16 ft. wide, involving 18,000 sq.yd. concrete and 3000 cu.yd. earth excav. About $56,000. S. Humes, co. engr. Noted Apr. 24.

California—Until June 23, by State Highway Comn., Forum Bldg., Sacramento, building 9.7 mi. road between Hopland and easterly boundary, Mendocino Co., involving 106,800 cu.yd. excav., 350 cu.yd. Class "A" Portland cement concrete, etc.; 9.4 mi. road between westerly boundary and Lakeport, Lake Co., 104,600 cu.yd. excav., 300 cu.yd. Class "A" Portland cement concrete, etc. A. B. Fletcher, state highway engr.

Que., Coteau Landing—Until June 16, by town, building cement sidewalks. About $20,000. G. Vernier, clk.

Ont., Galt—Until June 18, by W. H. Fairchild, city engr., building 15,000 sq.yd. asphaltic pavement and 8500 lin.ft. curbing and guttering on Main St. About $50,000.

Ont., Vankleek Hill—Until June 23, by W. T. Dunning, town clk., building 24,800 sq.yd. bituminous macadam road, 1947 sq.yd. concrete gutter and 1 rein.-con. culvert. Town will supply binder and road metal (uncrushed) at points within ¾ mi. average haul, of work. About $80,000. Magwood & Stidwell, Pitt St., Cornwall, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Comn., Springfield, let contract to Marshfield Constr. Co., Marshfield, $27,746, building 9700 ft. state highway, 18 ft. wide, Weymouth Twp., involving 39,000 gal. bituminous, 4900 tons broken stone, 1100 cu.yd. earth excav.; to W. Jones, Barnstable, $21,295, building 6500 ft. state highway, Wareham Twp., 26,200 gal. bituminous, 3300 ton broken stone, 1500 cu.yd. earth excav. Noted May 29th.

Massachusetts—A. W. Dean, engr., 212 State House, Boston, received bids June 3, building state highway, Southbridge Twp., 18 ft. wide, involving 19,000 gal. bituminous, 3250 ton broken stone, 200 ft. c.i. pipe, 2700 cu.yd. earth and 2150 cu.yd. fill excav., from F. O. Bowie, Southbridge, $27,362; Lane Constr. Co., 37 Colony St., Meridan, Conn., $27,779; T. McGovern Co., Southbridge, $28,270. Noted May 29.

★Mass., Boston—City let contract laying granite block pavement on Newbury and Boylston Sts., to J. Doherty & Co., Boston, $17,959. Work involves 2500 sq.yd. granite block and 550 sq.yd. asphalt, on 6 in. concrete base.

★Mass., Boston—Dept. Pub. Wks. let contract, to Rowe Constr. Co., Brighton, $45,576, paving Center St., et al, 40 ft. wide, involving 22,750 sq.yd. asphalt, 365 lin.ft. stone curbing, 500 ton crushed stone; to Central Constr. Co., School St., $51,178, paving Greenwich St., West Roxbury, 40 ft. wide, 10,120 sq.yd. asphalt, 434 lin.ft. stone curbing, 37,940 sq.ft. concrete sidewalk.

★Rhode Island—State Bd. Pub. Rds., Providence, let contract building 10,560 ft. Hartford Pike, Johnston and Scituate Twps., to R. H. Newell & Sons Co., Uxbridge, Mass., $46,281; 9297 ft. East Main Rd., Portsmouth Twp., to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $49,838; 8180 ft. Waterman Ave., East Providence Twp., to B. Perini, Ashland, Mass., $63,772; 3550 ft. Mendon Rd., Lincoln Twp., to Winslow & Cummings, Nashua, N. H., $23,343. Noted May 29.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contracts, to Sicilian Asphalt Paving Co., 41 Park Row, New York City, regulating, grading, curbing and laying sidewalks on Dumont Ave., $3819; East 4th St., $15,404; East 17th St., $13,785; to Grimm Constr. Co., 460 Harold Ave., Richmond Hill, East 4th St., from Ave. I to J, and excavating to subgrade of 9 in. Ave. I from East 3rd to East 4th Sts., $4488; to Brooklyn Alcatraz Asphalt Co., 409 Hamburg Ave., East 67th St., $9785. Noted June 5.

★N. Y., Endicott—Endicott-Johnson Corp. and Village Trustees co-operating to macadamize boulevard along Susquehanna River, etc. About $30,000. Work will be done by day labor under supervision E. B. Lacey, Endicott.

★N. Y., Lockport—Common Council let contract paving Gooding St., brick, and West Jackson St., concrete, to C. N. Stainthorpe & Co., 126 Main St., $78,611. Noted Mar. 27.

★N. Y., New York—H. Bruckner, pres. Bronx Boro., let contracts repaving with granite blocks on concrete foundation, Southern Blvd., East 153rd and East 154th Sts., to O'Rourke Constr. Co., 150 Nassau St., $184,585, $27,533 and $10,741 respectively; Burnside Ave., to Burnside Constr. Co., 270 Burnside Ave., $19,298; Kinsella St., to A. F. Del Balso, 1481 Hoe Ave., $6038; Wilkins Ave., to S. S. Davis, $40,158. Noted June 5.

N. Y., New York—Armory Bd., at office of J. F. Hylan, mayor, City Hall, received lowest 3 bids, June 5, removing curb, extending concrete sidewalks and laying con- Ave. and Kingsbridge Rd., Bronx Boro., crete foundation for floor in drill hall of 8th Coast Artillery Corps Armory, Jerome Contr. No. 1, from F. Roeber, 507 5th Ave., $13,150; Craemer & Leedecke, $20,223; Spadero Contg. Co., 827 East 217th St., $21,190. Noted May 29.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids June 3, regulating and repaving with granite block on concrete foundation, roadway of (a) Moore St., (b) West Bway., (c) William St., (d) Theatre St., (e) Centre St., (f) Walker St., (g) Madison St., from M. J. O'Hara, 1228 Park Ave., (a) $6616, (b) $80,342, (c) $5429, (e) $19,329, (f) $4168; Asphalt Constr. Co., 2197 Madison Ave., (a) $6960, (b) $82,007, (c) $5902, (d) $4250, (e) $22,262; Cramer & Leedecke, (a) $7194, (e) $24,073, (f) $4330; O'Rourke Constr. Co., 150 Nassau St., (b) $84,779; P. H. McCarthy, 17 East 13th St., (c) $6106, (d) $4561, (f) $4562; W. J. Fitzgerald, 547 West 45th St., (a) $7347, (b) $88,157, (c) $6140, (d) $4353, (e) $22,182, (f) $4494; Burnside Constr. Co., 270 Burnside Ave., (e) $21,643, (f) $4505; Davney Asphalt Paving Co., foot of Quinby Ave., (g) $57,608; J. L. Brunstar, Harlem River and 150th St., (g) $59,274; Uvalde Asphalt Paving Co., 1 Bway., (g) $60,872. Noted May 29.

N. Y., New York—L. Nixon, supt. pub. wks., Capitol, Albany, received lowest 3 bids June 3, paving barge canal terminals, Pier 6, East River, Contr. 52-P, from Sicilian Asphalt Paving Co., 41 Park Row, $11,225; Cleveland Trinidad Paving Co., Flushing, $12,375; Uvalde Asphalt Paving Co., 1 Bway., $12,450. Noted May 8.

★N. Y., S. I., St. George—C. D. Van Name, pres. Richmond Boro., let contract regulating and repaving with bituminous concrete on present macadam foundation, roadway of Richmond Ave., to Uvalde Asphalt Paving Co., 1 Bway., New York City. About $54,885. Noted May 22.

★N. Y., Syracuse—City let contract resurfacing 4000 ft. South Ave. from West Onondaga St. to Cortland Ave., to G. B. Dickinson, Union Bldg. About $75,000. Noted May 29.

★New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, let contract building Sect. 1A State Highway Route No. 10, from Ft. Lee Ferry to Arcadian Way, Bergen Co., to D. G. Aronberg, Norfolk, Va., 96.9% of $481,000 (engineer's estimate). Noted May 29.

New Jersey—State Highway Comn., Broad St. Bank Bldg., Trenton, received bids surfacing (a) 21,384 sq.yd. State Highway Route No. 14, Wildwood Junction-Cape May Court House, Cape May Co., concrete, (b) 37,750 sq.yd. State Highway Route No. 14, Rio Grande-Wildwood Junction Sect., Cape May Co., concrete, from E. Riley Mixner, Goshen, (a) $114,687, (b) $71,645; W. P. McDonald Co., Phila., (a) $117,284, (b) $68,085; Cassedy & Homan, Cape May City, (a) $118,023, (b) $69,275. Noted Apr. 24.

★N. J., Belvidere—Bd. Freeholders, Warren Co. let contract building 1½ mi. Hope Rd., concrete, to Salmon Bros., Netcong, $44,927. Noted Feb. 13.

★N. J., Bogota—Town Council let contracts to, F. Poriello, Hackensack, improving Palisade Ave., cost $15,675; C. De Napoli, Inc., Hackensack, improving Fairview Ave., $20,952; Hamilton & Phelan, Ridgefield Park, improving Grove St., $11,922; H. Martin, Leonia, improving Oakwood Ave., $13,769.

★N. J., Camden—City let contract paving 2 mi. Federal St. from 27th to 42nd Sts., 36 in. wide, to J. M. Kelley, 432 Market St., $54,285. Work involves 10,500 sq.yd. granite block at $5.17 per sq.yd.

N. J., Hackensack—Bd. Freeholders, Bergen Co. received bids improving 4.63 mi. Paterson Plank Rd., from Hackensack River Bridge to Carstadt, 5 in. granite surface on 5 in. concrete foundation, from M. J. O'Connell, 135 Union St., $183,089; J. E. Douden, New York City, $194,476; Union Bldg. & Constr. Co., Main Ave., Passaic, $196,571. Noted Apr. 10.

Streets and Roads (Continued)

N. J., Jersey City—City received lowest 3 bids improving Johnston Ave. from Grand St. to Corneilson Ave., Belgian block pavement on concrete base, from E. J. Flaherty Co., 76 Montgomery St., 97% of engineer's estimate ($19,000); Van Keuren Contg. Co., Prior St., 100%; J. Billington, 214 Boulevard St., 105%. Noted May 29.

N. J., Jersey City—City received bid improving Bond St. between Boulevard and Garrison Ave., from W. T. S. Crichfield, Washington St., Hoboken, 122% of engineer's estimate. Noted May 22.

★Pennsylvania—State Highway Dept., Harrisburg, let contracts building 11,065 ft. rein.-con., in Cameron Co., to Fish, Young & Parks, Phila., $104,885; 13,464 ft. rein.-con., Union Co., to Richardson-Hand Co., Wilkes-Barre, $82,306; 27,688 ft. rein.-con., Wayne Co., to M. J. Malloy, Sugar Notch, $210,327; 26,648 ft. rein.-con. and Hillside vitr. brick, Clarion Co., to Red Bank Constr. Co., New Bethlehem, $237,139 Noted May 8.

★Pa., Allentown—City let contract paving Walnut St. with amiesite and building sewers, to G. H. Hardner, Lentz Bldg., $29,159 and $6238 respectively.

Pa., Ebensburg—Comrs. Cambria Co. received lowest bid building 3.4 mi. road in East Carroll Twp. from Patton Boro. to Carrolltown, from L. R. Anderson, Altoona, $286,953 for brick on concrete base and $264,464 for brick on cinder base.

★Pa., Ebensburg—Comrs. Cambria Co. let contract rebuilding 1 mi. brick road on 5 in. concrete base, in Patton Boro., to Gifford & Pinchot, Philipsburg, $23,718. Noted May 8.

Pa., Phila.—Dept. Pub. Wks. received low bids for improvements as follows: Schedule (A) grading (1) Claridge St.; (2) Northumberland St.; (3) Greene St.; (4) Ramona St.; (5) Windsor St.; (6) 74th Ave.; Schedule (B) improving Adams Blvd., part assessment work; Schedule (C), asphalt paving assessment work, (1) Lindle St.; (2) Spring Garden St.; (3) Vaux St.; (4) 6th St.; (5) 68th St.; Schedule (D), asphalt repaving, (1) Clementine St.; (2) Fairmount St.; (3) Lippincott St. from Kensington to Jasper Sts.; (4) Lippincott St., from Amber to Pennsylvania R. R.; Schedule (E), wood block repaving, (1) Carpenter St. from 6th to 7th Sts.; (2) Carpenter St. from 8th to 10th Sts.; (3) Marlborough St.; (4) Richmond St.; Schedule F, sprinkling macadam and district roads, (1) Dist. 1; (2) Dist. 5 and 7; (3) Dist. 6; Schedule (I), furnishing and applying dust layer; Schedule (J), furnishing and delivering fuel oil, from S. K. Davis Co., 20th and Spencer St., (A1) $9562; (A6) $9284; J. Mehan & Son, 915 West Dauphin St., (A1) $16,971; (A3) $19,210; (A4) $1762; (A5) $1573; (B) $34,440; (C2) $2753; (D2) $24,838; (E1) $7352; (E2) $7628; (E3) $2978; (E4) $3560; T. Connor, 3329 North 5th St., (A2) $9237; (A4) $1736; J. F. Feeney, 106 Kalos St., Wissahickon, (A2) $9327; H. C. Ambler, 3717 Old York Rd., (A2) $10,205; M. J. McCrudden, 805 Franklin Trust Bldg., (A3) $14,293; (I) Spec. 2, $20,800; D. McMahon, Post Office Bldg., Germantown, (A3) $14,983; (A6) $14,546; (F3) $6.42 per day; F. T. Buckius, Jr., 4050 Kensington Ave., (A4) $929; A. A. Pastor, 6028 Greenway Ave., (A5) $636; E. A. Muller, 5512 Vine St., (A5) $363; (F1) $6.90 per day; J. V. Cummings, Pennsylvania Bldg., (A6) $11,296; Barber Asphalt Paving Co., 239 North 30th St., (B) $30,812; (C1) $20,632; (C2) $2325; (C3) $3766; (C4) $7940; (C5) $3970; (D1) $3831; (D2) $24,207; (D3) $3878; (D4) $1915; J. J. McHugh, 1430 South Penn Sq., (B) $32,242; (E1) $7515; (E2) $7774; (E3) $2938; (E4) $3565; Eastern Paving Co., 401 Colonial Trust Bldg., (C1) $21,975; (C2) $2513; (C3) $3850; (C4) $8697; (C5) $4020; (D1) $3877; (D2) $23,460; (D3) $4044; (D4) $2071; Mchy. Paving & Constr. Co., Nicetown Lane and C St., (C1) $23,166; (C3) $4056; (C4) $8082; (C5) $4059; (D1) $4371; Phila. Paving Co., 1345 Arch St., (D3) $5032; (D4) $2459; Cunningham & Murray, 1345 Arch St., (E1) $7474; (D2) $7730; (F1) $7.35 per day; (F2) $7.95 per day; (F3) $7.95 per day; C. L. Baden, 1345 Arch St., (F1) $7.47 per day; R. P. Bennis, Chew and Price Sts., (F2) $6.63 per day; J. P. Leewright, 426 Seville St., (F3) $9.40 per day; Headley Good Rds. Co., Franklin Trust Bldg., (I) Spec. 2, $18,460; (I) $2000; Atlas Refining Co., 3144 Passyunk Ave., (I) Spec. 1, $22,588; Spec. 2, $20,963; (J) $1520. Noted May 29.

Pa., Pittsburgh—Allegheny Co. received bids building 5280 ft. brick and concrete roadway on West Run Rd. from 8th Ave., Homestead Boro., to 1 mi. southwardly, 16 ft. wide, from R. Swan, Jenkins Arcade, $45,251, M. O'Herron, South 1st and McKean Sts., $49,027, T. Cronin, 17th and Muriel Sts. $50,752; 6000 ft. Tarentum-Culmerville Ridge Rd., 16 ft. wide, from T. Cronin, 17th and Muriel Sts., $51,645; Federal Constr. Co., Pittsburgh, $52,006; Hillside Stone Co., Farmers Bank Bldg., $64,625. Noted May 15.

Pa., Pittsburgh—City received bids grading, paving and curbing Methyl St. from Wentworth St. to Coast Ave., involving 4225 sq.yd. vitr. brick on 6 in. concrete base, 2540 sq.yd. stone block, 5340 lin.ft. curbing, and 9534 cu.yd. earth excav., etc., from F. and F. Diulus, 40 Boundary St., $45,521; Booth & Flynn, 1942 Forbes St., $48,063; T. Cronin Co., South 17th and Muriel Sts., $48,427. Noted May 22.

★Pa., Pittsburgh—City let contracts grading, paving and curbing (a) Azalia St., involving 1020 sq.yd. vitr. brick on 6 in. concrete base, 55 sq.yd. stone block, 774 lin.ft. curbing, 328 cu.yd. earth excav., etc.; (b) Howley St., 1695 sq.yd. asphalt on 6 in. concrete base, 1207 lin.ft. curbing, 750 cu.yd. earth excav.; (c) Gray St., 695 sq. yd. vitr. brick and 1180 sq.yd. stone on 6 in. concrete base, 1713 lin.ft. curbing, 2355 cu.yd. earth excav.; (d) Alexis St., 2104 sq.yd. vitr. brick on 6 in. concrete base, 1693 lin.ft. curbing, 552 cu.yd. earth excav., etc.; (e) Faulkner St., 2910 sq.yd. vitr. brick on 6 in. concrete base, 2405 lin.ft. curbing, 2270 cu.yd. earth excav.; (f) Downing St., 600 sq.yd. stone block on 6 in. concrete base, 528 lin.ft. curbing, 877 cu.yd. earth excav.; (g) Boundary St., 630 sq.yd. stone block on 6 in. concrete base, 480 lin.ft. curbing, 2251 cu.yd. earth excav.; (h) Mulberry Way, 478 sq.yd. stone block on 6 in. concrete base, 155 cu.yd. earth excav., to Neelen & Daly, 2529 Perrysville Ave., (a) $5211; M. O'Herron, South 1st and McKean Sts., (b) $8836; (c) $15,895; Booth & Flynn, 1942 Forbes St., (d) $11,780, (f) $5328, (g) $6301, (h) $2582; T. Cronin, 17th and Muriel Sts., (e) $21,695. Noted May 22.

★Pa., West Wyoming (Pittston P. O)—Town let contract paving 5800 sq.yd. Hicks Lane, with 5 x 12 x 2 in. "Hastings" asphalt blocks, to Banks Constr. Co., 51 South Washington St., Wilkes-Barre, $13,514.

★Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract building 2 mi. Hanover Pike from Hitshue's Corner, Reistertown, to near Wodensburg, Federal Aid Project No. 26, Contr. B-31, Baltimore Co., to Fisher & Carrozza, 805 Calvert Bldg., cost $50,311; 2.08 mi. highway from end of concrete road near Harrisville to eastern corporate limits of Rising Sun, Federal Aid Project No. 18, Contr. No. Co.-28, Cecil Co., to T. Mullen, 4001 Greenmount Ave., $58,143; 3.92 mi. highway through Aberdeen from western limits to Baltimore & Ohio R. R. crossing and from Pennsylvania R. R. crossing to eastern limits, Contr. H-22, Harford Co., to T. W. H. Abbott, 2802 St. Paul St., $37,063; 2.6 mi. highway from Jarrettsville to Bethel Church, near Cathcart, Federal Aid Project No. 17, Contr. No. H-23, Harford Co., to D. M. Andrew Co., Sisson and 26th Sts., $64,272; 2.33 mi. highway from Corrigansville to Maryland-Pennsylvania State Line at Ellerslie, Contr. No. A-14, Allegany Co., to Vang Constr. Co., 2135 Linden Ave., $86,869; all contractors of Baltimore. Noted May 15.

Maryland—State Rds. Comn., 601 Garrett Bldg., Baltimore, received lowest bid building 2.12 mi. highway from Oakland toward Hutton via Crellin, Federal Aid Project No. 4, Contr. No. G-13, Garrett Co., from Vang Constr. Co., 2135 Linden Ave., Baltimore, $78,071. Noted May 15.

★S. C., Columbia—City let contract paving 3 blocks Assembly St. from Gervais to Taylor Sts., 30 ft. wide, to Powell Contr. Co., 1921 Taylor St., $53,140. Work includes paving two 30 ft. roadways and curbing parkways in street center, and involves 17,000 sq.yd. 6-8 in. concrete and 5000 lin.ft. curb. Noted May 22.

★Fla., Kissimmee—Comrs. Osceola Co. let contract grading and surfacing Dixie Highway, to Murphy & Maloney, Knoxville, Tenn. About $64,000.

★Ala., Heflin—Cleburn Co. let contract grading, draining and surfacing with chert part of Heflin and Anniston Rd., 8.5 mi. long, to Stanley & Seigle, Lafayette, $36,798. Noted May 15.

★Ohio—State Highway Comn., Columbus, let contracts building roads in following counties:

Auglaize Co., Sect. "A-3" Wapakoneta-St. Marys Rd., 2.19 mi., grading, constructing bridges and culverts and paving with plain concrete, to York & Studebaker, Greenville, O., $60,083.

Sect. "B-1" Wapakoneta-St. Marys Rd., 2.29 mi., grading, constructing bridges and culverts and paving with plain concrete, Renick & Smith, Findlay, $61,738.

Sect. "B-2" Wapakoneta-St. Marys Rd., 2.05 mi., grading, constructing bridges and culverts and paving with plain concrete, J. Wroe, Dayton, $54,651.

Columbiana Co., Sect. "E-1" Lisbon-Canton Southern Rd., constructing bridge over Beaver Creek, N. R. Porterfield, Youngstown, $13,331.

Jefferson Co., Sect. "D" Steubenville-Hammondsville Rd., 3.14 mi., grading, constructing bridges and culverts, W. F. Payne, Springfield, $35,439.

Medina Co., Sects. "P" and "Q" Cleveland-Wooster Rd., 4.73 mi., grading, constructing bridges and culverts and paving with bituminous macadam, G. S. Mellert & Co., Medina, $129,209.

Monroe Co., Sect. "E" Barnesville-Woodsfield Rd., 3.148 mi., paving with waterbound macadam on sandstone foundation, W. W. Patton, Woodsfield, $55,288.

Sect. "F" Barnesville-Woodsfield Rd., 4074 mi., paving with waterbound macadam on sandstone foundation, W. W. Paton, Woodsfield, $57,920.

Morrow Co., Sects. "E" and "F" Mansfield-Mt. Gilead Rd., 4.10 mi., grading, constructing bridges and culverts and paving with plain concrete, Brewer & Brewer Sons, Chillicothe, $112,501.

Preble Co., Sect. "F" Dayton-Indianapolis Rd., building bridge, Brookville Bridge Co., Brookville, $6605.

Richland Co., Sect. "A" Shelby-Ashland Rd., 1.98 mi. grading, constructing bridges and culverts and paving with bituminous macadam, Scott, Fike & McNabb, Ashland, $54,080.

Van Wert Co., Sect. "F" Van Wert-Delphos Rd., 4.75 mi. grading, constructing bridges and culverts and paving with bituminous macadam, P. Shindledecker, Van Wert, $103,601.

Sect. "G" Van Wert-Delphos Rd., 3.41 mi. grading, constructing bridges and culverts and paving with bituminous macadam, S. Putnam, Van Wert, $74,242.

Sect. "H" Van Wert-Delphos Rd., 2.59 mi. grading, constructing bridges and culverts and paving with bituminous macadam, N. B. Putnam, Van Wert, $59,843.

Williams Co., Sect. "C" Bryan-Wauseon Rd., 2.05 mi. grading, constructing bridges and culverts and paving with bituminous concrete, Municipal Constr. Co., Gary, Ind., $67,261.

Medina Co., Sect. "A-2" Cleveland-Wooster Rd., 1 mi. grading and paving with bituminous macadam, Highway Constr. Co., Springfield, $14,787. Noted June 5.

★O., Marion—Bd. Control let contracts to P. Drake & Son, Marion, grading, curbing, paving and laying water mains in Wallace St., cost $10,399; Bennett St., $23,437; Park St., $44,987; Mill St., $10,175; to H. P. Streicher & Son, 319 Terminal Bldg., Toledo, Woodrow Ave., $21,522; Summit St., $15,066; Fairhaven Ave., $2113; to Kolberger & Hoyle, Marion, building sewer in Fairgrounds St., $9437.

Ind., Indianapolis—City received bids resurfacing (a) Chesapeak St. from Illinois to Pennsylvania Sts., (b) Vermont St. from East to West Sts., (c) Henry St. from Meridian to Illinois Sts., (d) Alabama St. from Washington to Ohio Sts., (e) Alabama St. from Washington to Maryland Sts., (f) alley east of Ruckle St. between 20th and 21st Sts., (g) Blackford St. from Washington St. to tracks south of canal, (h) alley south of 15th St. from alley east of Hudson to Alabama Sts., (i) 44th St. from Bway. to Central Ave., (j) 36th St. from Central to College Aves., from Union Asphalt Constr. Co., 308 Amer. Central Life Bldg., (a) asphalt, $2.73 per lin.ft., (b) asphalt $7.14, (d) asphalt, $6.02, (e) asphalt, $9.03; Columbia Constr. Co., Indianapolis, (a) brick, $4.00, (f) brick, $3.00, concrete $2.45, (g) brick, $7.50, concrete $5.90, (h) brick $3.70, concrete $3.20; Amer. Constr. Co., 108 North Delaware St., (b) asphalt, $7.39, (g) asphalt, $7.30, (i) asphalt, $6.42, bituminous concrete, $6.08, (j) asphalt, $6.10, bituminous concrete, $5.70; Marion Co. Constr. Co., 367 South Illinois St., (c) asphalt, $6.40; Abel Bros., 402 Amer. Central Life Bldg., (f) concrete, $2.54.

Streets and Roads (Continued)

★Ind., Mt. Vernon—Comrs. Rockcastle Co. let contract building about 7 mi. graded earth road, including drainage structures and bridges, to E. A. Clifton, London, $81,594.

★Michigan — State Highway Comn., Lansing, let contracts, to W. B. Chalmers Co., Grand Rapids, improving Federal Aid Project No. 16, Washtenaw Co., bituminous concrete, cost, $19,955; W. D. Shook, Orange Twp., Ionia Co., Assessment Dist. No. 59, 2½ mi. road west of Portland, Ionia Co., 16 ft. gravel surface, $20,335; Brighton & Spalding, Chamber of Commerce, Detroit, Assessment Dist. No. 54, 7.7 mi. road connecting Hillsdale Rd. with village of Waldron, Hillside Co., 16 ft., gravel, $85,292; Skelton & Ryan, Toledo, O., Brighton Rd., Lenawee Co., Class "C" gravel on slag base, $64,385. Plans include shaping, surfacing, grading, providing drainage structures and culverts.

Mich., Detroit—City received bids paving (a) Casper Ave., from Ferndale to Dix Aves., (b) Carter Ave. from Dexter to Quincy Aves., (c) Greeley Ave. from Westminster to Caniff Aves., (d) Honorah Ave. from Ferndale to Dix Aves., (e) Longworth Ave. from Springwells to Elsmere Sts., (f) Norman Ave. from Ferndale to Woodmere Aves., (g) Olivet Ave. from Springwells Ave. to Michigan Central R. R., (h) Solvay Ave. from Fort St. to Michigan Central R. R., (i) Witt Ave. from Lawndale to Elsmere Aves., (j) Webb Ave. from 12th to Oakman Sts. and Stroll's subway, all 26 ft. wide with Amherst curbstone except (b) Berea curbstone, from Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $25,170, (b) $14,770, (c) $27,382, (d) $19,322, (e) $32,328, (f) $26,508, (g) $10,849, (h) $25,293, (i) $11,042, (j) $24,214; Cleveland Trinidad Paving Co., 2930 Woodward Ave., (a) $25,619, (b) $14,926, (c) $27,781, (d) $19,677, (e) $32,971, (f) $26,894, (g) $11,057, (h) $25,798, (i) $11,307, (j) $24,048; W. B. Brady Constr. Co., 1972 Grand River Ave., (a) $25,800, (b) $14,692, (c) $28,788, (d) $19,820, (e) $33,238, (f) $27,125, (g) $11,086, (h) $25,866, (i) $11,337, (j) $24,351. Noted May 8 and 22.

Mich., Milan—City received bids grading, draining, curbing and paving Wabash St. from Saline River to south corporation line, 16-18 ft. wide, from Marshall & Green, Grand Rapids, $31,289; Litchfield & Stuart, Ann Arbor, $31,897; W. H. Knapp, Marshall, $34,180. Noted May 15.

★Mich., Oakwood (Oxford P. O.)—City let contract paving 5800 ft. Fort Blvd. from River Rouge bridge to Dearborn Rd., one course concrete, 2 strips 3000 ft. long, 20 ft. wide and two 2800 ft. long, 15 ft. wide, concrete curbing and 3 in. drain below curb, to F. Porath, 305 Free Press Bldg., Detroit; about $98,000. Noted May 22.

★Illinois—State Highway Comn., Springfield, let contracts improving Sects. D-15, A, B and C, Natl. Highway, Clark Co., to J. O. Heyworth, Harvester Bldg., Chicago, $526,586; Sects. D, Clark Co., and F-15d and E. Cumberland Co., to J. W. Etchison, Casey, $304,780; Sect. F, Cumberland Co., to J. O. Heyworth, Harvester Bldg., Chicago, $125,413; Sects. G and H, Cumberland Co., to H. Hays & Son, Janesville, Wis., $85,825 and $208,729, respectively. Noted May 15.

★Ill., Belleville—City let contract paving 1100 ft. South 3rd St., 28 ft. wide, concrete, to Hoeffken Bros. Supply & Constr. Co., 222 West B St., $11,135.

★Wis., Manitowoc—City let contract grading and paving 2.9 mi. 10th St., 20 ft. wide, to Manger & McGuker Co., 332 Layton Blvd., Milwaukee. About $45,000. Work involves 9930 lin.ft. concrete curb and gutter, 24,000 sq.yd. bituminous macadam and 12,000 cu.yd. grading.

★Wis., Milwaukee — Milwaukee Co. let contract paving 2 mi. Howell Rd. No. 4, 18 ft. wide, involving 21,200 sq.yd. concrete and 9200 cu.yd. earth excav., to Milwaukee Gen. Constr. Co., 878 2nd Ave., $53,308. Noted June 5.

★Wis., Neenah—City let contract paving Main, Lake and Church Sts., to J. Schneider Constr. Co., Menasha, $22,715. Noted May 8.

★Ia., Marengo—City let contract paving with bitumen filled brick on concrete base 57 blocks various streets, 24-48 ft. wide, to A. Horribin, Des Moines, $301,000. Work involves 70,000 sq.yd. bitumen filled brick, at $3.20 per sq.yd., 2250 sq.yd. 6 in. concrete, $2.31 per sq.yd., 50,000 lin.ft. 18 in. curb and gutter, $0.805 per lin.ft., 25,000 cu.yd. earth excav., $0.785 per cu.yd. and 70,000 sq.yd. 3-6 in. concrete base.

ROAD WORK—MISSOULA, MONT.

Bids were received by Bureau of Public Roads, Missoula, (lowest 3) for constructing Kooskia-Lowell Project, (1) 8 mi., (2) 23 mi., from (A) Carlson-Norman Co., Realty Bldg., Spokane, Wash.; (B) Rich & Markhus, Prosser, Wash.; (C) Lord Constr. Co., Hamilton, Wash.; (C-1) Nettleton, Bruce-Eschbach Co., Amer. Bank Bldg., Seattle, Wash. The unit bids were as follows:

	A	B	C
32 acres clearing	$110.00	$150.00	$100.00
16,700 cu.yd. rock excavation	1.65	2.00	1.55
16,700 cu.yd. rock excavation (exp. fur.)	1.50	1.90	1.45
41,944 cu.yd. common excavation	.75	.75	.83
1,000 cu.yd. sta. overhaul	.05	.10	.05
7.95 mi. finishing earth road	200.00	200.00	250.00
42 cu.yd. class "C" concrete culv. H.W	30.00	30.00	60.00
63 cu.yd. cement rubble masonry culv. H.W	15.00	20.00	40.00
126 cu.yd. dry rubble masonry culv. H.W	10.00	6.00	12.50
1,091 lin.ft. 18-in. corrugated pipe culvert	2.70	3.00	4.25
64 lin.ft. 24-in. corrugated pipe culvert	4.60	4.60	5.25
64 lin.ft. 2 x 2-ft. log culverts	2.50	3.00	3.75
1,091 lin.ft. 1½x2-ft. log culverts	2.50	2.00	3.25
635 lin.ft. rustic guard rail	1.00	.50	.60
3,268 cu.yd. dry rubble masonry retaining wall	3.00	2.50	6.00
16 acres grubbing	240.00	145.00	100.00
16 acres grubbing (exp. fur.)	220.00	140.00	100.00
36 lin.ft. 6x4-ft. log culverts	6.00	7.00	7.50
2 10-ft. span log bridge	110.00	100.00	125.00
2 12-ft. span log bridge	138.00	120.00	150.00
3 14-ft. span log bridge	161.00	140.00	175.00
1 16-ft. span log bridge	184.00	160.00	200.00
1 18-ft. span log bridge	216.00	180.00	225.00
1 20-ft. span log bridge	240.00	200.00	250.00
360 cu.yd. cement rubble masonry bridge abutments	15.00	20.00	20.00
360 cu.yd. concrete masonry bridge abutments	25.00	25.00	50.00
3,813 sq.ft. log bridge abutments	.70	.80	.65
Extended totals	$83,018	$87,481	$94,139

	A	B	C
59 acres clearing	$90.00	$150.00	$100.00
26,060 cu.yd. rock excavation	1.65	2.00	2.50
26,060 cu.yd. rock excavation (exp. fur.)	1.50	1.90	2.25
94,818 cu.yd. common excavation	.75	.70	.70
1,000 cu.yd. sta. overhaul	.05	.10	.05
22.8 mi. finishing earth road	200.00	200.00	200.00
108 cu.yd. class "C" concrete culv. H.W	30.00	30.00	33.00
162 cu.yd. cement rubble masonry culv. H.W	15.00	20.00	20.00
324 cu.yd. dry rubble masonry culv. H.W	9.00	6.00	7.00
2,737 lin.ft. 18-in. corrugated pipe culverts	2.70	3.00	3.50
82 lin.ft. 30-in. corrugated pipe culverts	4.60	6.00	6.00
38 lin.ft. 36-in. corrugated pipe culverts	5.30	6.60	8.00
38 lin.ft. 3x3-ft. log culverts	4.00	5.00	4.00
82 lin.ft. 3x2-ft. log culverts	3.50	4.00	3.00
345 lin.ft. 2x2-ft. log culverts	2.50	3.00	2.00
2,392 lin.ft. 1½x2-ft. log culverts	2.50	1.50	1.50
985 lin.ft. rustic guard rail	1.00	.50	.80
3,965 cu.yd. dry rubble masonry retaining wall	3.00	2.50	4.50
28 acres grubbing	190.00	150.00	200.00
28 acres grubbing (exp. fur.)	170.00	140.00	180.00
36 lin.ft. 6x4-ft. log culverts	6.00	7.00	8.00
3 10-ft. span log bridge	110.00	100.00	60.00
4 12-ft. span log bridge	138.00	120.00	70.00
4 14-ft. span log bridge	161.00	140.00	85.00
3 16-ft. span log bridge	184.00	160.00	95.00
2 18-ft. span log bridge	216.00	180.00	110.00
2 20-ft. span log bridge	240.00	200.00	125.00
700 cu.yd. concrete masonry bridge abutments	25.00	25.00	28.00
700 cu.yd. cement rubble masonry bridge abutments	15.00	20.00	20.00
7,280 sq.ft. log bridge abutments	.70	.80	.60
Extended totals	$153,347	$157,518	$170,075

★Minn., Austin—Comrs. Mower Co. let contract building Job No. 1901, State Rd. No. 3, Job No. 1902, State Rd. No. 2, Job No. 1903, State Rd. No. 8, to T. J. Freiderick & Rogers & Curtis Co., 705 Globe Bldg., Minneapolis, $14,876. Work involves 6600 cu.yd. excav., at $0.40 per cu.yd., loading and hauling 3690 cu.yd. material 0 to ½ mi., $0.75 per cu.yd., loading and hauling, 2759 cu.yd. ½ to 1 mi., $0.95 per cu.yd., loading and hauling 14,740 cu.yd. to 1 mi. point, $1.10 per cu.yd. and $0.55 per cu.yd. for additional haul beyond 1 mi. point.

★Minn., Chaska—Comrs. Carver Co. let contract building 2½ mi. Job No. 1908, Sect. 3 and 10, Waconia Twp., to J. J. Mergens, 403 Kasota Bldg., Minneapolis, $11,093. Noted May 15.

★Minn., Duluth—City let contracts to J. McDonnell, 1031 East 7th St., grading and paving 366 ft. 14th Ave. east from 9th to 10th Sts., 24 ft. wide, involving 1182 sq.yd. concrete, 939 lin.ft. concrete curbing and 654 ft. 12 in. sewer pipe, cost, $6500; A. N. Nelson, 1014 East 6th St., laying cement walks on 42,475 ft. of streets from west line 12th Ave. west of 110th Ave., W., $10,725, grading and paving with concrete 666 ft. 12th Ave. east from 9th to 13th Sts., 25 ft. wide, 2150 sq.yd. concrete, 1440 lin.ft. concrete curbing and 250 ft. 3 in. drain tile, $8627; D. H. Clough & Co., 914 East 1st St., paving 7850 ft. East 1st St. between 6th and 27th Aves., 34 ft. wide, 27,463 sq.yd. each of creosote block, sheet asphalt and bitulithic, $105,933; N. Anderson, 224 9th Ave., E., laying concrete sidewalks on 42,525 ft. streets east of east line of 12th Ave., west of 110th Ave., W., $10,834.

★Minn., Mankato—Comrs. Blue Earth Co. let contract paving 5000 sq.yd. road, 5 ft. wide, to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $17,800.

★Minn., Preston—Comrs. Fillmore Co. let contract building 8 mi. Federal Aid Project No. 39, State Rd. No. 1, 20 ft. wide, to Cameron Joyce & Co., Keokuk, Ia., $0.45 per cu.yd. Noted May 1.

★Minn., St. Peter—Comrs. Nicollet Co. let contract building 3½ mi. Job No. 1808, State Rd. No. 2, Granby Twp., to A. W. Webster, Nicollet, $12,840. Noted May 22.

★Minn., Stillwater—Comrs. Washington Co. let contract grading and graveling 5 mi. Project No. 42, State Rd. No. 3, 24 ft. wide, to Jaemesin, Thorsen & Sandeen, Stillwater, $66,689. Noted May 15.

★Minn., Willmar—Comrs. Kandiyohi Co. let contract building 9.5 mi. Federal Aid Project No. 21, State Rd. No. 6, on Glacier Park Highway, to A. Guthrie & Co., 366 Jackson St., St. Paul, $235,960.

Streets and Roads (Continued)

★Minn., Willmar—Comrs. Kandiyohi Co. let contract paving 9.5 mi. Federal Aid Project No. 31, State Rd. No. 6, 20 ft. wide, with rock, to A. Guthrie & Co., 366 Jackson St., St. Paul, $235,960. Noted May 8.

★Kan., Kansas City—City let contract resurfacing Kansas Ave. from 1st to 12th Sts., involving 30,000 sq.yd. rock asphalt, to D. G. Randebush, Kansas City, at $1.65 per sq.yd.

★Kan., Kansas City—Wyandotte Co. will build 2½ mi. Fort to Fort Highway, 18 ft. wide, concrete. Work will be done by day labor under supervision of O. K. Williams, co. engr. Former bids rejected.

Neb., Geneva—C. Underwood, city clk., received bids May 29, paving and building storm sewers in 10½ blocks, from Abel Constr. Co., 318-19 Terminal Bldg., Lincoln, $140,494; Intermountain Bridge & Constr. Co., Tecumseh, $143,725. Noted May 15.

★Neb., Madison—City let contract paving Madison, Pearl and 3rd Sts., 24-56 ft. wide, involving 29,296 sq.yd. vertical fibre, 14,504 lin.ft. concrete curb and 6190 cu.yd. earth excav., to Abel Constr. Co., 318-19 Terminal Bldg., Lincoln, $125,909.

★Wyo., Thermopolis—A. J. Lowry, town clk., let contracts paving streets in Paving Dist. No. 1, to C. Connor, Golden St., Denver, Colo.; storm sewers, to Security Bridge Co., 502 North 32nd St., Billings, Mont. Noted May 8.

★Montana—State Highway Comn., Helena, let contract building Federal Aid Project No. 3, Big Horn Co., to A. Carlson, Columbus, $16,511.

★Ark., Blytheville—Comrs. Paving Dist. No. 1 and Curbing, Guttering and Storm Sewering Impvt. Dist. No. 1, let contract for 2 mi. paving, involving 38,476 sq.yd. concrete, 25,584 sq.yd. rein.-con. gutters, 42,582 lin.ft. concrete curbs and 1600 lin.ft. 15 and 18 in. storm sewer with appurtenances, to Healy & Rousch, Cape Girardeau, Mo. About $150,000. Noted May 29.

★Tex., Dallas—City let contract paving Beckley Ave. from Zangs Ave. to Tilden St., 30 ft. wide, to Standard Eng. & Constr. Co., Interurban Bldg., Dallas, $24,221. Work involves 6615 sq.yd. Uvalde rock asphalt on 5-in. concrete base, 3958 lin.ft. combined curb and gutter, 139 lin.ft. sidewalk and 2530 cu.yd. earth excav.

★Tex., Dallas—Dallas Co. let contract improving 9.125 mi. State Highway No. 1, known as Dallas-Ft. Worth Rd., 20 ft. wide, to Healey Constr. Co., Burk Burnett Bldg., Ft. Worth, $303,966. Noted May 8.

★Tex., Seguin—Comrs. Guadalupe Co. let contract grading and surfacing 3.256 mi. Texas Post Rd. from Comal Co. line to Bexar Co. line, 15 ft. wide, involving 17,192 lin.ft. grading and 28,654 sq.yd. bituminous material, to S. A. Starkey, Houston, $16,046. Noted May 15.

★Wash., Aberdeen—City let contract paving and building sidewalks on 7 blocks 1st St. from M to Division Sts., involving 8605 sq.yd. concrete paving, 4850 lin.ft. curbing and guttering and 3365 lin.ft. concrete sidewalk, to Hankeli, Hegg & Co., Aberdeen, $34,208.

★Wash., Cashmere—City let contract paving Cottage Ave., et al. involving 16,000 sq.yd. concrete, to Burt & Singfeller, Wenatchee. About $41,000. Noted May 29.

★Wash., Charleston—City let contract paving Cambrian Way, involving 39,065 sq. yd. 1 course concrete, 945 sq. yd. concrete sidewalk, 13,900 cu.yd. earth excav. and 1000 cu.yd. rip rap, to R. G. Stevenson, 1327 Ewing St., Seattle, $118,008.

★Oregon—State Highway Comn., Portland, let contract paving and grading 9.8 mi. McMinnville-North Yamhill Rd., section of McMinnville-Forest Grove Highway, Yamhill Co., to Northwestern Constr. Co., Portland, $224,155, using concrete pipe and No. 2 concrete pavement. Noted May 29.

★Ore., Enterprise—City let contract paving with bitulithic 1st unit of village streets, to Warren Constr. Co., Journal Bldg., Portland. About $114,000. Noted May 22.

California—State Highway Comn., 515 Forum Bldg., Sacramento, let contract, to J. A. Marshall and J. S. Baker, Berkeley, building 3 mi. Div. 4, Route 5, Sect. A, State Highway between Glenwood and Sand Hill School, Santa Cruz Co.; to F. Rolandi, 550 Montgomery St., San Francisco, 11 mi. Div. 11, Route 20, Sect. E, State Highway between White Bar Creek and Helena, Trinity Co. Noted May 8.

California—State Highway Comn., Forum Bldg., Sacramento, received lowest 3 bids building Sect. E, Route 20, Div. 2, Federal Aid Project No. 8-A, Trinity Co., involving 140,000 cu.yd. excav., 950 cu.yd. Class "A" Portland cement concrete, from F. Rolandi, 550 Montgomery St., San Francisco, $242,320; Erickson & Peterson, Inc., Monadnock Bldg., San Francisco, $274,295; Palmer & McBryde, Hooker & Lent Bldg., San Francisco, $294,545; Sect. A, Route 28, Div. 2, Federal Aid Project No. 10, Modoc Co., 48,000 cu.yd. excav., 450 cu.yd. Class "A" Portland cement concrete, etc., W. H. Paulk and F. D. Harbert, Adin, $123,821; Sect. A, Route 3, Div. 4, road in Santa Cruz Co., 6000 cu.yd. excav., 3520 cu.yd. Class "A" Portland cement concrete, etc., J. A. Marshall and J. S. Baker, Berkeley, $29,620; W. A. Dontanville, Arroyo Grande, $29,790; Bates & Borland, Oakland Bank of Savings, Oakland, $29,860.

★Cal., Avalon—See "Waterworks."

★Cal., Merced—City let contract grading 4½ blocks of K St. and alley in Block B, to A. Teichert & Sons, Sacramento, $0.192 per sq.ft. for paving and $0.65 per lin.ft. for cement curbs. Plans include 4-in. concrete paving with ⅜-in. screenings and oil surface, cement curbs, etc. Noted Apr. 10.

Cal., San Diego—Common Council received bids paving with asphaltic wearing surface on 1 course Portland cement concrete base, Jackdaw, Hawk and Hunter Sts., Avalon and Arcadia Drives, from Fairchild-Gilmore-Wilton Co., 24 14th St., $32,764; G. R. Daley, McNeece Bldg., $32,773; T. C. Breitenstein, P. O. Box 165, $33,099. Work involves 3165 lin.ft. cement curbing and 15,330 sq.yd. asphaltic wearing surface on 4-in. concrete base, etc.

★Cal., Stockton—City let contract grading, building cement curbs, concrete gutters, concrete and oil paving on streets west of California St. in North Stockton Sect., to Clark & Henry Co., 38 South Sutter St., $19,363.

★Que., Quebec—City let contract paving Beauport and Charlesbourg Rds., with Mexican asphalt, to Quebec Paving Co., 16 2nd Ave. About $130,000. Noted May 15.

★Que., St. Joseph d'Alma—Town let contract building macadam road, to J. Girard. About $20,000.

★Ont., Ottawa—Bd. Control let contract paving Booth St. from Somerset to Queen Sts., asphalt, to Ottawa Constr. Co., Elgin St., $30,041. Noted May 29.

Railways

PROPOSED WORK

California—City Comrs. Pasadena, directed R. V. Orbison, city engr., to make new survey for electric railway between here and Los Angeles. Bond issue for project defeated short time ago but proposition will be submitted to voters again in a few months. About $3,000,000. H. Dyer, clk. Noted Apr. 17.

Excavation and Dredging

PROPOSED WORK

Ga., Gainesville—Dredging—Bd. Comrs., D. D. No. 1, Hall Co., soon lets contract dredging 5 mi. drainage ditches, involving 193,748 cu.yd. dredge work. W. A. Mitchell, chn.

Minn., Grand Rapids—Excavation—See "Streets and Roads."

Ariz., Clifton—Excavation—See "Streets and Roads."

Cal., Bakersfield—Irrigation—City Council has ordered East Side Canal Co. to cover its irrigation ditches within city limits. About $250,000.

Cal., El Centro—Canals—See "Miscellaneous."

BIDS DESIRED

N. J., Manahawkin—Until June 17, by Ocean Co. Mosquito Extermination Comn., New Brunswick, cutting 40,000 lin.ft. or more of ditching, 10 in. wide, 15 in. deep and 20,000 lin.ft. 10 in. wide, not more than 30 in. deep, on salt marshes in Lacey and Ocean Twps., Ocean Co. T. J. Headles, executive officer.

Del., Dover—Dredging—Until June 16, by Indian River Inlet Comn., at office of State Highway Dept., Dover, dredging inlet to Indian River Bay, Sussex Co., involving 20,000 cu.yd. excav. C. M. Upham, ch. engr.; advertised in this issue.

N. C., Beaufort—Drainage—Until June 18, by Drainage Comrs. Carteret Co., building 272 mi. canal involving [illegible],000 cu. yd. excav.

La., Thornwell—Canal—Until June 21, by Thornwell D.D. No. 1, building drainage canal involving 200,000 cu.yd. earth excavation. T. H. Mendell, Lake Charles, La., engr.

Tenn., Jackson—Drainage—Until June 25, by Bd. Dir. of D. D. No. 8, Madison and Haywood Counties, building [illegible] mi. canal involving 107,633 yd. floating dredgework. J. T. Rothrock, Jackson, chn.

Minn., Blue Earth—Excavation—See "Streets and Roads."

Minn., Little Falls — Excavation — See "Streets and Roads."

Minn., Marshall — Excavation — See "Streets and Roads."

Ore., Portland—Channel—Until June 18, by City Council, building channel from Columbia River to Columbia Slough, to serve as outlet for sewers of Peninsula Sewer Dist., involving 1,325,000 cu.yd. excav. and 20,000 cu.yd. riprap. O. Laurgaard, city engr. Noted Apr. 17.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Barnstable—Channel—Massachusetts Harbor & Land Comn., Boston, received bids June 4, dredging channel in Popponsett Bay, here, from J. R. Burke, 7[illegible] Devonshire St., Boston, $52,070; J. S. Packard Co., Turks Head Bldg., Providence, R. I., $52,480; Gerrish Dredging Co., 101 Tremont St., Boston, $55,350. Work involves 82,000 cu.yd. floating dredgework.

★N. Y., New York—Dredging—M. Hurlburt, comr. docks, Pier "A," Battery Pl., let contract furnishing all labor and material for dredging at West 46th St., North River, Contr. 1614, to F. A. Schomberg, $9680. Noted June 5.

★Mich., Newport—Dredging—Realty Co., Newport, let contract dredging 1200 ft. of 72 ft. canal, average depth 12 ft., (all earth), to J. Berchil Dredging Co., Moffat Bldg., Detroit. About $35,000.

★Wis., Sheboygan—Excavation—Sheboygan Co. let contract excavating and laying 3.9 mi. 8-12 in. tile in D. D. No. 1, involving 5950 cu.yd. dry earth excav., to Koeppe & Jacoby, Main St., Cedar Grove. About $18,000. Noted May 29.

Minn., Warren—Excavation—See "Streets & Roads."

★Mo., Poplar Bluff—Excavation—Comrs. Inter River D. D., Butler Co., let contract building 206 mi. open ditch, 12-55 in. wide at base, 8 ft. deep, involving 7,200,000 cu. yd. floating dredgework and dragline excav., to Callahan Constr. Co., Great Southern Life Bldg., Dallas, Tex., at $0.10½ per cu.yd. Noted May 29.

Cal., Sacramento — Excavation — See "Streets & Roads" under California.

Industrial Works

PROPOSED WORK

Vt., Rutland—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, prepared plans for 2 story, 50 x 110 ft. brick and steel factory, rein.-con. flooring, brick foundation, here. About $80,000. Owners name witheld.

Mass., New Bedford—Butler Mill, Federal St., Boston, soon receives bids building 2 story, rein.-con., fireproof mill, rein.-con. flooring, concrete foundation, on Ruth Ave. here. About $100,000. Lockwood Greene & Co., 60 Federal St., Boston, archts.

Mass., New Bedford—Nashawena Mills, Belleville Ave., plans to build 4 new factories with a combined floor space of 200,000 sq.ft. About $300,000. C. R. Makepiece & Co., 430 Butler Exch., Providence, R. I., engrs.

Mass., Willimansett—B. F. Perkins & Son, Inc., 2 Crescent St., Holyoke, purchased large site along Boston & Maine R. R. tracks, here, and plans to build plant. Architect not selected.

R. I., Pawtucket—J. and P. Coats, Inc., Pine St., plans to construct 2 story, 50 x 80 ft. addition to mill and 2 story, 70 x 80 ft. rest and dining room building, rein.-con. and steel, rein.-con. flooring, concrete foundation. About $50,000.

Industrial Works (Continued)

R. I., Pawtucket—W. G. Richards, archt., 17 Exchange St., Providence, soon receives bids for 1 story, 101 x 132 ft. garage and 1 story, 2[illegible] x 36 ft. salesroom, brick, rein.-con. flooring, concrete foundation, on Main St., for H. and S. Rand, North Main St. About $45,000.

R. I., Providence—J. Lockhart, Hope and 4th Sts., soon receives bids building 1 story, 50 x 150 ft. and 50 x 50 ft. concrete garage and salesroom, concrete flooring, concrete foundation. About $30,000.

Conn., Groton—M. Pollack & Co., Conantville, (Willimantic P. O.) plans to build 3 story, 50 x 130 ft., brick and steel factory and several workmen's houses, concrete foundation, here. About $200,000.

Conn., Hartford—Colonial Auto Co., 1279 Main St., plans to build 2 story, 65 x 165 ft. brick and rein.-con. garage and sales station, rein.-con. flooring, concrete foundation, on Ann St. About $65,000. E. T. Wiley, 75 Pratt St., archt.

Conn., Hartford—G. A. Zunner, archt., 756 Main St., soon lets contract building 1 story, 52 x 102 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Park St., for T. Yaffo, 156 Lawrence St. About $25,000.

Conn., New Britain—G. A. Zunner, archt., 756 Main St., Hartford, soon lets contract building 1 story, 50 x 125 ft. brick and steel garage and service station, rein.-con. flooring, concrete foundation, on Hartford Ave., for City Service Sta., Stanley St. About $30,000.

Conn., New Haven—Brown & Thomas Auto Co., 7 Dixwell Ave., plans to build garage and salesroom, on Whalley Ave. About $60,000. Architect not selected.

Conn., New Haven—W. L. Frank, 61 Prince St., plans to build 1 story, 50 x 165 ft. brick and concrete garage, concrete flooring, concrete foundation, on George St. About $30,010. J. Weinstein, 6 Church St., archt.

N. Y., Black River—Northern New York Utilities, Inc., Light & Power Bldg., Watertown, soon receives bids building rein.-con. power house, 2500 lin.ft. power canal, involving rock and earth excav., dam forebay and tailrace, also steel viaduct over canal carrying State Highway. Company will also install 2 vertical turbine generator units and appurtenances. J. B. Taylor, pres. H. G. Davis, ch. engr. Noted Mar. 6.

N. Y., Brooklyn—C. Hutwelker, 655 5th Ave., had plans prepared by E. F. Seelye, archt. and engr., 101 Park Ave., New York City, for 5 story, 63 x 100 ft., brick and steel packing house, rein.-con. flooring, concrete foundation, on Hall St. and Flushing Ave. About $100,000.

N. Y., Brooklyn—Mason, Au & Magenheimer, 22 Henry St., having plans prepared by Ebling & Magnerson, archts., 52 Vanderbilt Ave., New York City, for 8 story, 60 x 100 ft. rein.-con. and steel addition to factory, rein.-con. flooring, concrete foundation, at 24 Henry St. About $150,000.

N. Y., Brooklyn—Shampan & Shampan, archts., 50 Court St., preparing plans for 4 story, 92 x 100 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on Varet and White Sts. About $100,000. Owner's name withheld.

N. Y., Long Island City—Sawyer Biscuit Co., 404 East 32nd St., New York City, soon receives bids for 8 story, 126 x 200 ft. rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Degnon St. here. Ballinger & Perrott, 1328 Bway., New York City, archts. and engrs. Noted May 8.

N. Y., New York—Hillman Co., 567 3rd Ave., soon receives bids building 1 story, 99 x 120 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 237-245 East 41st St. About $25,000. M. H. Harrison, World Bldg., archt. Noted June 5.

N. Y., Pierrepont Manor—Northern New York Milk Co. recently incorporated with $500,000 capital stock, plans to build rein.-con. milk station, evaporating plant and milk shipping station. About $200,000. Address F. P. Redfield, Adams, dir.

N. Y., Syracuse—B. G. H. Metal Mfg. Co., Inc., 106 South State St., purchased site at 108-12 South State St., and plans to build 3 story brick plant. About $25,000. W. E. Sias, secy.

N. Y., Utica—Horrocks-Ibbotson Co., 54 Genessee St., had plans prepared by W. L. Strobel, archt., Martin Bldg., for 2 brick factories on Whitesboro St. to contain 27,000 sq.ft. space and 2 storage buildings, 8500 sq.ft. space. About $75,000.

N. Y., Utica—See "Buildings."

N. J., Kearney (Arlington P. O.)—Ford Motor Co., Lincoln Highway, plans to build 4 story, 68 x 255 x 850 ft. assembling plant.

N. J, Kearney (Arlington P. O.)—White Tar Co. soon lets contract building 2 story, 100 x 200 ft., rein.-con. factory and office, rein.-con. flooring, concrete foundation. About $60,000. J. W. Cowper Co., Fidelity Bldg., Buffalo, N. Y., engr.

N. J., Lambertville—Chemung Iron & Steel Co., 39 Cortlandt St., New York City, having plans prepared by E. F. Quirk, engr., c/o owner, for 1 story, 100 x 380 ft., rein.-con. and steel rolling mill, rein.-con. flooring, concrete foundation. About $100,000.

Pa., Altoona—Altoona Overall Co. purchased 60 x 80 ft. site on Union Ave. and plans to build 3 story, brick factory. About $50,000. M. Henderson and A. Farrish, proprieters. Architect not selected.

Pa., Altoona—Mirror Printing Co., 1000 Green Ave., plans to build 3 story, 38 x 50 ft., brick and steel addition to plant, rein.-con. flooring, stone foundation, on Green Ave. and 10th St. About $35,000. J. Millard, Hutchinson Bldg., archt.

Pa., Bangor—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, prepared plans for 2½ story, 50 x 100 ft., brick, steel and timber factory, rein.-con. flooring, brick foundation. About $80,000. Owner's name withheld.

Pa., Johnstown—H. J. Cartin, secy. bd. dirs., Conemaugh Valley Memorial Hospital, soon lets contract building 2 story, rein.-con., steel and brick boiler house and annex on Franklin St., 8th Ward. About $25,000. W. R. Myton, 1204 1st Natl. Bank Bldg., archt.

Pa., Phila.—F. D. Heyburn, 52nd St. and Overbrook Ave., rejected bids opened June 2 building 2½ story, 16.18 x 31.44 x 32.27 ft brick garage and store house. New bids soon. Addison Savery, 21 South 12th St., archt.

Pa., Phila.—J. M. Kennedy, 1001 Chestnut St., having plans prepared by H. H. Kline, archt., 536 Mifflin St., building 2 story, concrete, steel and brick factory, on Venango and B Sts.

Pa., Phila.—H. H. Kline, archt., 536 Mifflin St., preparing plans for 1 and 2 story, 72 x 602 ft. concrete, steel and brick factory on Richmond Ave. Owner's name withheld.

Md., Baltimore—Genl. Investment Co., Columbia Ave. and Baltimore & Ohio R.R., plans to build 4 story, 90 x 100 ft., rein.-con. and steel warehouse, rein.-con. flooring, rock and concrete foundation, on Columbia Ave. and Putman St. About $50,000. S. Leibowitz, mgr. G. R. Callis, Jr., 55 Knickerbocker Bldg., archt.

Md., Highlandtown—(Baltimore P. O.)—Jones & Lamb Co., Pennsylvania and Fulton Aves., soon receives bids remodeling plant of Monumental Brewery Co. and constructing several rein.-con., steel and brick buildings, rein.-con. flooring and foundation, on Lombard St., same to be used as meat packing plant and oil refinery. C. C. Comstock, 110 West 40th St., New York City, engr. Noted Apr. 24.

Tenn., Memphis — Stratton-Warren Hardware Co., 134 East Calhoun St., soon receives bids building 4 story, 67 x 170 ft., brick warehouse, on Calhoun St. About $100,000. W. F. Schultz, Memphis, engr.

Ky., Louisville—Kentucky Wagon & Mfg. Co., 3rd and K Sts., plans to build 2 story, brick and steel plant. About $100,000.

O., Canton—Holland Bread Co., Toledo, having plans prepared by McCormick Co., archts. and engrs., Century Bldg., Pittsburgh, Pa., for 1 and 2 story, 120 x 209 ft., steel and brick bakery, concrete foundation, here. About $100;000. A. Wade, Holland, pres.

O., Cleveland—Jones Gear Co., Guardian Bldg., soon receives bids building 2 story, 30 x 100 ft. and 110 x 310 ft., rein.-con., steel and brick factory and office on Wayside Rd. About $130,000. G. A. Greible, 517 Sloan Bldg., archt. and engr.

O., Columbus—Columbus Tire & Rubber Co., Hayden Bldg., plans to build 1 story, 100 x 340 ft., factory on West Goodale St. About $92,000. Austin Constr. Co., East 152nd St., archts.

Mich., Cedar Bank—See "Buildings."

Mich., Detroit—A. Kahn, archt., Marquette Bldg., receives bids about June 20, building 6 story, 150 x 150 ft. rein.-con., brick and steel service station and sales department, rein.-con. flooring, concrete foundation, on York and Cass Aves., for Gen. Motors Corp., Boyer-Campbell Bldg., Cadillac Motor Car Co., lessee. Noted May 8.

Mich., Detroit—Natl. Biscuit Co., 42-56 Woodbridge St., having plans prepared for 10 story, 100 x 200 ft. plant on Forsyth Ave., to include bakery, offices, freight shed, loading platform and addition to garage.

Mich., Port Huron—C. H. Wills and J. R. Lee, Book Bldg., Detroit, have purchased tract of land, south of here, extending 3½ mi. along St. Clair River with depth of 1½ mi., and plan to build large motor car manufacturing plant.

Ill., Chicago—All Amer. Truck Co., 2952 West Chicago St., having plans prepared by S. N. Crowen, archt., 30 North La Salle St., for first unit of plant., rein.-con. and brick, on Grand Ave. and Natchez St. About $200,000. Ultimate cost, $1,500,000.

Ill., Chicago—J. B. Rohm & Son, archts., 138 North La Salle St., receive bids about July 1, building 2 and 6 story, brick and rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Oak and Kingsbury Sts., for G. Rasmussen Co., 615 West Randolph St., to be leased to Natl. Tea Co. Abut $400,000. Noted May 22.

Ill., Quincy—Kespohl-Morenstecher Dry Goods Co., 4th and Main Sts., preparing plans for 2 story, 125 x 160 ft., brick and concrete warehouse and addition to store adjoining, rein.-con. flooring, rock foundation. About $70,000.

Wis., Milwaukee—Briggs-Stratton Co., Louis Ave., having plans prepared by H. J. Esser, archt., Camp Bldg., for 5 story, 60 x 170 ft. rein.-con. addition to factory, with 21 x 70 ft. wing About $500,000.

Wis., Milwaukee—H. Bryant, 412 Pereles Bldg., plans to build 2 story, 46 x 150 ft., rein.-con. and brick garage, at 146 8th St. About $50,000. C. Barkhausen, Iron Blk., archt.

Wis., Portage—Weinberg Shoe Co., Milwaukee, plans to build 2 story, 60 x 110 ft. brick, steel and rein.-con. factory, rein.-con. flooring, brick foundation, here. About $90,000. Architect not selected.

Wis., Sheboygan—City, c/o C. U. Boley, engr., City Hall, plans to build 1 story, 60 x 125 ft. brick and rein.-con. garage, rein.-con. flooring, brick foundation, on 9th St. A. Nack, City Hall, archt.

Wis., Sheboygan—Havana Amer. Cigar Co., c/o I. L. Stein, 319 North Wells St., Chicago, plans to build 2 and 3 story, 60 x 200 ft., brick, rein.-con. and steel factory on 13th St., here. About $80,000.

Wis., Sheboygan—Natl. Box & Novelty Co., 8th St., plans to build 4 story, 60 x 150 ft. brick, rein.-con. and steel factory, on 13th St. and Kentucky Ave. About $70,000. Architect or engineer not selected.

Wis., Sheboygan—North Star Rubber Co., c/o L. Hoffmeister, 176 16th St., Milwaukee, plans to build 2 story, 60 x 95 ft. brick, rein.-con. and steel factory on Michigan Ave. About $45,000.

Wis., Sheboygan—Sheboygan Cigar Box Lumber Mfg. Co., c/o J. Will, Sheboygan, plans to build 2 story, 50 x 80 ft., brick, rein.-con. and steel factory, brick foundation, on Martin Ave. About $70,000. Juul & Smith, Img Bldg., archts.

Minn., International Falls—City having plans prepared by W. Glenn, engr., Minneapolis, for hydrogen gas plant. About $75,000.

Kan., Wichita—A. J. Watson having plans prepared by H. A. Noble, engr., Reliance Bldg., Kansas City, Mo., for warehouse, here. About $100,000.

S. D., Madison—City voted $100,000 to build electric light and power plant.

Mo., St. Joseph—City voted $500,000 bonds to build extension to electric light plant. Noted Mar. 27

Mo., St. Louis—Barnett, Hayes & Barnett, archts., 949 Century Bldg., soon receives bids building 4 and 6 story, 119 x 120 ft., rein.-con., steel and brick factory, rein.-con. flooring, concrete foundation, on 7th and Washington Sts., for J. Smith Furniture Co., 919 North 7th St. About $300,000.

Industrial Works (Continued)

Mo., St. Louis—Bd. Pub. Serv. soon receives bids building one 120 x 200 ft. and one 200 x 400 ft. concrete warehouses, including 11 concrete freight platforms, cranes, etc. About $300,000. J. A. Hook, city engr.

Mo., St. Louis—Cornelius Mill Furnishing Co., 6th and Carr Sts., having plans prepared by C. F. May, archt. and engr., Laclede Bldg., for 2 story, 73 x 128 ft. factory. Cost to exceed $50,000.

Mo., St. Louis—United Drug Co., 63 Leon St., Boston, Mass., having plans prepared for 8 story factory on San Francisco Ave. and Kingshighway, here. About $2,000,000.

Tex., Dallas—Dallas Power & Light Co., Interurban Bldg., plans to build brick and steel sub-station, concrete flooring. About $250,000. J. H. Gill, engr.

Tex., Dallas—Guiberson Oil Well Specialty Corp., 418 South Boston St., Tulsa, Okla., plans to build 1 story, concrete, brick and steel factory, concrete and brick foundation, on Forrest and Pennsylvania Aves., here. About $1,000,000. Architect or engineer not selected.

Okla., Okmulgee—Oil Well Supply Co. having plans prepared and soon receives bids building 2 story, 50 x 75 ft. brick and steel warehouse, on Old Baseball Park and 3rd St. About $35,000. J. D. Lemer, Pittsburgh, Pa., engr.

Okla., Tulsa—Continental Supply Co., 507 North Boulder St., plans to build 3 story, 60 x 100 ft. warehouse. About $33,000. Architect not selected.

Wash., Orting—See "Buildings."

Ore., Pendleton—Collins Flour Mill, Pendleton, having plans prepared by Nordyke & Marmon Co., archt., 250 North Meridian St., Indianapolis, Ind., for 6 story, 50 x 100 ft. rein.-con. flour mill and 2 story warehouse, on East Webb St. R. M. Crommelin, Spokane, Wash., mgr.

Ore., Roseburg—Umpqua Valley Fruit Union plans to build 4 story, 50 x 180 ft. rein.-con. packing house and cold storage plant. R. C Wood, mgr. Architect not selected.

Ore., Salem—Oregon Pulp & Paper Co. soon receives bids building rein.-con. paper and sulphite pulp mill on Willamette River. About $1,000,000. C. E. Eaton, Sherman Bldg., Watertown, N. Y., engr.

Cal., Los Angeles—Bd. Pub. Serv. Comn., 645 South Olive St., voted $13,500,000 bonds; $2,500,000 to be used to build power plant No. 2 in San Francisquito Canton and power development in Owens River Gorge and $11,000,000 for purchasing distributing system owned by Southern California Edison Co. E. F. Scattergood, 645 South Olive St., engr. Noted May 29.

Cal., Orange—Foothill Growers, Inc., plans to build 1 story 200 x 200 ft. concrete and frame addition to packing house, concrete foundation. About $50,000.

Cal., Ventura—See "Buildings."

Ont., Port Colborne—Canada Cement Co., 273 Craig St. W., Montreal, Que., preparing plans for potash recovery plant, here. About $150,000.

BIDS DESIRED

Pa., Phila.—Snyder & Co., 17-19 North 10th St., receiving bids for 5 story, 31 x 104 ft., concrete, steel and brick warehouse. Peuchert & Wunder, 310 Chestnut St., archts. Noted Jan. 9

Pa., Reading—Until June 16, by Phila. & Reading Ry., Reading Terminal, Phila., building 1 story, 38 x 50 ft., rein.-con. and brick power house, here. A. E. Owen, Reading Terminal, Phila., engr.

Wis., Milwaukee—Until June 10, by R. H. Pinkley, engr., Pub. Serv. Bldg., building 2 story, 60 x 80 ft. brick, concrete and steel, sub-power station, for T. M. E. R. & L. Co., rein.-con. flooring, concrete foundation. About $40,000.

Que., Shawinegan Falls—Until July 1, by Town Council, building electric-light plant. About $35,000. B. S. Atkins, engr.

Ont., Hamilton—Until June 14, by F. W. Warren, archt., Bank of Hamilton Bldg., for concrete and steel factory for Natl. Paper Goods Co. Ltd., 144 Queen St. About $75,000.

Ont., Port Arthur—Until June 30, by M. H. MacLeod, vice pres., Canadian National Rys., 27 Wellington St., Toronto, building superstructure of grain elevator work house of 700,000 bu. capacity, with unloading shed and complete elevator equipment. C. D. Howe & Co., Whalen Bldg., consult. engrs.

PRICES AND CONTRACTS AWARDED
(★Indicates award of contract)

★Mass., Boston—Boston Buick Co., 97 Masachusetts Ave., let contract building 2 story, 85 x 300 ft., rein.-con. and steel storage building and garage, rein.-con. flooring, concrete foundation, on Babcock and Commonwealth Aves., to Evatt Constr. Co., 161 Devonshire St.

★Mass., Boston—W. D. Young & Co., 10 Washington St., let contract building 5 story, 80 x 128 ft. rein.-con. warehouse and sales house, rein.-con. flooring, concrete foundation, on Babcock and Commonwealth Aves., to W. Bailey Co., 88 Broad St. About $225,000. Noted May 1.

★Mass., Taunton—Robertson Motor Car Co., School St., let contract building 3 story, 110 x 110 ft. rein.-con. auto service station, rein.-con. flooring, brick and concrete foundation, on Trescott St., to J. A. Glenn, 15 Trescott St. About $100,000.

★R. I., Central Falls (Pawtucket P. O.)—Pennsylvania Silk Mills, 4th Ave., New York City, let contract building brick and timber mill, on Mill St., to A. F. Smiley, Oak Hall Bldg., Pawtucket. About $125,000.

★R. I., Pawtucket—Lorraine Mfg. Co., Mineral Spring Ave., let contract building fireproof dyehouse and bleachery, rein.-con. flooring, concrete foundation, to O. D. Purington & Co., 624 Industrial Trust Bldg., Providence. About $400,000.

★R. I., Providence—Atlantic Mills, Equitable Bldg., Boston, let contract building 3 story, 46 x 98 ft. brick and steel power house, concrete foundation, on Manton Ave., to O. D. Purington & Co., 624 Industrial Trust Bldg. About $25,000.

★Conn., New Britain—Landers, Frary & Clark, Commercial and Center Sts., let contract building 1 story, 50 x 100 ft. brick and mill construction factory, rein.-con. flooring, concrete foundation, on Center St., to Ellison Constr. Co., 120 Wellington Ave., Hartford. Noted May 29.

★Conn., New Britain—Taplin Mfg. Co., 65 Arch St., let contract building 2 story, 50 x 90 ft. brick factory, concrete flooring, concrete foundation, to R. H. Hibbard Co., 140 Main St. About $30,000.

★Conn., New Haven—S. N. E. Telephone Co., 114 Court St., let contract building 3 story brick and steel storehouse, concrete foundation, on Liberty St., to D. G. Carmichael, 902 Chapel St. About $35,000.

★Conn., Waterbury—M. Joseloff, 17 Brown Pl., let contract constructing 3 story, 50 x 132 ft. fireproof warehouse and grocery building, rein.-con. flooring, concrete foundation, on South Leonard St., to Tracy Bros. Co., 52 Benedict St. About $75,000. Noted May 15.

★N. Y., Amsterdam—McCleary, Wallin & Crouse, 57 Lyon St., let contract constructing 3 story, 135 x 325 ft., main building, with two 2 story 50 x 60 ft. and 50 x 125 ft. additions, and 1 story 130 x 150 ft. picker house, mill constructions, rein.-con. flooring, concrete foundation, to J. W. Bishop Co., 11 Foster St., Worcester, Mass. About $500,000. Noted May 29.

★N. Y., Brooklyn—T. De Lisi and O. Sacchitti, 966 Atlantic Ave., will build 2 story, 60 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Atlantic and Grand Aves. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Hills Bros., 375 Washington St., New York City, let contract building 6 story factory, with 36 x 40 ft. and 20 x 36 ft. wings, rein.-con. and steel, rein.-con. flooring, concrete foundation, on Sedgwick St., to Turner Constr. Co., 244 Madison Ave., New York City.

★N. Y., Brooklyn—Montrose Garage, Inc., c/o H. Weinstein, archts., 32 Court St., will build 1 story, 75 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Franklin and Willoughby Aves. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Pathe Freres, Grand Ave., let contract building 7 story, 90 x 100 ft., brick, steel and rein.-con. addition to factory, rein.-con. flooring, concrete foundation, to White Fireproofing Constr. Co., 95 Madison Ave., New York City. Noted May 8.

N. Y., Buffalo—Wheat Ice Cream Co., 235 Elm St., received bids building 2 story, 92 x 150 ft. rein.-con. garage, rein.-con. flooring, concrete foundation, on Elm St., from Metz Bros., Fillmore Ave. $62,000; Eastern Concrete Steel Co., Morgan Bldg. $65,000; G. D. Wilson, Builders' Exch. $66,000. Noted May 15.

★N. Y., New York—See "Buildings."

★Pa., Altoona—Altoona Baking Co., 200 Chestnut Ave., let steel contract for 2 story, 118 x 120 ft., steel and concrete bakery, on 9th Ave. and 28th St., to Jones & Laughlin, Ross St., Pittsburgh. Noted May 15.

★Md., Sykesville—Melville Woolen Co. let contract rebuilding concrete and steel mill, concrete foundation, to Consolidated Eng. Co., 243 Calvert Bldg., Baltimore. About $35,000.

★Va., Danville—Willingham & Co. let contract building 2 story, 81 x 192 ft., brick and timber plant, on Linn St., to T. C. Thompson, Charlotte, N. C. About $35,000.

★Fla., Jacksonville—Virginia Chemical Co., 11 South 12th St., Richmond, Va.; let contract building 46 x 240 ft. factory, on Mills St., to Huggen Bros., Bell Bldg., Montgomery. About $250,000. Noted Mar. 27.

★O., Cleveland—Columbia Steel & Shafting Co., Engineer's Bldg., let contract building 1 story, 147 x 157 ft., rein.-con., steel and brick warehouse and office, rein.-con. flooring, at 1224 East 55th St., to Hunkin Conkey Co., 600 Century Bldg. About $100,000. Noted June 5.

★Ind., Kokomo—Haynes Automobile Co., 1108 South Main St., let contract building 4 story, 120 x 800 ft. plant, to M. J. Hoffman Constr. Co., Furniture Bldg., Evansville. About $450,000.

★Mich., Detroit—Maxwell Motor Co., Woodward and Warren Aves., let contract building 1 story, 101 x 157 ft., concrete and steel assembling plant, concrete flooring, concrete foundation, to Hazelton & Clark Co., Book Bldg. Noted May 29.

★Mich., Highland Park (Detroit P. O.)—Ford Motor Co. let contract building 4 story, 80 x 260 ft., rein.-con., brick and steel service station and garage, rein.-con. flooring, concrete foundation, on Woodward Ave., to Bryant & Detwiler, 2336 Dime Bank Bldg. Noted May 22.

★Mich., Highland Park (Detroit P. O.)—See "Buildings."

★Ill., Chicago—Columbian Bank Note Co., 1104 South Wabash Ave., let contract building 3 story, 75 x 125 ft., rein.-con. printing plant, rein.-con. flooring, concrete foundation, at 500-506 South Ashland Ave., to Schmidt Bros. Constr. Co., 105 North Clark St. About $75,000.

★Ill., Chicago—Granet & Rothschild, 323 West Jackson Blvd., let contract building 2 story, 50 x 120 ft., brick and timber factory, concrete foundation, at 2422 South Crawford Ave., to J. Rodatz, 209 South La Salle St. About $25,000.

★Ill., Chicago—W. Wrigley Jr. Co., 5 North Wabash Ave., let contract building 8 story, 80 x 343 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Ashland Ave. and 36th St., to E. W. Sproul Co., 2001 West 39th St. About $600,000.

★Wis., Ft. Atkinson—Creamery Package Co., Ft. Atkinson Bldg., let contract building 5 story, 90 x 207 ft., rein.-con. and brick factory to Raulf Co., 428 Grand Ave., Milwaukee. About $200,000. Noted June 5.

★Wis., Manitowoc—Manitowoc Seed Co., 1009 Main St., let contract building 2 story, 60 x 150 ft., brick, steel and rein.-con. warehouse, concrete flooring, brick foundation, on 8th St., to Blake Constr. Co., 627 South River St., Appleton. About $40,000. Noted Apr. 3.

★Wis., Manitowoc—Tinsel Mfg. Co., 16th and Hamilton Sts., let contract building 3 story, 60 x 100 ft., brick, steel and rein.-con. factory, rein.-con. flooring, brick foundation, to E. R. Herman, Manitowoc. About $80,000.

★Wis., Milwaukee—Lincoln Motor Car Co., 820 3rd St., let contract building 2 story, 60 x 108 ft., rein.-con. and brick garage, rein.-con. flooring, concrete foundation, on 3rd and Clark Sts., to P. Riesen & Sons, 1018 Humboldt Ave. About $40,000. Noted June 5.

★Wis., Sheboygan—Columbia Shoe Co., c/o C. Wolf, 1525 North 10th St., let contract building 3 story, 70 x 110 ft. brick factory, brick foundation, on 10th St., to C. Ackerman Sons, Sheboygan. About $30,000. Noted May 29.

Industrial Works (Continued)

★**Wis., Sheboygan**—Wadham Oil Co., 350 Clinton St., Milwaukee, let contract building 2½ story, 60 x 92 ft., brick warehouse and filling station, rein.-con flooring, rock foundation, on 13th St. and Michigan Ave., here, to C. Zelle & Sons, 1220 Michigan Ave. Cost between $40,000 and $60,000. Noted May 29.

★**Wis., Sheboygan Falls**—Brickner Woolen Co., c/o A. Brickner, Sheboygan Falls, let contract building 2 story, 52 x 90 ft. brick, rein.-con. and steel factory, brick foundation, on Main St., to Siems, Helmers & Schaffner, 514 Germania Life Bldg., St. Paul, Minn. About $30,000.

★**Minn., Minneapolis**—Brin Glass Co., 610 1st St., N., let contract building 5 story warehouse at 604 Washington Ave., N., to H. N. Leighton Co., 127 South 10th St. About $100,000.

★**Mo., St. Louis**—St. Louis Mfg. Corp., 5401 Bulwer Ave., let contract building 1 story, 426 x 132 ft., brick and steel factory, at 5437-61 Natural Bridge Ave., to H. Haeseler Bldg. & Constr. Co., 621 Wainright Bldg., $406,731.

★**Mo., St. Louis**—Scullin Steel Co., 6700 Manchester St., will build steel rolling mill at 6700 Knox Ave. About $2,000,000. Work will be done by day labor.

★**Tex., Port Arthur**—Adams & Gorin let contract building 2 story, 100 x 140 ft., rein.-con. warehouse, to McDaniel & Hartford, Port Arthur. About $51,500.

★**Wash., Goldendale**—Leadbetter & Walters will build 1 story, 100 x 120 ft., brick warehouse. Work will be done by day labor.

★**Ore., Tillamook**—Ackley & Miller let contract building 1 story, 105 x 143 ft. concrete garage, to F. Heyd, Tillamook. Noted May 29.

★**Cal., Fresno**—San Joaquin Baking Co., San Benito and P Sts., let contract building 1 and 2 story, 145 x 280 and 12 x 168 ft., rein.-con. and brick bakery, rein.-con. flooring, concrete foundation, on Los Angeles and L Sts., to R. Pederson, 446 Clark St. Cost, including equipment, $250,000. Noted June 5.

★**Cal., Los Angeles**—G. H. Wadleigh let contract building 3 story, 70 x 170 ft., rein.-con., brick and hollow tile garage and machine shop, rein.-con. flooring, concrete foundation, to Leonardt & Peck, H. W. Hellman Bldg., $32,475. H. G. Haffer, 1026 Orange St., lessee.

★**Cal., Modesto**—M. F. Hewell let contract building 2 story, 125 x 140 ft., rein.-con. garage, including freight elevator, on 10th and G Sts., to E. Green, Modesto. About $50,000.

★**Cal., Santa Rosa**—Santa Rosa Shoe Mfg. Co. let contract building 2 story factory, to A. M. Hildebrand, Santa Rosa. About $25,000.

Buildings

PROPOSED WORK

Mass., Northampton — Church — Notre Dame Roman Catholic congregation, King St., plans to build brick and stone church. About $150,000. Architect not selected.

R. I., Pawtucket—Recreation—See "Industrial Works."

Conn., Groton—Housing—See "Industrial Works."

Conn., Manchester — Housing — Cheney Bros., Hartford Rd., plan to build 2 story workmen's houses on Park and Prospect Sts. About $100,000.

Conn., New Britain—Church—St. Marks Episcopal congregation, 21 Washington St., having preliminary plans prepared by Carrere & Hastings, archts., 52 Vanderbilt Ave., New York City, for 100 x 100 ft. brick and steel, brick foundation, on Washington St. About $100,000. Noted Apr. 24.

Conn., New Britain—School—Bd. Educ. plans to build auditorium and 20 room addition to North End School, on Bassett St. About $200,000. Architect not selected.

Conn., New Haven — Hospital—C. S. Palmer, archt., 191 Church St., receives bids about June 15, building 5 story, 100 x 140 ft., fireproof, rein.-con. flooring, concrete foundation, on Orchard St., for Grace Hospital Assn., 1418 Chapel St. About $300,000. Noted Feb. 27.

Conn., New London—Business—A. H. E. Burr, Alger St., plans to erect business building on Bank St. and Montauk Ave. About $50,000. Architect not selected.

Conn., New London—Theatre—H. R. Brewster, archt., 295 East 17th St., Brooklyn, receives bids about July 1, building 3 story, 70x165 ft., brick and concrete, rein.-con. flooring, concrete foundation, on Bank St., here, for W. T. Murphy, 143 Bank St. about $125,000. Noted Mar. 13.

Conn., Norwich — Hospital — Norwich Hospital for Insane receives bids about June 20, for 2 story, 200 x 200 ft. brick and rein.-con. psycopathic and tuberculosis ward building, rein.-con. flooring, concrete foundation, on Preston St. About $200,000. Cudworth & Thompson, Thayer Bldg., archts. Noted May 1.

Conn., Torrington—Club—St. Francis T. A. & B. Society, Spear St., plans to build 2 story clubhouse, to include gymnasium, bowling alleys, etc. About $60,000.

Conn., Waterbury — Bank — Waterbury Natl. Bank, 150 Bank St., receives bids about July 15, building brick and limestone, on Grand and Field Sts. About $100,000. C. Gilbert, 244 Madison Ave., New York City, archt.

N. Y., Brooklyn—Theatre—J. Manheimer, 1694 49th St., having plans prepared by Carlson & Wiseman, archts., 226 Henry St., for 3 story, 203 x 302 ft. brick, stone and steel, rock foundation, on Flatbush Ave. and Albemarle Rd. About $450,000. Noted Apr. 24.

N. Y., Brooklyn—Theatre—I. Miller, 1663 Union St., soon receives bids for 2 story, 100 x 140 ft. brick and steel, brick foundation, on St. Johns Pl. and Utica Ave. About $150,000. T. W. Short, 370 Macon St., archt. Noted May 15.

N. Y., Herkimer—Theatre—Griswold & Mason having plans prepared by E. A. Howard, Bastable Blk., Syracuse, for 60 x 135 ft. fireproof, (1200 seating capacity), on Main St. About $80,000. Address T. P. Griswold, Herkimer.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 1123 B'way., for 2 story, 100 x 145 ft. brick, steel and limestone, brick foundation, on Tratman Ave. west of Rowland St. About $200,000.

N. Y., New York—Hospital—New York Infirmary for Women and Children, 321 East 15th St., having plans prepared by Butler & Rodman, archts. and engrs., 56 West 45th St., for altering 7 story brick and steel hospital. About $72,000.

N. Y., New York—Office—Larimore & Co., 1 West 40th St., soon receives bids building 6 story, 34 x 100 ft. brick and steel, brick foundation, at 15-17 West 46th St. About $80,000. Zipkes, Wolff & Kudroff, 25 West 42nd St., archts. and engrs. Noted June 5.

N. Y., New York—Office—One Hundred and Ten William St. Corp. having plans prepared by F. H. Quinby, archt., 99 Nassau St., for 18 story brick and steel addition, on William and John Sts.

N. Y., New York—Store—Buckley-Newhall Co., 125th St. and 5th Ave., having plans prepared by J. B. Snooks Sons, archts. and engrs., 261 Bway, for 12-story, 100 x 125 ft. brick and steel, rock foundation, on 6th Ave. and 41st St.

N. Y., North Tonawanda—Gymnasium, etc.—Bd. Educ. having plans prepared and estimates made for 2 story gymnasium and drill hall. About $80,000.

N. Y., Rochester—Store—B. Forman, 46 Clinton Ave., S., plans to build 3 story, 34 x 125 ft. brick addition to present plant. About $60,000. Architect not selected.

N. Y., Rye—Club—J. E. Bowman, Hotel Biltmore, New York City, having plans prepared by Warren & Wetmore, archts. and engrs., 16 East 47th St., New York City, for brick, steel and rein.-con. club house, rock foundation, here. About $2,000,000.

N. Y., Utica—Hospital—Utica State Hospital, Marcy Division, had plans prepared for 3 story, 40 x 206 ft. building to be known as Acute Hospital, with 3 wings, 35 x 58 ft., cost $350,000; also 3 story, 41 x 320 ft. Chronic Hospital, with 3 wings, 41 x 83 ft., both brick and rein.-con., cost $400,000.

N. Y., Utica—Office, etc.—Langdon & Hughes Electric Co., 233 Elizabeth St., having plans prepared for 3 story, brick, office, storage and shop building, at 225-229 Elizabeth St. Cost between $60,000 and $70,000.

N. Y., Watertown—Hotel—Kamargo Hotel Corp. recently incorporated, having plans prepared by Essenwein & Johnson, archts., Ellicott Sq., Buffalo, for hotel on Washington St. About $500,000. D. M. Anderson, Sherman Bldg.; F. A. Empsall, 122 Court St.; D. D. Kieff, Flower Bldg., dirs.

N. J., Hoboken—Office—Tietjen & Lang Dry Dock Co., 17th St., plans to build 3 story, concrete. About $100,000.

N. J., Jersey City—Jail—Bd. Freeholders Hudson Co. plans to build jail. About $200,000.

N. J., Jersey City—Mausoleum—Mutual Mausoleum Co. plans to build concrete, brick and marble, on Garfield Ave. About $300,000.

N. J., Kearney (Arlington P. O.)—Office—See "Industrial Works."

N. J., New Brunswick—Theatre—Victory Amusement Corp., New Brunswick, having plans prepared by J. H. Scheier, archt., 25 West 42nd St., New York City, for 100 x 100 ft., brick and steel, brick foundation, on Albany and Washington Sts. About $300,000.

N. J., Orange—Sanatorium—G. C. Bergen, purch. agt. Essex Co. (Newark), soon receives bids building concrete and steel sanatorium, here. About $569,000. G. Green, 27 Clinton St., Newark, archt.

N. J., Woodbury—Bank—C. P. Peddle, archt., 136 South 4th St., Philadelphia, soon receives bids building 1 story, 35 x 106 ft., concrete, for 1st Natl. Bank, here. About $125,000.

Pa., Allentown—Theatre and Office—Wilmer & Vincent Theatre Co., 1451 Bway., New York City, soon receives bids building 3 story, 116 x 116 and 58 x 90 ft., steel and brick. Hoffman & Henon, Finance Bldg., Phila., archts. Noted Feb. 27.

Pa., Altoona—Business Bldg.—A. Marincucci & Bros., 814 18th St., receives bids about June 30 building 2 story, 40 x 61 ft., brick and stone, on 9th Ave. and 16th St. About $50,000. F. A. Hersh and F. J. Shollar, Commerce Bldg., archts.

Pa., Altoona—Schools—Bd. Educ. Logan Twp., soon lets contract building three 2 story, 42 x 62 ft. brick and stone schools at Garden Heights, South Altoona, and Greenwood; also 2 story, 21 x 30 ft. addition to Pleasant Valley School. Total cost, $55,000. Separate bids will be asked for each school. F. A. Hersh and F. J. Shollar, Commerce Bldg., archts.

Pa., Johnstown—Bank—United States Natl. Bank purchased 60 x 231 ft. site on Franklin St. and plans to build, brick, stone and steel. Architect not selected. G. M. Kline, W. G. Hager and others, dirs.

Pa., Phila.—Synagogue—Beth Shalom congregation, 224 Market St., having plans prepared by Fieldstein & Roth, archts., 1328 Chestnut St., for 3 story, 100 x 125 ft. concrete and brick. About $100,000.

Md., Baltimore—Parish House and Manse—Forest Park Presbyterian congregation, 3714 Springdale Ave., plans to build 2 story, 40 x 75 ft., rein.-con., stone and brick, concrete and rock foundation, on Dalrymple and Garrison Aves. About $50,000. J. E. Finney, pastor, J. E. Lafferty, Roslyn St. near Beach Ave., archt.

Md., Tracys Landing—School—Bd. Educ. Anne Arundel Co., Annapolis, having revised plans prepared by H. P. Hopkins, archt., 211 Union Trust Bldg., Baltimore, for 2 story, brick, stone foundation. About $50,000. Former bids rejected. Noted May 29.

W. Va., Martinsburg—Hospital—City plans to build 4 story addition to hospital.

W. Va., Welch—Municipal—City Comrs. plan election soon to vote on $60,000 bonds to build 3 story municipal building, to house city officials and Fire Dept.

Fla., Jacksonville—School—Duval Co. election June 24, to vote on $150,000 bonds to build school.

Ala., Birmingham—Memorial Auditorium—Committees being organized and campaign will be started to raise $1,000,000 to build memorial auditorium. M. W. Bush, c/o Chamber of Commerce, chn.

Ia., Sac City—School—Bd. Educ. having plans prepared by Ashby, Ashby & Schultz, archts., 178 West Jackson Blk., Chicago, for 2 story, 85 x 150 ft., brick and timber, rein.-con. flooring, concrete foundation. About $100,000.

Buildings (Continued)

O., Cleveland — Commercial — K. V. Painter, Cuyahoga Bldg., plans to build 10 story, 135 x 360 ft., rein.-con., steel and brick, on East 17th St. and Euclid Ave. About $300,000. Architect not selected.

O., Cleveland—Hotel—Euclid Prospect Corp., c/o Van Aken & Strock, 6525 Euclid Ave., plans to build 12 story, 377 x 400 ft., rein.-con., steel and brick, concrete foundation, at 2432 Euclid Ave. About $4,000,000. Warren & Wetmore, 16 East 47th St., New York City, archts.

O., Cleveland—Memorial—City of Cleveland Memorial Assn., c/o M. Bernstein, 1442 East 105th St., having preliminary prepared by W. S. Lougee, archt., Marshall Bldg., for 4 story, 66 x 346 ft., rein.-con., steel and brick, on Lakeside and Ontario Aves. About $300,000. Noted Feb. 20.

O., Columbus—Store—Union Clothing Co., Long and High Sts., plans to raze present structure and build 6 story, 62 x 87 ft., on West Long St. About $160,000. Architect not selected.

O., Dayton—Bank and Office—Winters Natl. Bank, 2nd and Main St., plans to build 5 story, 72 x 80 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation. About $250,000. W. B. Phillips, c/o F. H. Smith, engr., 120 Bway., New York City, archt.

O., Springfield—Theatre—G. Sun, Main and Limestone Sts., soon receives bids building 2 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, on Limestone St. About $75,000. W. F. Miller, Kelly Bldg., archt.

O., Youngstown — Church — St. Lukes Lutheran congregation plans to build 50 x 87 ft., on West Evergreen St. and Oak Hill. About $90,000. Architect not selected.

Ind., Terre Haute—School—Bd. Educ. plans to build school. About $150,000.

Mich., Alpena—Armory—A. Gould, archt., Empire Bldg., Detroit, receives bids about June 20, building 1 story, 118 x 180 ft., rein.-con., brick and steel, concrete foundation for City. Noted May 22.

Mich., Cedar Bank—School—State Bd. Control, Lansing, purchased 125 acre site here and plans to build training school for women. Plans include 3 story administration building, 3 dormitories, each 38 x 179 ft. with wing, 38 x 74 ft., central heating plant and chapel, all fireproof construction. Cost will exceed $500,000.

Mich., Detroit—Hall—Church of the Annunciation, c/o W. P. Bradley, chn., 419 Bewick Ave., plans to build memorial hall and gymnasium on Parkview and Jefferson Aves. About $50,000.

Mich., Detroit—Home—A. Kahn, archt., Marquette Bldg., receives bids about June 14, building 6 story, 114 x 147 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, at Harper Hospital, on John R St. About $300,000.

Mich., Detroit—Hotel—W. S. Barr, c/o Baxter, Odell & Halpin, archts., 1024 Hammond Bldg., having plans prepared for 4 story, brick, on Henry St. between Cass Ave. and 2nd St. About $125,000.

Mich., Detroit—School—Bd. Educ. soon lets contract building 2 story, 65 x 180 ft., rein.-con., brick and steel addition, rein.-con. flooring, concrete foundation, on Indiandale Ave. and 12th St. Malcolmson & Higginbotham, 404 Moffat Bldg., archts.

Mich., Highland Park (Detroit P. O.)—Hall—Village plans to build hall. About $700,000. F. Caldwell, 20 Gerald Ave., comr.

Ill., Chicago—Hotel—Ritz Hotel, c/o W. W. Ahlschlager, archt., 111 West Washington St., having plans prepared for 10 story, 100 x 150 ft. rein.-con., rein.-con. flooring, concrete foundation, on Kenmore and Granville Sts. About $1,000,000.

Ill., Chicago Heights—Club—P. Gerhardt, archt., 64 West Randolph St., receives bids about July 15, building 6 story, 100 x 142 ft., brick and rein.-con., rein.-con. flooring, concrete foundation, on Illinois and Oak Sts., for Chicago Heights Country Club. About $300,000.

Ill., East Moline—Rectory—Holy Name Church having plans prepared by H. Dox, archt., 301 Apollo Bldg., Peoria, for brick rectory, on 6th St. and 17th Ave. About $50,000.

Ill., Quincy—Hospital—Blessing Hospital Assn., Spring and 10th Sts., plans to build 4 story, 160 x 250 ft. brick and rein.-con. addition and 2 story, brick, sun and sleeping porches, rock foundation. About $200,000.

Ill., Quincy — Store — See "Industrial Works."

Wis., Beloit — Church — Our Savior's Lutheran congregation plans to build church. About $50,000.

Wis., Beloit—Schools—East Side School Dist. voted to issue $245,000 bonds to build intermediate school on Lawrence Ave., cost $160,000; other in Perrigo addition, $85,000.

Wis., Eau Claire—School—Bd. Educ. had plans prepared by C. Volkman, archt., 106½ Grand Ave. E., for 67 x 165 ft. brick, rein.-con. and stone school, for 10th Ward. Cost between $85,000 and $90,000.

Wis., Fond du Lac—Club—Loyal Order of Moose plans to build club in Central Park. About $50,000.

Wis., Ft. Atkinson—Church—St. Peters Episcopal congregation having sketches made by Schuchard & Judell, archts., 425 East Water St., Milwaukee, for brick and stone, concrete foundation. About $60,000. R. W. Mason, rector.

Wis., Green Bay—Home—Mc Cormick Memorial Home soon receives bids building 2 story, 46 x 115 ft. concrete and brick, concrete foundation, on Allonez St. About $50,000. Foeller & Scholeer, 123 North Washington St., archts. Noted Apr. 17.

Wis., Milwaukee—Bank—Natl. Exch. Bank, Bway. and Michigan Ave., having preliminary sketches made by Van Ryn & De Gelleke, archts., Caswell Blk., for 4 story, brick, steel and stone, concrete foundation, at 387 East Water St. About $500,000.

Wis., Milwaukee—Hall—Garfield Lodge No. 309 F. & A. M., c/o W. E. Haefner, 933 Orchard St., plans to build 2 story, 80 x 125 ft. rein.con. and brick on 27th and Center Sts. About $50,000. Architect or engineer not selected.

Wis., Milwaukee—Store—I. Goldman plans to build 4 story, 120 x 140 ft. on 4th Ave. and Mitchell St. About $185,000.

Wis., Milwaukee—Theatre—Gayety Theatre, 143 2nd St., having plans prepared for remodeling theatre. About $65,000. C. Fox, mgr. Kirchoff & Rose, Majestic Bldg., archts.

Wis., Sullivan—School—Bd. Educ. plans to build 2 story, 50 x 95 ft. brick and rein.-con., brick foundation, on Main St. About $55,000. Architect not selected.

Minn., Balaton—School—Bd. Educ. soon receives bids building rein.-con. and brick, rein.-con. flooring, brick and rock foundation. About $75,000. H. W. Parsons, 600 Builders' Exch., Minneapolis, archt. and engr. Noted May 1.

Minn., Cass Lake—High School—School Dist. voted $70,000 bonds to build high school. D. V. Wardner, clk.

Minn., Duluth—School and Auditorium Sacred Heart Church plans to build 2 story, 80 x 140 ft., rein.-con. and steel, rein.-con. flooring, concrete foundation, on 4th St. and 27th Ave., E. About $120,000. Holstead & Sullivan, Palladio Bldg., archts. and engrs.

Minn., Ely—School—Bd. Educ. soon receives bids building rein.-con. and brick industrial school, rein.-con. flooring, brick foundation. About $80,000. H. W. Parsons, 600 Builders' Exch., Minneapolis, archt. and engr.

Minn., Glen Lake (Hopkins P. O.)—Hospital—Sund & Dunham, archts., 514 Essex Bldg., Minneapolis, receives bids about June 21, building 1½ story, 125 x 135 ft., rein.-con. and brick, here, for Hennepin Co. About $50,000.

Minn., Hibbing—Club—Lodge No. 1022, B. P. O. E., plans to build 3 story, 50 x 120 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Howard St. and 5th Ave. About $75,000. E. W. Coons, chn.

Minn., Ivanhoe—Courthouse—J. T. Wilson, aud. Lincoln Co., soon receives bids building rein.-con. and brick, rein.-con. flooring, brick foundation. Cost between $110,000 and $270,000. H. W. Parsons, 600 Builders' Exch., Minneapolis, archt. and engr.

Minn., Minneapolis—Bank—Federal Reserve Bank, New York Life Bldg., purchased site on Marquette Ave. and [illegible] St., and plans to build bank. About $1,[illegible],000. Architect not selected.

Minn., Minneapolis—Office—Chamber of Commerce, 4th Ave. and 3rd St., having plans prepared by Bertrand & Chamberlain, archts. and engrs., 616 North West Bank Bldg., for 12 story, 130 x [illegible] ft., rein.-con. About $810,000.

Minn., Nashwauk—School—Bd. Educ. having revised plans prepared by Tyrie & Chapman, archts., 320 Auditorium Bldg., Minneapolis, for grade and high school here. About $300,000.

Minn., Winona—Dormitory—State Bd. Control, St. Paul, soon lets contract building 3 story, 46 x 130 ft., rein.-con. and brick dormitory here for women. About $100,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. and engr.

S. D., Aberdeen — Theatre — McCarthy Theatre Co., Watertown, purchased site here and plans to build theatre. About $100,000.

S. D., Brookings—High School—Bd. Educ. plans to build 2 story, 152 x 176 ft. brick and rein.-con. About $200,000. Tyrie & Chapman, 320 Auditorium Bldg., Minneapolis, Minn., archts.

S. D., Ipswich—School—City voted $85,000 bonds to build school. E. M. Paul, clk.

N. D., Fargo—Seminary—Oak Grove Seminary plans to build seminary. About $65,000. T. T. Fjelstad, Cooperstown, secy.

N. D., Milton—High School—Bd. Educ. soon lets contract building 2 story, 70 x 110 ft., brick and rein.-con. About $50,000. J. Brecke, pres.

N. D., Nekoma—High School—Bd. Educ. soon lets contract building 2 story, 70 x 110 ft. brick and rein.-con. About $50,000. A. B. Flou, pres.

N. D., New England—Church and School—St. Mary's Church plans to build. About $50,000. N. Ressler, Mandan, archt.

Mont., Miles City—Courthouse—Custer Co. election Sept. 2, to vote on $190,000 bonds to build courthouse. J. H. Bohling, Jr., co. clk.

Mo., St. Joseph—City Hall—City voted $450,000 bonds to build city hall. Noted May 1.

Mo., St. Joseph — Hospital — City voted $100,000 bonds to build hospital for contageous diseases. Noted May 1.

Mo., St. Louis—Church—Trinity Methodist Episcopal congregation plans to build on 13th and Tyler Sts. Cost to exceed $50,000. T. E. Green, pastor.

Mo., St. Louis—Mercantile—May Department Stores Co., 6th and Locust Sts., plans to build 7 story, at 615 Locust St. Cost to exceed $100,000. C. F. Laffer, c/o Famous-Barr Co., 6th and Locust Sts., supt.

Mo., St. Louis—Office—Leonard & Locust Investment Co., c/o S. Hamburg, pres., 2407 North Bway., plans to build 65 x 125 ft., rein.-con., steel and brick, rein.-con. flooring, concrete foundation, at 1117-21 Pine St. Cost to exceed $100,000. Architect not selected.

Mo., St. Louis—Theatre—Pantages Vaudeville Circuit, c/o A. Pantages, pres., 36th North and Madison Sts., Seattle, plans to build on 6th St. here. About $500,000. Architect not selected.

Tex., Dallas—Lodge—Dallas Lodge No. 44, I. O. O. F., plans to build 6 story, rein.-con., on Pearl and Cabell Sts. About $250,000.

Tex., Hallettsville—School—City voted $65,000 bonds to build school.

Tex., Rockdale—School—School Bd. having plans prepared by A. B. Ayres, archt., Bedell Bldg., San Antonio, for school. About $75,000.

Tex., San Antonio—School—City voted to issue $250,000 bonds to build additional schools.

Okla., Idabell—Courthouse and Jail—Comrs. McCurtain Co. soon let contract building courthouse and jail. Bonds for $125,000 voted for project. Noted Mar. 20.

Okla., Sand Springs—City Hall—City plans to build 2 story, 46 x 100 ft. brick and stone, brick and concrete foundation, on Bway. and McKinley St. About $50,000. Architect not selected.

Buildings (Continued)

Okla., Tulsa—Gymnasium — Trustees Henry Kendall College, Cleland and 7th Sts., having revised plans prepared for brick and stone gymnasium. C. E. Buchner, chn.

Okla., Tulsa—Store—R. N. McFarlin 1610 South Carson St., plans to build 5 story, 100 x 100 ft., on 4th and Main Sts. About $500,000. W. H. Reynolds, 416 West 2nd St., agt. Architect not selected.

Okla., Tulsa—Temple—Shrine and Masonic Bldg. Assn., 20 Main St., between 6th and 7th Sts., plans to build 3 story, 175 x 240 ft., stone, on Boston and 7th Sts. About $500,000. G. Winkler, 414 Palace Bldg., archt.

Colo., Del Norte—High School—Town having plans prepared by Montjoy, French & Frewen, archts., Chamber Commerce Bldg., Denver, building high school. About $75,000.

Colo., Loveland—Bank—Loveland Natl. Bank, 141 East 4th St., having plans prepared building bank. About $100,000. V. C. Vorreiter, pres.

Colo., Monte Vista—School—Town plans to build school. About $100,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Colo., Walsenburg—School—Huerfano Co. plans to build school. Cost between $90,000 and $100,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Idaho, Boise—Tourtellote & Hummel, archts., Overland Bldg., receive bids about July 25, constructing 4 story, 100 x 122 ft. brick or sand stone building concrete foundation, for Y. M. C. A. About $125,000. Noted May 15.

Idaho, Boise—State Legislature—W. J. Hall, comr. pub. wks., receives bids about July 25, building two 5 story, 80 x 120 ft., fireproof wings to capitol, on Jefferson St. About $900,000. Tourtellotte & Hummel, Overland Bldg., archts. Noted May 2.

Idaho, Nampa—Bank—Tourtellote & Hummell, archts., Overland Bldg., Boise, receive bids about June 15 building 1½ story, 85 x 115 ft., stone and terra cotta, concrete foundation, for Farmers and Merchants Natl. Bank. About $85,000. Noted May 15

Ariz., Phoenix—Hotel—H. Bird and R. M. Monagham, Jefferson Hotel, plan to build 6 story, 150 x 150 ft. addition on Jefferson St

Wash., Bellingham — Church — First Christian congregation plans to build 3 story, 100 x 150 ft., brick, on Dock St. About $60,000. Architect not selected.

Wash., Chehalis—Gymnasium and Industrial Shop—State Bd. Control, Olympia, having plans prepared by J. Zittel, archt., Jameison Bldg., Spokane, building gymnasium and industrial shop at Boys' Training School, here. About $60,000.

Wash., Orting—Barracks, etc. — State Bd. Control, Olympia, having plans prepared by J. Zittel, archt., Jameison Bldg., Spokane, building barracks and warehouse on state grounds, for Soldiers' Home. About $85,000.

Wash., Seattle—Temple—Central Labor Council plans to build labor temple. About $1,500,000. Architect not selected.

Wash., Spokane—Home—Northwest Mission Conference of Swedish Evangelical Church having plans prepared by J. A. Creutzer, archt., Leary Bldg., Seattle, for 3 story, in Pasadena Park. About $100,000.

Wash., Tacoma—Hotel—Linnard Hotel Syndicate, c/o C. E. Moore, representative, 919 South M St., having plans prepared by K. K. Cutter, archt., Eiler Bldg., Spokane, for fireproof hotel. Cost, including furnishings, $1,500,000.

Cal., Claremont — Dormitory — Pomona College plans to build 4 dormitories for girls on campus, here. About $50,000. Architect not selected.

Cal., Hermosa Beach—School—School Trustees voted $60,000 bonds to build 4 room gymnasium and auditorium addition to school on Pier Ave. Architect not selected.

Cal., Long Beach—Y. M. C. A. having plans prepared by E. L. Mayberry, 468 Pacific Electric Bldg., Los Angeles, and W. H. Austin, 222 1st Natl. Bank Bldg., associate archts., for 6 story brick building on 7th St. and Amer. Ave., here. About $150,000. Noted May 15.

Cal., Los Angeles — Administration — University of Southern California, College of Liberal Arts Bldg., 35th and University Sts., having plans prepared by J. Parkinson, archt., 420 Title Insurance Bldg., for 3 story, 160 x 256 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on University Ave., to contain offices and chapel to seat 2000. This is first of group of 4 or 5 buildings to be erected to cost about $3,000,000.

Cal., Los Angeles—High School—Fowler Union High School Dist. having plans prepared by Allison & Allison, archts., 1405 Hibernian Bldg., for high school to include administration, domestic and manual training, gymnasium and auditorium buildings, rein.-con. flooring, concrete foundation. About $150,000.

Cal., Reedley—Bank—Reedley Natl. Bank having plans prepared by E. J. Kump, archt., 227 Rowell Bldg., Fresno, for 1 story 60 x 150 ft., rein.-con. and terra cotta, concrete foundation. About $70,000 including fixtures.

Cal., Sacramento—Hospital—Sisters Hospital, 23rd and R Sts., purchased 6 acre site on 40th St. near H St., and plans to build hospital. About $200,000. Architect not selected.

Cal., San Bernadino—Schools—City election in June to vote on $250,000 bonds to build three 10 room, one 8 room and two 6 room schools. W. C. Seccombe, pres. bd. educ.

Cal., Santa Monica—Hotel—Santa Monica Beach Assn. having preliminary plans prepared by M. Hunt, archt., Hibernian Bldg., Los Angeles, for 10 and 12 story, 500 x 1200 ft., on ocean front, here. About $1,500,000. Address J. B. Lankershim, Lankershim Bldg., Los Angeles.

Cal., Santa Monica—Schools—Bd. Educ. voted $75,000 bonds to build 6 room addition to Washington School and 4 room addition to John Adams School and for purchase of additional grounds; also $30,000 for Greek Theatre at high school. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts. Noted May 8.

Cal., Santa Rosa—Schools—City having plans prepared by W. H. Weeks, archt., 75 Post St., San Francisco, for grammar school and combination high school and memorial hall, concrete and brick. About $250,000. Bonds will be voted for project.

Cal., South Pasadena — Schools — City election June 20 to vote on $275,000 bonds to purchase sites and build 15 room intermediate school, cost, $75,000 and 1 on El Centro St., $60,000. G. W. Lawyer, school trustee.

Cal., Vallejo—Theatre—Bell Amusement Co. having plans prepared by B. J. Joseph, archt., Call-Post Bldg., San Francisco, for 1 story, rein.-con. About $60,000.

Cal., Ventura—Hospital—Bd. Supervs. Ventura Co. having plans prepared by A. C. Martin, archt., 430 Higgins Bldg., Los Angeles, for 2 story hospital, here, to include service and power house, nurses' home, residence building and 4 cottages, rein.-con. and hollow tile, rein.-con. flooring, concrete foundation. Cost between $150,000 and $200,000. Noted Jan. 23.

Que., Montreal—Church—St. Cyprians Angelican congregation plans to build. About $100,000. Architect not selected.

Ont., Alexandria—Hospital—A. Chisolm soon lets contract building hospital, chapel and monastery. About $75,000. Kenneth & Rea, Beaver Hall Hill, Montreal, Que., archts. Noted June 5.

Ont., Espanola—School—Separate School Bd. soon lets contract building brick with 8 room capacity. About $60,000. C. F. Burden, Massey, archt.

Ont., Hamilton—Club—Masonic Lodge plans to build brick and stone club. About $250,000. F. J. Howell, 136 Charles St., chn. Architect not selected.

Ont., Hamilton—School—Separate School Bd. plans to build 3 story, brick and steel, concrete foundation. About $75,000. P. J. Maloney, 56 Mulberry St., secy.

Ont., Niagara Falls — School — High School Bd. plans to build brick technical school. About $100,000. Adress J. Muir, 85 Ellis St. Architect not selected.

Ont., Pembroke—Theatre—Ottawa Valley Amusement Co., Altmonte, having plans prepared by Richards & Abra, archts., 127 Sparks St., Ottawa, building brick, here. About $50,000.

Ont., Sarnia—Institute—High School Bd. having plans prepared by S. B. Coon & Son, archts., Excelsior Life Bldg., Toronto, for brick collegiate institute with 18 rooms. About $350,000. Noted Apr. 24.

Ont., Sarnia—Theatre—United Theatres, Ltd., had plans prepared for 2 story, brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Victoria St. About $75,000. J. Myers, engr.

BIDS DESIRED

N. Y., Middletown—Hospital—Until July 1, by State Hospital Comn., Capitol, Albany, building 40 x 320 ft. chronic hospital with 3 wings, brick super-structure, concrete foundation for Middletown State Hospital here. About $400,000. L. F. Pilcher, Albany, state archt.; advertised in this issue. Noted June 5.

N. Y., New York—Store, Lofts, Etc.—Until June 20, by Maynicke & Franke, archts., 25 East 26th St., for 15-story, 50 x 85 ft. brick and steel, rock foundation, at 119 West 41st St., for R. Wurlitzer & Co., 113 West 40th St. About $600,000. Noted Apr. 3 under "Langdon Co."

N. Y., Ossining—Hall, etc.—Until June 24, (change of date), by C. F. Rattigan, supt. state prisons, Hall Records Bldg., New York City, building mess hall and kitchen No. 4, detention No. 5, outside cell No. 7, clinic No. 8, pump house, reservoir, also for sanitary heating and electric work on same. L. F. Pilcher, Capitol, Albany, state archt.; advertised in this issue. Noted May 22.

N. J., Camden—Schools—Until June 23, by Bd. Educ., building 4 story, 80 x 168 ft. in Yorkship Village, and 2 story, 126 x 172 ft. here, both brick. P. A. Davis, 1713 Sansom St., Phila., archt.

N. J., Jersey City—Schools—Until June 17, by Bd. Educ., building School No. 23. About $100,000. J. T. Rowland, Jr., 100 Sip Ave., archt Noted May 8.

N. J., Newark—School—Until June 17, by Bd. Educ., building 4 story, 163 x 223 ft., rein.-con. and steel vocational school, on Sussex Ave. About $500,000. J. H. & W. C. Ely, Fireman's Bldg., archts. and engrs.

N. J., Trenton — Psychopathic — Until June 25, by Dept. of Architecture, 142 West State St., building 4 story, 45 x 93 ft., concrete and stone, at State Hospital for Insane. About $350,000. F. H. Bent, Bound Brook, archt.

N. J., Verona (Montclair P. O.)—Hospital—Until June 23, by J. M. Bergen, purch. agt. Essex Co., (Newark), constructing hospital, main building to be 3 story, with four 1 story, one 1 story and one 3 story outer pavilions, concrete and steel. About $590,000. J. Green, 27 Clinton St., Newark, archt.

Pa., Bethlehem — High School — Until July 14, by H. J. Judd, supt. school dist., building 4 story, 200 x 300 ft., rein.-con. and steel. About $800,000. V. T. Ritter, North Amer. Bldg., Philadelphia, archt.

Pa., West Bethlehem (Bethlehem P. O.) —School—Until July 14, by H. J. Judd, supt. school dist., building 2 story, 150 x 150 ft., brick and rein.-con. About $200,000. V. T. Ritter, North Amer. Bldg., Philadelphia, archt.

S. C., Clinton—Dormitories—Until June 20, by Bd. Regents, State Hospital for Insane, Columbia, building two 1 and 2 story rein.-con. and brick dormitories, rein.-con. flooring, brick foundation for School for Feeble-Minded, ½ mi. from here. About $50,000. R. G. Scarborough, chm. G. E. Lafaye, 1003 Loan & Exch. Bank Bldg., Columbia, archt.

O., Akron—Theatre and Store—Friedman Bros., Medford Bldg., receiving bids building 1 and 2 story, 50x120 ft., rein.-con., steel and brick, rein.-con. flooring concrete foundation, on East Market St. and Irene Ave. About $50,000. Fichter & Brooker, 606 Metropolitan Bldg., archts.

O., Columbus—Chemistry—Until June 16, by Bd. Trustees of Ohio State University, building 1 story, 140 x 205 ft. chemistry, factory construction, rein.-con. flooring, concrete foundation, on campus. About $85,000. J. N. Bradford, c/o Ohio State University, archt.

O., Columbus—Club—Until June 16, by Bd. Trustees of Ohio State University, building 3 story, brick, with two 50 x 130 ft. wings, rein.-con. flooring, on campus. About $240,000. J. N. Bradford, c/o Ohio State University, archt.

Buildings (Continued)

Ill., Chicago—Library and Office—Until June 16, by Holabird & Roche, archts., 104 South Michigan Ave., building 14 story, 128x135 ft., steel, concrete foundation, on Randolph St. and Michigan Blvd., for John Crerar Library, Marshall Field Bldg. About $1,500,000. Noted May 22.

Ill., Chicago—School—Until June 19, by Bd. Educ., 5 South Dearborn St., building 3 story, 169 x 263 ft. (irregular) brick and steel, rein.-con. flooring, concrete foundation, on West 18th St. and South Keeler Ave. About $650,000. A. F. Hussander, c/o owner, archt.

Wis., Two Rivers—Until June 25, by Bd. Educ., c/o W. T. Darling, supt., building 3 story, 80 x 155 ft. brick and rein.-con., rock foundation, on Main St. About $125,000. J. D. Chubb, 109 Dearborn St., Chicago, archt.

Ia., Britt—High School—Until June 17 (change of date) by Bd. Educ., building 2 story, 104 x 242 ft., rein.-con. and brick, brick foundation. About $175,000. G. Lockhart, 391 Endicott Bldg., St. Paul, archt. Noted May 22.

Minn., Bemidji—Dormitory—Until July 1, by State Bd. Control, St. Paul, building 2 story, rein.-con. and brick dormitory for girls at Normal School here. About $100,000. C. H. Johnston, 715 Capital Bank Bldg., St Paul, archt.

Minn., Duluth—School—Until June 23, by C. A. Bronson, clk. bd. educ., building 2 story, 60 x 100 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Bayview Heights. About $60,000. Croft & Boerner, Lonsdale Bldg., archts. and engrs. Noted Mar. 13.

Minn., Duluth—Grade School—Until June 23, by C. A. Bronson, clk. bd. educ., building 1 story, 115 x 260 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on Minnesota Ave. About $100,000. Croft & Boerner, Lonsdale Bldg., archts. and engrs. Noted Feb. 13.

Minn., International Falls—School—Until June 15, by Independent School Dist. No. 4, Koochiching Co., building two 1 story, 22 x 40 and 24 x 34 ft., fireproof schools. About $50,000. W. P. Allred, Jr., Fergusson Bldg., Duluth, archt.

Minn., Moose Lake—School—Until June 16 (change of date), by C. F. Mahnke, clk. bd. educ., building 2 story, 62 x 90 ft. About $50,000. F. A. Schweiger, Moose Lake, archt. Noted May 22.

Minn., Russell—School—Until June 27, by Bd. Educ., building 2 story, 60 x 75 ft., rein.-con. About $50,000. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, engr.

Minn., Villard—Store—Until June 14, by P. G. Peterson, building 1 story, 26 x 80 ft. About $52,000.

Minn., Willmar—Cottages—Until June 17 (change of date), by State Bd. Control, 715 Capital Bank Bldg., St. Paul, building 2 rein.-con. and brick cottages at State Asylum here. About $110,000. Noted May 15.

Minn., Willmar—Service Hall, etc.—Until July 15 (change of date), by State Bd. Control, 715 Capital Bank Bldg., St. Paul, building 2 story, 45 x 120 ft., rein.-con. and brick, at State Asylum here. About $85,000. Noted May 15.

Kan., McPherson—Hospital—Until June 24, by McPherson Co., building 3 story, brick, rein.-con. flooring. About $115,000. H. A. Noble, Reliance Bldg., Kansas City, Mo., engr. Mann & Gerow, Hutchinson, archts. Noted Mar. 13.

Kan., Sabetha—Memorial Hall—Until June 17, by city, building 2 story, 75 x 130 ft., rein.-con., stone and brick, rein.-con. flooring, rock foundation. About $50,000. T. W. Williamson & Co., 418 Central Natl. Bank Bldg., Topeka, archts.

Neb., Omaha—Church—W. J. Borer, pastor Roman Catholic Church is receiving bids for 1 and 2 story brick church and rectory on 32nd and Francis Sts. About $75,000. J. M. Nachtigal, Paxton Blk., archt.

Neb., Omaha—Medical—W. P. Wherry, pres. Douglas Co. Medical Assn., is receiving bids for 15 story, 88 x 132 ft. steel, brick, stone and terra cotta, on 11th and Dodge Sts. About $2,000,000. J. A. McDonald, 905 Omaha Natl. Bank Bldg., archt.

Tex., Wichita Falls — Administration, etc.—Until June 16, by Com. of Northwest Texas Insane Asylum, constructing 4 rein.-con. buildings, rein.-con. flooring, concrete foundation, at asylum, here, including administration building, dormitory, heating plant, etc. About $350,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts.

Colo., Brighton—School—Until June 23, by Bd. Dir. School Dist. No. 27, Adams Co., building brick and steel addition to present structure, rein.-con. foundation. About $50,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Colo., Englewood—High School—Until June 23, by Bd. Dir. School Dist. No. 1, Arapahoe Co., building 2 story, brick and steel, rein.-con. foundation. About $80,000. Montjoy, French & Frewen, Chamber Commerce Bldg., Denver, archts.

Ariz., Globe—Schools—City election June 14, to vote on $80,000 bonds to build additions to high school and $100,000 to build grade school on Hill St. G. R. Hill, school trustee.

Cal., Colusa—Hotel—J. L. Swank is receiving bids building 4 story, concrete and brick on 7th and Market Sts. J. S. Gould, Colusa, archt.

Cal., San Jose—Hall—Until June 26, by W. F. McClure, state engr., Forum Bldg., Sacramento, building assembly hall at State Normal School here. About $80,000.

Que., Fraserville—Hospital—Until July 15, by town, building concrete, steel and stone hospital. About $100,000. P. Levesque, 115 St. John St., Quebec, archt.

Que., Montreal—Exchange—Until July 1, by Bell Telephone Co., 118 Notre Dame St. W., building concrete, steel and stone. About $75,000. W. J. Carmichael, 29 Hospital St., archt. Noted Apr. 3.

Que., Montreal—Theatre—Until June 21, by D. Dufort, archt., 195 St. Catherine St. E., building brick, concrete and steel, for S. Marstad, 1541 Notre Dame St., W. About $50,000.

Ont., Toronto—Schools—Until June 17, by Bd. Educ., 155 College St., building John Ross Robertson School, 2 story, brick, on Glenholme Ave., and 2 story, stucco, on Glengrove Ave. About $100,000 each. D. R. Franklin, 2 College St., archt. Noted May 15.

Ont., Welland—Fire Hall—Until June 16, by Town Council, building 2 story brick. About $60,000. C. M. Stapf, town clk. W. W. La Chance, Temple Bldg., archt. Noted Jan. 30.

Alta., Raymond—School—Until July 1, by Dept. Pub. Wks., Edmonton, building brick, steel and concrete school. About $50,000.

Alta., Youngstown—School—Until July 1, by Dept. Pub. Wks., Edmonton, building brick, concrete and steel school. About $50,000.

SEWERS—NEWARK, N. J.

Bids were received by Passaic Valley Sewerage Commissioners, May 20, for constructing intercepting sewerage system, part of Sect. No. 19, (1) Lodi St. River Crossing, (2) Wallington River Crossing, from (A) Henry E. Fox Constr. Co., 81 East 125th St., New York City; (B) Franco-American Constr. Co., Inc., 150 Nassau St.; (C) Canedella & Co., 136 Bloomfield Ave., Passaic. The unit bids were as follows:

	A	B	C
Earth excavation, dredging and refilling, in trench and open excavation, for 42-in. C. I. pipe line crossing Passaic River, etc. (lump sum)	$60,400.00	$69,000.00	$122,500 00
Laying 42-in. C. I. pipe line across Passaic River, furnishing of joint materials, making, testing and tightening of pipe joints, etc. (lump sum)	10,800.00	9,000.00	8,500 00
10 cu.yd. rock excavation, in dredged and open excavation	10.00	30.00	30 00
350 cu.yd. concrete masonry, in place, with Portland cement mortar	30.00	30.00	25 00
80 cu.yd. brick masonry and appurtenant work in manholes laid with Portland cement mortar	20.00	50.00	25 00
15,000 lb. steel for concrete reinforcement and other purposes	.10	.15	12
400 long tons rip rap, in place, including gravel backing	6.00	8.00	7 00
6,000 lin.ft. timber piles, in place	1.00	2.00	3.00
50 pile bents timber caps, blocks, wedges, etc	6.00	20.00	20 00
Venturi meter, 18 x 36 in., complete (but without recording apparatus) and including all appurtenant work (lump sum)	4,550.00	2,500.00	2,500 00
Extended totals	$98,150.00	$113,750 00	$168,150 00

	A	B	C
Earth excavation, dredging and refilling, for 36-in. C. I. pipe line crossing Passaic River, etc., and all appurtenant work (lump sum)	$50,400.00	$60,000.00	$90,000 00
Laying 36-in. C. I. pipe line across Passaic River, furnishing of joint materials, etc., and all appurtenant work (lump sum)	8,300.00	8,000.00	5,000 00
50 cu.yd. rock excavation, in dredged and open excavations	10.00	30.00	1,500 00
60 cu.yd. concrete masonry, in place, with Portland cement mortar	25.00	30.00	1,500.00
20 cu.yd. brick masonry and appurtenant work, in manholes, laid with Portland Cement mortar	20.00	50.00	500.00
2,000 lb. steel for concrete reinforcement and other purposes	.10	.15	300.00
3,500 lin.ft. timber piles, in place	1.00	2.00	10,500.00
45 pile bents timber caps, blocks, wedges, etc	6.00	20.00	900.00
Gate valve, 36 in., and appurtenances, complete, in place (lump sum)	2,875 00	1,200.00	1,000.00
Extended totals	$67,945	$81,700	$111,200

PRICES AND CONTRACTS AWARDED
(★Indicates award of contract)

Mass., Boston—See "Industrial Works."

★Mass., Easthampton—Bank—Hutchins & French, archts., 6 Beacon St., Boston, let contract, to MacDonald & Joslin Co., 161 Devonshire St., Boston, making extensive alterations in interior and building new marble exterior to 3 story bank, for Easthampton Savings Bank, 139 Main St. About $60,000. Noted June 5.

★R. I., East Providence, (Providence P. O.)—Club House—Metacomet Golf Club, Union Trust Bldg., let contract building 2 story, brick, to E. H. Bigney, 17 Custom House St., Providence. About $75,000. Noted Apr. 10.

★R. I., Howard—Administration—State Bd. Charitable and Penal Institutions, Providence, let contract converting 2 story fireproof service building, here, into administration building, to D. J. Barry, 60 East Manning St., Providence. About $50,000. Noted May 15.

★R. I., Woonsocket—Theatre—W. F. Fontaine, archt., 285 Main St., let contract, to J. F. Fleurant & Son, 158 Rathbun St., building 2 story, 60 x 100 ft. brick, concrete foundation on Cumberland and Clinton St., for Social Amusement Co., 11 Cumberland St. About $60,000. Noted May 8.

**★Conn., Bridgeport — **Loft — Mendelson Bros., 622 Water St., let contract building 3 story, 60x100 ft., brick and concrete, concrete foundation, on Strafford Ave., to S. W. Hubbell Bldg. Co., 589 Knowlton St. About $40,000.

★Conn., Bristol—School—Bd. Educ. let masonry and carpentry, contract building 3 story brick, steel and concrete addition to Park St. School, rein.-con. flooring, concrete foundation, to Torrington Bldg. Co., 197 Water St., Torrington. About $61,440. Noted Apr. 17.

Buildings (continued)

★Conn., Torrington—Theatre—H. Quittner, 421 Seaview Ave., East Norwalk, let contract building 64 x 135 ft. brick and steel, rein.-con. flooring, concrete foundation, on East Main St., here, to L. Longhi & Bro., Alhambra Bldg. About $90,000. Noted Mar. 27.

★N. Y., Brooklyn—School—Bd. Educ. let contract building P. S. 97, brick and steel, brick foundation, on Stillwell Ave., north of Ave. S, to P. Cleary, 115 Marion St. About $151,700. Noted May 15.

N. Y., Central Islip—Hospital, etc.—State Hospital Comn., Capitol, Albany, received lowest 3 bids June 4 building 3 story, 39 x 296 ft. addition to building for acute patients, with 3 wings, 35 x 39 ft., brick and rein.-con., concrete foundation, at Central Islip State Hospital, here, general contract from W. L. Crow Constr. Co., 103 Park Ave., New York City, $289,900; T. H. McHale & Son, Cahill Bldg., Syracuse, $293,200; M. Kantrowitz, 20½ Market St., Albany, $328,800; heating work, from W. B. Armstrong Co., 3 Fulton St., Albany, $22,842; Jarcho Bros., Inc., 22 East 105th St., New York City, $23,842; J. C. Williams, Inc., 233 Bway., New York City, $24,447. Noted May 15.

★N. Y., Cohoes—High School—Bd. Educ. let general contract building high school, on Columba St., to Hanrahan Bros., 336 Bwine Ave., Schenectady, $157,967; heating, to Johnstown Heating Co., 131 East 26th St., New York City, $29,653; plumbing, to Scotland & Munro, 72 Remsen St., $11,678. Noted June 5.

★N. Y., New York—Hotel—Crescent Realty Co., 26 East 23rd St., will build 16-story, 150 x 200 ft. brick and steel, brick foundation, on 5th Ave. and 50th St. About $500,000. Work will be done by day labor. Noted May 15.

★N. Y., New York—Loft, etc.—G. Ker, Inc., 350 West 38th St., will build 5 story, brick and steel loft and garage, rock foundation, at 354-358 West 37th St. About $70,000. Work will be done by day labor. Noted June 5.

★N. Y., New York—School—St. Bernards School, 4 East 98th St., let contract building 5-story, 25 x 62 ft. brick and steel, concrete foundation, at 12 East 98th St., to C. T. Wills, 286 5th Ave. About $70,000.

★N. J., Atlantic City—Hotel—H. Trumbauer, archt., Land Title Bldg., Phila., let contract building 12 story, 150 x 250 ft., concrete and brick, on Illinois Ave., to Cramp & Co., Denckla Bldg., Phila. Ritz-Carlton Hotel, Broad and Walnut Sts., lessee.

★Md., Aberdeen—Bank—First Natl. Bank let contract building 2½ story, 50 x 75 ft., rein.-con., steel and brick, concrete and rock foundation, to J. W. Waters Bldg. Co., 23 East Centre St., Baltimore. About $50,000. Noted May 29.

★Ky., Louisville—Office—Atherton Realty Co., Atherton Bldg., let contract building 11 story, 62 x 100 ft. rein.-con. addition, rein.-con. flooring, concrete foundation, on Chestnut St. west of 4th St., to A. Struck Co., Garden and Chestnut Sts. About $300,000.

O., Cleveland—See "Industrials."

★Mich., Detroit—Mercantile—E. Kern Co., 146 Woodward Ave., let contract building 10 story, 100 x 135 ft., rein.-con. and terra cotta, to S. W. Mark Constr. Co., Leader-News Bldg., Cleveland. About $650,000. Noted Apr. 24.

★Mich., Detroit—Office—Eureka Vacuum Cleaner Co., 1211 David Whitney Bldg., let contract building 4 story, concrete, brick and steel office and shop, concrete foundation, to A. W. Kutsche & Co., 817 Ford Bldg.

★Mich., Highland Park (Detroit P. O.)—Hospital—City let contract building 4 story hospital and 2 story powerhouse and laundry with connecting tunnel, rein.-con., brick and steel, concrete foundation, to O. W. Rosenthal Constr. Co., 80 East Jackson Blvd., Chicago, Ill., $241,600. Noted May 22.

★Ill., Chicago—Hotel—R. A. Pottinger, 4005 Irving Park Blvd., let contract building 4 story, 45 x 130 ft. rein.-con., rein.-con. flooring, concrete foundation, at 4028 Irving Park Blvd., to Healy Constr. Co., 4601 North Monticello Ave. About $100,000.

★S. D., Beresford—Bank—Security State Bank let contract building 1 story, 43 x 86 ft., brick and rein.-con., to Floyd Niebuhr Co., 1726 Newton Ave., North Minneapolis, Minn. About $50,000.

★Mo., St. Louis—Bank and Office—L. Haeger, archt., 3844 Utah Ave., let contract, to G. Moeller, 3520 Itaska Ave., building 2 story, 55 x 100 ft. rein.-con., steel and brick, rein.-con. flooring, rock foundation, at 3134-36 South Grand St., for Tower Grove Bank, Grand and Juniata Aves. About $65,000. Noted Mar. 6.

★Tex., Cameron—High School—City let contract building C. H. Yoe Memorial High School, on Hefley Heights St., to Page Bros., Austin Natl. Bank Bldg., Austin. About $100,000.

★Tex., Wichita Falls—Business—Lowry & Bacon let contract building 2 story brick and timber, concrete foundation to [illegible] Taylor & Bros., Wichita Falls. About [illegible]0,000.

★Wash., Seattle—Sales—H. H. James, archt., Annex Bank Bldg., let contract, to J. Henrikson, Globe Blk., building 3 story, 92 x 120 ft., mill construction, rein.-con. flooring and concrete foundation, for E. E. Siegley, Summit and Pine Sts., $55,082.

★Wash., Tacoma—School—Bd. Educ. let contract building brick addition to Grant School, to Dawson & Dahlberg, 901 Market St., $63,407.

★Wash., Walla Walla—Bank—First Natl. Bank, 2nd and Main Sts., will build 9 story, 60 x 120 ft., concrete, on 2nd and Adler Sts. About $400,000. Work will be done by day labor under supervision of Beezer Bros., archts., Seaboard Bldg., Seattle.

★Cal. Los Angeles—Store and Loft—J. E. Carr, Investment Bldg., let contract building 5 story, 67 x 145 ft., rein.-con., brick and terra cotta, concrete foundation, at 621-25 South Bway., to Darrell Condley Co., 520 Marsh-Strong Bldg., $100,500.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engr. Office, 601 Army Bldg., rejected bids dredging in Woodbridge Creek and Raritan Bay, N. J. No bids were received for dredging Keyport Harbor. Noted Apr. 3.

W. Va., Camp Humphries—Gas Plant and Distribution System—Constr. Div., War Dept., Wash., D. C., plans to build artificial gas plant and distribution system, here.

Fla., Key West—Oil Burning Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., received no bids furnishing oil burning equipment for boilers at Naval Sta.; Spec. 3847. About $6500. Noted May 22.

Ore., Chemawa—Repairs and Improvements—Congress appropriated $150,000 for repairs and improvements at Indian Training School here, including roads, walk, etc.

BIDS DESIRED

R. I., Coddington Point—Tank and Tower—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., erecting tank and tower, here; Spec. 3937. About $14,000. Noted June 5.

N. Y., West Point—Building Wing—Until June 30, by Quartermaster, West Point, building east wing of gun shed and wings for artillery and cavalry barracks; advertised in this issue.

Pa., Phila.—Assembly Shop—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building extension to assembly shop, here; Spec. 3927. About $700,000; $10 deposit required for plans and spec. Noted June 5.

Pa., Pittsburgh—Locks and Dams—Until July 7, by U. S. Engr. Office, Pittsburgh, building locks and fixed dams in Ohio River, near Emsworth; advertised in this issue.

Md., Baltimore—Foundation—Until June 20, by Supt. Lighthouses, Baltimore, building foundation for Wade Point Light Sta., N. C.

D. C., Wash.—Fuel Oil—Until July 1, by A. L. Flint, purch. agt. for Panama Canal Wash., furnishing and delivering 300,000 bbls. at Cristobal and 700,000 bbls. at Balboa. Noted May 8.

D. C., Wash.—Sewer—Until June 23, by Dist. Comrs., Dist. Bldg., constructing Luzon Ave. Trunk Sewer; advertised in this issue.

Va., Hampton Roads—Tank and Tower—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., erecting tank and tower, here; Spec. 3936. About $14,000. Noted June 5.

Va., Quantico—Storehouses—Until June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 12 metal storehouses, here. Spec. 3916. About $300,000; $10 deposit for plans and spec. Noted June 5.

S. C., Paris Island—Tank and Tower—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., erecting water tank and tower, here; Spec. 3935. About $14,000. Noted June 5.

O., Cincinnati—Gate-Operating Machinery—Until July 8, by U. S. Engr. office, 1st Dist., Cincinnati, furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39, Ohio River; advertised in this issue.

Wis., Milwaukee—Revetment Repairs—Until June 30, by U. S. Engr. Office, Milwaukee, repairing pile substructure and building concrete superstructure on south revetment, St. Joseph Harbor, Mich.

Minn., Montevideo—Post Office—Until July 9, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building post office, here; advertised in this issue.

Tex., Pittsburgh—Post Office—Until July 8, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building, here.

Ariz., Holbrook—Road Work—Until June 23, by Bureau Pub. Rds., U. S. Dept. of Agriculture, 218 Luna Strickler Bldg., Albuquerque, N. M., building 14.8 mi. Sect. 2, Snowflake-Pinetop Project, Navajo Co., involving 100 cu.yd. rock and 50,860 cu.yd. earth excav., 38,300 lin.ft. protection ditches, 636 lin.ft. 18 in. and 263 lin.ft. 24 in. corrugated iron culverts, one 8 ft. and one 10 ft. span timber bridges and 140 cu. yd. dry rubble headwalls. J. S. Bright, Dist. Engr.

Cal., San Diego—Pipe Line—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building gas pipe line system here; Spec. 3939. About $8900; $10 deposit required for plans and spec. Noted June 5.

H. T., Pearl Harbor—Hospital—Until June 25, by Bureau Yards and Docks, Navy Dept., Wash., D. C., building, here; Spec. 3931. About $300,000; $40 deposit required for plans and spec. Noted June 5.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Repairing Pier Walls—Bureau of Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, repairing wall of Pier No. 1, (1) work complete, from

Mansfield & Savage, 135 William St., New York City, (1) $0.30; (2) $3.84; (3) $0.108; (4) $0.30; (5) $3., (90 days).

Dewey Cement Gun Constr. Co., 836 Hamilton St., Allentown, Pa., (1) $0.50; (2) $2.45; (3) $0.40; (4) $0.60; (5) $2.45, (90 days).

New England Cement Gun Co., 61 Bway., New York City, (1) $0.60; (2) $2.70; (3) $0.40; (4) $0.60; (5) $2.70. Noted May 22.

★Mass., Boston—Wharf—Supt. Lighthouses let contract rebuilding wharf at lighthouse depot, Woods Hole, to Mansfield & Savage, 135 William St., New York City, $12,998. Noted Apr. 3.

Mass., Chatham—Roads—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, building roads and sidewalks and resurfacing existing road, at Naval Air Sta., here, (1) work complete, from

Coleman Bros., 1 Marginal St., Chelsea, Mass., (1) $7270, (45 days); (2) $1.75; (3) $1.75.

H. S. Roberts & Co., 1123 Bway., New York City, (1) $9987; (2) $5.; (3) $5. Noted May 15.

★Mass., Springfield—Alterations—U. S. Arsenal, Hill Shops, let contract altering engine room, here, to A. E. Stephens Co., 318 Main St., $25,000.

R. I., Newport—Boathouse—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, building boathouse at Naval Torpedo Sta., Goat Island, (1) work complete, from

Oscawana Bldg. Co., 101 Park Ave., New York City, (1a) $91,970, (150 days); (2a) $8800; (3a) $9000.

Federal Government Work (Continued)

H. S. Roberts & Co. 1123 Bway, New York City, (1) $97,550, (150 days); (2) $7917; (3) $8550.

G. Howard and Sons Co., 153 Main St., Brockton, Mass., (1a) $103,100; (2a) $11,000; (3a) $8,900. Noted May 15.

N. J., Cape May—Storage Tanks—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, installing diesel and gasolene oil storage tanks, here, (1) work complete, from

Mansfield & Savage, 135 William St., New York City, (1) $82,986, (150 days); (2) $14; (3) add $1., deduct $0.15; (4) add $600; (5) $100; alternate (1) $78,990, (150 days).

Simpson & Brown, 90 West St., New York City, (1) $87,278, (150 days); (2) $10.50; (3) add $0.60, deduct $01; (5) $200. Noted May 15.

Pa., Ft. Mifflin—Fence—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, building, here; (1) work complete, from

Wright Wire Co., 69 Hammon St., Worcester, Mass., (1) $14,400; (2) $1.81; (3) $60.

Wayne Iron Wks., 818 Commonwealth Trust Bldg., Phila., Pa., (1) $14,800, (120 days); (2) $1.80; (3) $70.

Cyclone Fence Co., 403 Stock Exchange Bldg., Phila., Pa., (1) $15,951; (2) $1.98; (3) $84; alternate (1) $14,922, (60 days); (2) $1.85. Noted May 15.

Pa., Phila.—Heating and Humidifying Apparatus—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, installing at Aircraft Storage Plant, here, from

Enterprise Steam & Hot Water Heating Co., 600 North Howard St., Baltimore, Md., (1) $62,529, (120 days).

Austin Heating Corp., 121 West 42nd St., New York City, (1) $64,425, (120 days).

H. E. Crook, 28 Light St., Baltimore, Md., (1) $64,500, (120 days). Noted May 15.

★**Md., Baltimore**—Rip Rap—Supt. Lighthouses let contract furnishing and placing rip rap stone at light stations in Chesapeake Bay and Potomac River, to Port Deposit Quarry Co., Port Deposit, $33,180. Noted Apr. 17.

★**D. C., Wash.**—Grading—Dist. Comrs., Dist. Bldg., let contract grading (1) Douglas and Polk Sts.; (2) Whittier St., to G. Hymene, 2209 F St., N. W., (1) $.74 per cu.yd.; (2) $.58 per cu.yd. Noted May 22.

D. C., Wash—Partitions—Bureau Yards & Docks, Navy Dept., Wash., received bids building partitions for machine shop, from A. C. Moses & Co., 916 New York Ave., $42,500 (75 days); C. & H. Engr. Co., Colorado Bldg., $44,950 (100 days); Hyde & Baxter, Wash., $45,990 (100 days). Noted June 5.

Va., Hampton Roads—Electric Freight Elevator—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids installing 12 elevators in 6 and 3 story storehouses, at Naval Operating Base, here, from

Kastner & Hecht Co., 501 South Thropp St., Chicago, Ill., (1) $112,644, (150 days).

Otis Elevator Co., Metropolitan Bank Bldg., Wash., D. C., (1) $115,775.

A. B. See Electric Elevator Co., 220 Bway., New York City, (1) $114,410, (150 days). Noted May 15.

★**Va., Hampton Roads**—Motor Generator Sets and Switchboard—Bureau Yards and Docks, Navy Dept., Wash., D. C., let contract installing at Submarine Base, here, to Genl. Electric Co., River Rd.., Schenectady, N. Y., $44,050 (150 days). Noted June 5.

Va., Hampton Roads—Revolving Platform—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, building at Naval Sta., here, from

Mansfield & Savage, 135 William St., New York City, (1) $11,131, (60 days).

Carroll Electric Co., 714 12th St., Wash., D. C., (1) $11,975 (60 days).

King Lumber Co., Charlottesville, Va., (1) $12,400, (60 days). Noted May 15.

S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 6, building post office, here, (1) limestone; (2) sandstone, from C. E. Goodhand, Chadburn, Neb., (1) $68,000; (1a) $54,750; W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., (1) $68,970; (1a) $56,600; Northern Constr. Co., 421 Milwaukee St., Milwaukee, Wis., (1a) $59,470; (2b) $59,980. Noted May 1.

Tex., Denton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 5, building post office, here, from Cooper-Lund Inc., Newark, N. J., $63,426; J. F. McKnight, Hallettsville, $63,735; A. W. Lane, 19 South La Salle St., Chicago, Ill., $68,153. Noted May 15.

Tex., Galveston—Air Station—Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids June 4, developing Naval Air Sta., here, (1) work complete, from

C. E. Carson Co., 155 North Clark St., Chicago, Ill., (1a) $749,800, (240 days); (1b) add $18, deduct $8; (1c) add $0.75, deduct $0.25; (2a) $10,500; (4a) $100; (4b) $2500; (4c) 6 in. $175, 8 in. $225, 10 in. $275, 12 in. $300;

Horton & Horton, McKinney and Valesco Sts., Houston, Tex., (1a) $756,900, (210 days); (1b) $14; (1c) $0.45; (2a) $12,400; (3a) $13,500; (4a) 800; (4b) $4900; (4c) 6 in. $59, 8 in. $80, 10 in. $99, 12 in. $126.

English Bros., 418 Lincoln Bldg., Champaign, Ill., (1) $782,000 (240 days); (1b) $20; (1c) $1; (2a) $13,840; (3a) $17,840; (4a) $1156; (4b) $3000; (4c) 6 in. $95, 8 in. $107, 10 in. $120, 12 in. $140. Noted May 8.

Miscellaneous

PROPOSED WORK

Granite Paving Blocks—Providence, R. I.—Bd. Contr. & Supply soon lets contract furnishing 150,000 granite paving blocks. W. C. Peekey, clk.

Conduit—Binghamton, N. Y.—G. Q. Moon & Co., 203 Chenango St., having plans prepared for conduit from railroad tracks to their elevator on Depot St. and conveyor system for handling grain. About $22,000.

Coal Trestle—Cape Vincent, N. Y.—Montreal Transportation Co. plans to build concrete and steel coal handling trestle at its wharves here. About $75,000.

Water Tower—Owings Mills, Md.—Maryland State School for Feeble Minded, Rosewood, near here, plans to build water tower, 75 ft. high and 36 ft. diameter, stone and steel frame, concrete and stone foundation, concrete top and outside spiral stairway. About $55,000. F. W. Keating, supt. C. L. Reeder, 300 Park Ave., Baltimore, engr.

Park—Columbia, S. C.—R. C. Keenan, 1228 Elmwood Ave., has donated 50 acres wooded land, 1½ mi. from center of city, on condition that city spend $50,000 for improving and equipping same as park. T. K. Legare, Columbia, engr.

Park and Resort—Tampa, Fla.—City plans to build park and resort on Big Island. Plans include sea wall, driveways and ½ mi. bridge. Cost between $250,000 and $1,000,000.

Elimination of Grade Crossings—Columbus, O.—City election about August to vote on $300,000 bonds to complete work of eliminating grade crossings. H. Maetzel, city engr.

Freight Shed and Loading Platform—Detroit, Mich.—See "Industrial Works."

Tunnel—Highland Park (Detroit P. O.), **Mich.**—See "Buildings."

Pier—Port Huron, Mich.—City having plans prepared by E. W. Whitmore, engr., City Hall, for protection pier at lake end of Black River Canal and gate for controlling flow of water from Lake Huron into canal, wood and concrete piling. About $10,000.

Dock—Wyandotte, Mich.—City receives bids about June 24 capping 36 x 100 wood pile dock with rein.-con. wall below water, earth and cinder fill, cinder roadway. M. L. Brown & Son, 821 Chamber of Commerce, engr.

Platforms—St. Paul, Minn.—State Agricultural Society plans to build 2 concrete platforms, 600 ft. long, and 2 sidings 600 ft. long, 16 ft. wide, from Como Ave. west between Sherwood and Packard Aves. About $20,000. J. B. Irvine, 408 Globe Bldg., engr.

River Improvements—St. Paul, Minn.—City having plans prepared for improvements to water front on both sides of Mississippi River. A. Claussen, city engr.

Artificial Mountains and Concrete Cliffs—St. Louis, Mo.—Bd. Pub. Serv. soon, receives bids building artificial mountains and concrete cliffs in Zoo at Forest Park. About $40,000. N. Cunliff, comr.

Dam—Boulder, Colo.—City plans election soon to vote on $25,000 bonds to repair Goose Lake Dam. W. D. S[illegible]r, city engr.

Docking Facilities—Vancouver, Wash.—Port of Vancouver Comn. plans to build import and export docking facilities. About $25,000 now available. W. Schw[illegible]z, city engr.

Pavilion—Astoria, Ore.—R. J. Smith plans to build dancing pavilion on 14th and Bond Sts. About $100,000. Architect not selected.

Tanks-Portland, Ore.—Pub. Dock Comn. soon receives bids building two 5000 bbl. and two 1000 bbl. tanks, with necessary piping, etc. About $48,000. G. B. Hegardt, c/o Dock Comn., engr.

River Improvement—El Centro, Cal.—Imperial Irrigation Dist. election July 1 to vote on $2,500,000 bonds to improve Colorado River. Work consists of flood protection work, upkeep of canals, irrigation work and to pay $800,000 debts. F. H. McIver, secy. J. N. Perry, Calexico, engr.

Shed—Oakland, Cal.—Parr-McCormick Terminal Co., foot of 7th St., rejected bids building 1 story, 120 x 500 ft., timber transit shed. Noted May 29.

Garbage Incinerator—Niagara Falls, Ont.—City plans to install garbage incinerator. About $18,000. P. C. Thomas, chn. com.

Stadium—Toronto, Ont.—City plans to build stadium on Rosedale grounds. About $53,000. Architect not selected.

BIDS DESIRED

Electrifying—Lackawanna, N. Y.—Until June 16, by Bd. Common Council, furnishing labor and material for electrifying pumping station. J. O'Connor, city clk.; advertised in this issue.

Paving Brick—Garrick, Pa., (Pittsburgh P. O.)—Until June 20, by Street Com., furnishing 40,000 vitr. block paving bricks. T. J. McGovern, boro. engr.

Flood Prevention Project—Lebanon, Pa.—Until June 25, by Mayor and Council, furnishing labor and materials required to construct Contr. No. 4 of flood prevention project. Work includes building 2200 ft. rein.-con. culvert and involves 6000 cu.yd. excav., 2000 cu.yd. concrete and 63,000 lb. reinforcement. P. A. Volcker, city engr.; advertised in this issue.

Road Material—Pittsburgh, Pa.—Allegheny Co. Controller receiving bids furnishing concrete monuments, concrete pipe, brick block and sand. R. V. Warren, Court House, engr.

Sewer Pipe, etc.—Chipley, Fla.—Until June 17, by Standafer, town clk., furnishing 41,865 ft. 8-15 in. sewer pipe, 112 tons 6-8 in. Class "B" c.i. pipe, 2000 lb. reinforcing steel, 101 manhole rings and covers, 220 manhole steps, 350 bbl. Portland cement, 6500 lbs. pig lead, 83,000 hard brick, etc. Carter & Butts, Geneva, Ala., engrs.

Pipe and Special Castings—Akron, O.—Until June 20, by H. S. Morse, dir. pub. serv., furnishing 210 tons 12 in. Class "B," 5 tons 12 in. Class "C," 215 tons 10 in. Class "B," 5 tons 10 in. Class "C," 185 tons 8 in. Class "B," 5 tons 8 in. Class "C," 245 tons 6 in. Class "B," 15 tons 6 in. Class "C," 60 tons 4 in. Class "B," 10 tons 4 in. Class "C" pipe and 30 tons special castings.

Water Tube Boilers, Stokers and Radial Brick Chimney—Lorain, O.—Until July 2, by Bd. Educ., installing water tube boilers and stokers and building radial brick chimney at high school boiler house. Watson Eng. Co., 1101 Hippodrome Bldg., Cleveland, engrs.

Motors and Pumps—Galesburg, Ill.—Until June 16, by W. L. Boutelle, city clk. for one 30 hp. 220 volt, 3 phase, 60 cycle slip ring type motor, 1800 r.p.m., three 40 hp. 220 volt, 3 phase, 60 cycle, slip ring type motor, 1800 r.m.p. and three 600 g.p.m. motor driven direct connected centrifugal pumps working under discharge pressure of 60 lb.; advertised in this issue.

Miscellaneous (Continued)

Water Meters—St. Paul, Minn.—Until June 16, by H. W. Austin, purch. agt., Bur. Water Supply, City Hall, furnishing 300 ⅝ in. disc. type water meters as required for 1919.

School Equipment—Fargo, N. D.—Until July 2, by Bd. Educ., furnishing equipment for New Combination School, covering the following lettings: (1) cabinet work, (2) miscellaneous furniture, (3) metal book stacks, (4) metal locks, (5) gymnasium equipment, (6) kitchen equipment, (7) pupils desks and opera chairs, (8) cork carpet, (9) art drawing tables, (10) window shades, (11) printing equipment, (12) wood working equipment, (13) ash hoist, (14) machine shop equipment, (15) traverse curtains, (16) stage scenery, (17) clocks, bells, telephones and fire alarm system, (18) electric light fixtures. E. G. Guthrie, secy., advertised in this issue.

Levee—Bridge Junction, Ark.—Until June 30, by St. Francis Levee Dist., Bridge Junction, extending levee 4 mi. to mouth of St. Francis River, involving 700,000 cu. yd. dry earth embankment. H. N. Pharr, Bridge Junction, engr.

Power Plant Equipment—Los Angeles, Cal.—Until June 27, by Bd. Pub. Serv., 645 South Olive St., furnishing hydraulic equipment, electric generators, transformers, auxiliary electric equipment and appurtenances for Power Plant No. 2 in San Francisquito Canyon, northeast of Chatsworth P. O. About $500,000. E. F. Scattergood, ch. electrical engr. Noted May 29 under "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Asphaltic Oil — Boston, Mass. — Comr. Pub. Wks. let contract furnishing 200,000 gal. 45% asphaltic oil, to A. Speares Sons, 156 6th St., $0.045 per gal.

★Stack—New Haven, Conn.—Pond Lily Co., 1475 Whalley Ave., let contract building 125 ft. brick stack and concrete foundation, to J. W. Leonard Co., 902 Chapel St. About $10,500.

Capstans and Hoists—Albany, N. Y.—L. Nixon, supt. pub. wks., Capitol, received only bid furnishing, testing and delivering electric capstans and trolley hoists at various barge canal terminals, Contr. 113, from Gen. Electric Co., 527 West 34th St., New York City, $14,000; furnishing, testing and delivering battery charging motor generator sets with switchboard panels for barge canal terminals in New York City, Contr. 117, from Electric Products Co., 1067 East 152nd St., Cleveland, O., $5293; Gen. Electric Co., River Rd., Schenectady, $5577; J. Livingston & Co., Grand Central Terminal, New York City, $7640. Noted May 15.

★Bituminous Material—St. George, S. I., N. Y.—C. D. Van Name, pres. Richmond Boro., let contract furnishing and delivering in tank cars at any railroad station in borough, 65,000 gal. bituminous material for road surfacing, to Barrett Mfg. Co., 17 Battery Pl., New York City, $5200. Noted May 22.

★Laundry Machinery—Wards Island, N. Y.—State Hospital Comn., Capitol, Albany, let contract for laundry machinery and motors at Manhattan State Hospital, here, to J. Livingston & Co., Inc., 70 East 45th St., New York City, $11,950. Noted May 29.

★Fence—Camden, N. J.—Fairview Realty Co., Fairview Ave. and Bway., let contract building 80,000 ft. fence, concrete posts, 2 strand and 1 strand wire pump chain, to J. S. Rogers Co., Drexel Bldg., Phila. About $25,000.

★Bunker—Newark, N.. J.—Pub. Serv. Elec Co., Terminal Bldg., will build 48 x 90 ft. extension to bunker at Point-No-Point power plant, here. About $150,000. Work will be done by day labor.

★Road Machinery—Harrisburg, Pa.—State Highway Comn., Harrisburg, let contracts furnishing (a) 7 rollers, (b) 13 rollers, (c) 10 rollers, (d) 8 traction engines, (e) 2 traction engines, (f) 2 traction engines, (g) 6 crushers, (h) 2 crushers, (i) 4 crushers, (j) 10 sprinklers, (k) 10 sprinklers, (l) 6 gasoline pumps, (m) 6 street sweepers, (n) 12 asphalt heating kettles, (o) 6 air drills, (p) 6 compressors, (q) 6 chip distributors, to Good Roads Mchy. Co., Kennett Square, (a) $29,050, (f) $4905, (i) $10,632, (k) $4620; Buffalo Springfield Roller Co., Springfield, Ill., (b) $58,500; Austin Western Road Machy. Co., 910 South Michigan Ave., Chicago, (c) $42,150; Galion Iron Wks. & Mfg. Co., Telephone Bldg., (d) $16,885, (g) $12,750; Acme Road Machy Co., 120 Liberty St., New York City, (e) $3752, (h) $5085, (j) $3940; Central Constr. Co., Commonwealth Trust Bldg., (l) $1220; C. Evans Co. Inc., (m) $1800, (q) $2700; Penn Fdry. & Mfg. Co., Wyomissing, (n) $227; J. J. Shannon & Co., 1744 Market St., Phila., (o) $660; C. D. Schramm & Son, 709 Arch St., Phila., (p) $2277. Noted May 8.

WATER SYSTEM—NEWARK, N. Y.

Bids were received by City, June 2, for constructing gravity water supply system, Div. No. 1, earthen dam and dykes, from (A) Lupfer & Remick, Ellicott Sq., Buffalo; (B) Brown, Low & Low Bros.; (C) Foundation Co., 233 B'way., New York City; (D) E. W. Foley Co., $70,880; Div. No. 2, mechanical filtration plant, awarded to Norwood Eng. Co., $24,960; Div. No. 3, laying Bell and Spigot cast iron pipe, (A) J. F. Leary Constr. Co., Cutler Bldg., Rochester; (B) Foundation Co., 233 B'way., New York City; (C) Bruno Pizzementi; (D) Tifft Constr. Co., $46,458 and $40,694; Div. No. 4, furnishing Bell and Spigot cast iron pipe, (A) U. S. Cast Iron Pipe & Foundry Co., 71 B'way., New York City; (B) Warren Fdry. & Machine Co., 11 B'way., New York City; (C) Camden Iron Works., Camden, N. J.; (D) John Fox & Co., 253 B'way., New York City. The unit bids of the lowest 3 bidders were as follows:

DIVISION 1

	A	B	C
Clearing and grubbing (lump sum):			
2,300 cu.yd. earth excavation core wall and pipe trenches	$1.40	$1.00	$1.25
28,600 cu.yd. embankment in dam and dikes	1.00	.80	.55
4,200 sq.yd. riprap			
100 sq.yd. cobble gutter	1.35	1.00	1.40
200 cu.yd. class "A" concrete	1.20	1.50	1.75
475 cu.yd. class "B" concrete	12.90	14.00	17.65
2,450 cu.yd. class "C" concrete	14.50	12.00	20.50
300 lin.ft. laying 14-in. cast iron	7.00	11.00	11.50
4 (pipe) valves 14-in. hauling and setting in place	6.00	25.00	13.00
6 14-in. flanged special castings hauling and setting in place	12.00	25.00	13.00
1 setting valve stem and wheel	12.00	10.00	13.00
1,200 lb. miscellaneous steel ladder, reinforcing steel, etc.	.20	.10	.10
900 lin.ft. 10-in. vitrified tile pipe furnished in place	1.20	2.50	.60
50 lin.ft. 4-in. vitrified tile pipe furnished in place	.90	.80	.20
1 wooden rack furnished in place	25.00	15.00	18.50
1 hauling and setting 14-in. fish trap	12.00	20.00	13.50
Extended totals	$66,918	$68,425	$69,067

DIVISION 3

	A	B	C
38,350 lin.ft. hauling and laying 14-in. cast iron pipe	$0.70	$0.88	$0.89
120 lin.ft. hauling and laying 6-in. cast iron pipe	.50	.80	.60
6 hauling and setting 14-in. valves	20.00	13.00	25.00
5 hauling and setting 6-in. valves	15.00	13.00	10.00
5 hauling and setting 1-in. air valves	5.00	2.65	5.00
400 ft. creek crossing	10.00	10.70	25.00
Extended totals	$31,125	$38,280	$44,429
Alternate bids Universal pipe	$31,125	$24,474	$37,130

DIVISION 4

	A	B	C
200 ton 14-in. class "B" cast iron pipe	$48.40	$49.50	$51.10
1550 ton 14-in. class "A" cast iron pipe	49.40	50.50	51.60
2 ton 6-in. class "A" cast iron pipe	49.40	54.00	51.60
1,600 lb. flanged special castings	.07½	.07½	.06½
6,000 lb. bell and spigot (8,000) special castings	.05½	.06	.06¼
1 14-in. flanged fish trap	110.00	110.00	50.00
Extended totals	$86,909	$88,873	$90,832

Alternate bid Universal Pipe, Central Fdry Co., 90 West St., N. Y. City, $115,707.

Prices bid at Newark, N. Y., on June 2, on a $300,000 gravity water supply system were notably low, as shown by the above tabulation. With gravel available at the site of the Newark dam, the corewall concrete is particularly cheap as to cost. The plans were prepared by James P. Wells, Rochester, N. Y.

★Crushed Stone, etc.—Pittsburgh, Pa.—Allegheny Co. let contracts furnishing 50,000 tons crushed stone, 2 mechanical unloaders and 2 street sweepers, to J. M. McGuire, Westinghouse Bldg.; Clydesdale Brick Co., Oliver Bldg.; Booth & Flynn, 1942 Forbes St.; H. J. Orth, Hotel Henry; Hillside Stone Co., Farmers' Bank Bldg., and Pennsylvania Lime and Ballast Co., Noted May 22.

Retaining Wall — Detroit, Mich. — See "Bridges.'

★Paving Blocks—Minneapolis, Minn.—City let contract furnishing 100,000 sq.yd. 3½ in. yellow pine creosoted paving blocks, to Republic Creosoting Co., 1614 Merchants Bank Bldg., Indianapolis, Ind., $2.10½ per sq.yd. Noted May 15

★Lighting System—Mandan, N. D.—City let contract furnishing and installing ornamental street lighting system on 77 blocks, to M. S. Hyland, 1114 8th Ave., Fargo. About $38,000. Noted May 1.

★Dry Kiln—St. Louis, Mo.—St. Louis Mfg. Corp., 5401 Bulwer Ave., let contract building 1 story, 84 x 443 ft. dry kiln, at 5479-5511 Natural Bridge Ave., to H. Haeseler Bldg. and Constr. Co., 621 Wainwright Bldg., $100,977.

★Dam and Canal—Gila Bend, Ariz.—Gila Water Co., c/o F. A. Gillespie, Tulsa, Okla., let contract building rein.-con. multiple arch diversion dam, 1680 ft. long, 20 ft. high with concrete pile foundation and concrete apron, 100 ft. long and 2 ft. thick, two 8 x 15 ft. sluice gates, requiring about 30,000 cu.yd. rein.-con., also restoring main canal, to Sherer & Crowley, 607 Pacific Electric Bldg., Los Angeles. About $695,000. Contractor sublet contract for dam and headgate both to cost $650,000, to W. Ledbetter & Co., engrs., Pacific Electric Bldg., Los Angeles. Owners will furnish all cement for project and also construct distribution system to supply irrigation water to about 72,000 acres of land.

Ferry Dock—Seattle, Wash.—Comrs. King Co. received bids building Vashon Heights ferry dock and landing, creosoted piling, from J. A. McEachern Co., Bell St. Dock, $23,400; C. C. Snyder Co., Pacific Blk., $24,768; P. Manson, 2407 Boylston St., $25,578. Noted May 15.

★Road Oil—Los Angeles, Cal.—City let contract furnishing 81% road oil to oil heating plant, for year ending July 1, to C. C. Harris Oil Co., 701 College St., $12.65 per ton. Noted May 29.

★Dock—Winehaven, Cal.—Richmond Belt Line Co., Richmond, let contract building addition and repairs to dock here, to J. D. Hannah, 142 Sansome St., San Francisco, $120,000.

★Road Oil—Winnipeg, Man.—City let contract furnishing 5 to 10 tank cars of road oil of 40% and 60% asphaltic base, to Imperial Oil Co., Ltd., 56 Church St., Toronto, Ont., $12.85 per gal. Noted Apr. 3.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 24.

Construction, Heating, etc.

Extension Notice

The time for the receipt of bids for the work at Sing Sing has been extended to Tuesday, June 24th, at 2:30 o'clock P.M. Bids to be received at Room 618, Hall of Records Building, Center and Chambers Streets, New York City, by Charles F. Rattigan, Superintendent.

Ossining, N. Y.

CONSTRUCTION WORK—**Mess Hall and** Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8); and Pump House and Reservoir;

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No 7); and Clinic Building (No. 8);

ELECTRIC WORK—**Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);**

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 24, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.; at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: **May 14, 1919.**

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: June 17.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS, ALBANY, N. Y.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, June 17, 1919, for the improvement of the following highways:

CHENANGO—Three highways: 4.78, 5.57, 5.87.

ERIE—One highway: 5.78.

ESSEX—Two highways: 8.85, 1.09.

FULTON—Three highways: 2.80, 4.90, 1.06.

ONONDAGA—Two highways: 7.45, 3.75.

RENSSELAER—Two highways: 1.44, 4.95.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

BROOME—One highway: 4.70.

CATTARAUGUS—One highway: 2.17.

NASSAU—One highway: 1.57.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

FULTON—One contract, reconstruction.

HERKIMER—One contract, resurfacing.

MONROE—Two contracts, resurfacing.

MONTGOMERY—One contract, reconstruction.

ONEIDA—One contract, timber crib-stone fill.

WESTCHESTER — One contract, reconstruction.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.

R. K. FULLER, Secretary.

OFFICIAL PROPOSALS

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 2

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 4 P.M., June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 52.00 miles of limestone macadam and 2 miles of bituminous macadam road, through the towns of Winslow, Fayetteville, and Goshen, Arkansas. Separate bids will be received on the steel bridges and the culvert tile. The item, hauling and placing tile will be included in the general bids, however. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Secretary.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Secretary, J. W. Reynolds, Fayetteville, Arkansas, and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District, in the sum of 5% of the amount of the bid. A construction bond of 25% of the contract will be required of the successful bidders. The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 2.

C. W. APPLEBY, President.
W. J. REYNOLDS, Secretary.
J. V. WALKER, Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: July 9.

Classification and Appraisal of Lands

Shelby, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

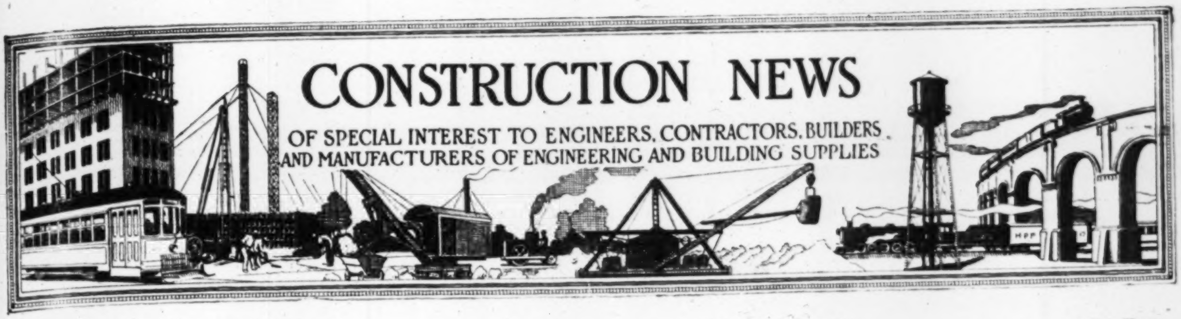
Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana.

H. E. MOODY, Clerk.

U. S. ENGINEER OFFICE, Pittsburgh, Pa.—Sealed proposals will be received at the U. S. Engineer Office, Pittsburgh, Pa., until 12 noon (Eastern time), July 7, 1919, and then opened, for constructing locks and fixed dams in the Ohio River, near Emsworth, Pa. Further information on application.



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS
AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 23	Hoffman Island, N. Y. Adv. June 19.	June 19
June 23	Bethlehem, Pa. Adv. June 12 and 19.	June 19
June 23	Lusk, Wyo. Adv. June 12 and 19.	June 12
June 23	Bemidji, Minn.	June 19
June 24	Toledo, O.	June 5
June 25	New York, N. Y.	June 19
June 25	Fountain Inn, S. C. Adv. June 5 and 12.	June 12
June 26	Morris Plains, N. J.	June 12
June 30	Salem, N. J. Adv. June 19.	June 19
July 1	Salem, Ill. Adv. June 19.	June 19
July 15	Denton, Mont.	June 19
July 16	Decorah, Ia. Adv. June 12 and 19.	June 12

SEWERS

June 20	Roselle Park, N. J. Adv. June 12 and 19.	June 12
June 23	Lansing, Mich. Adv. June 5, 12 and 19.	June 12
June 23	Dundas, Ont.	June 12
June 24	Toledo, O.	June 5
June 24	Duluth, Minn.	June 19
June 24	Barberton, O.	June 19
June 25	Lancaster, O.	June 19
June 25	Lima, O. Adv. June 5 to 19.	June 5
June 25	Jamesburg, N. J.	June 12
June 26	Greenwich, Conn. Adv. June 12 and 19.	June 12
June 27	Sherburn, Minn.	June 12
June 27	Deshler, Neb.	June 12
June 27	Detroit, Mich.	June 19
June 30	Sheboygan, Wis.	June 19
July 1	Wakefield, Neb.	June 12
July 14	North Mankota, Minn. Adv. June 19.	June 19
July 16	Milaca, Minn.	June 19

BRIDGES

June 21	Pensacola, Fla.	June 19
June 23	Osceola, Mo.	May 29
June 23	Lander, Wyo.	June 19
June 23	Sundance, Wyo.	June 19
June 23	Mercer, Pa.	June 19
June 23	Richland, Wash.	June 19
June 23	Duluth, Minn.	June 19
June 24	Menasha, Wis.	June 19
June 25	Michigan	June 19
June 28	Toronto, Ont.	June 19
June 30	Mora, Minn.	June 19
July 2	Pocahontas, Ia. Adv. June 19.	June 19
July 7	McAlester, Okla. Adv. June 12 and 19.	June 19
July 7	Monroe, Ga.	June 19
July 10	Riparius, N. Y. Adv. June 19.	June 19
July 14	Princeton, Minn.	June 19
July 15	Cedar Rapids, Mich. Adv. June 19.	June 19
July 17	Elmira, N. Y. Adv. June 19.	June 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 20	Connecticut	June 19
June 21	Port Huron, Mich.	June 19
June 23	Wichita, Kan.	June 5
June 23	Jackson, Tenn.	June 5
June 23	Toledo, O.	June 5
June 23	Coatesville, Pa. Adv. June 12 and 19.	June 12
June 23	Geneva, N. Y. Adv. June 12 and 19.	June 12
June 23	North Adams, Mass. Adv. June 12.	June 12
June 23	California	June 12
June 23	Martinsburg, W. Va.	June 12
June 23	Duluth, Minn.	June 12
June 23	Clairton, Pa.	June 19
June 23	Bozeman, Mont.	June 19
June 23	Washington	June 19
June 23	Sarnia, Ont.	June 19
June 23	Wyoming	June 19
June 23	Duluth, Minn.	June 19
June 23	Long Island City, N. Y.	June 19
June 24	Massachusetts	June 19
June 24	King City, Mo.	June 19
June 24	Toronto, Ont.	June 19
June 24	Villisca, Ia.	June 19
June 24	Grand Rapids, Minn.	June 19
June 24	Hartford, Conn.	June 19
June 24	Wisconsin	June 19
June 24	Columbia, S. C.	June 19
June 24	McPherson, Kan.	June 12
June 24	Grand Rapids, Minn.	June 12
June 24	McCook, Neb.	June 12
June 24	Marshall, Minn.	June 12
June 24	Washington	June 12
June 24	Greensburg, Pa.	June 12
June 24	Indianapolis, Ind.	June 12
June 24	Pennsylvania Adv. June 5 to 19.	June 12
June 24	New Mexico	May 29
June 24	Massachusetts	June 5
June 24	New York, N. Y.	June 19
June 25	New York, N. Y.	June 19
June 24	Jersey City, N. J.	June 19
June 25	Washington	June 12
June 25	Athens, Ala.	June 12
June 25	Reading, Pa. Adv. June 12.	June 12
June 25	Trenton, N. J.	June 12
June 25	Aberdeen, Wash.	June 12
June 25	Madison, Minn.	June 12
June 25	Duluth, Minn.	June 19
June 25	Port Huron, Mich.	June 19
June 25	Illinois Adv. June 19.	June 19
June 25	St. George, S. I., N. Y.	June 19
June 25	Brooklyn, N. Y.	June 19
June 26	Long Island City, N. Y.	June 19
June 26	Adair, Ia.	June 19
June 26	Rison, Ark. Adv. June 12 and 19.	June 19
June 26	Miami, Fla.	June 19
June 26	Jersey City, N. J.	June 12
June 26	Arkansas Adv. June 12 and 19.	June 12
June 27	Hiawassie, Ga.	June 5
June 27	Indianapolis, Ind.	June 5
June 27	Aberdeen, Wash.	June 5
June 27	Litchfield, Minn.	June 12
June 27	Ohio	June 12
June 27	Elliott, Ia.	June 19
June 27	Ilion, N. Y. Adv. June 19.	June 19
June 27	Albert Lea, Minn.	June 19
June 28	Vancouver, Wash.	June 19
June 28	Solana, Minn.	June 19
June 28	Opelousas, La.	June 19
June 28	North East, Pa. Adv. June 19.	June 19
June 28	Indiana	June 19
June 28	Litchfield, Minn.	June 12
June 28	East Liverpool, O.	June 12
Jnue 28	Fairmont, W. Va.	June 19
June 28	Fairmont, W. Va.	June 12
June 29	Redwood Falls, Minn.	June 19
June 30	Creston, Ia.	June 19
June 30	Kearney, Neb.	June 12
June 30	Sidney, Ia.	June 19
June 30	Bismark, N. D.	June 19
June 30	Virginia	June 19
June 30	Mora, Minn.	June 19
June 30	Lawrence, Kan.	June 19
June 30	Indiana	June 19
July 1	Ridgefield Park, N. J. Adv. June 19.	June 19
July 1	Lewisburg, W. Va. Adv. June 12 and 19.	June 19
July 1	Tabor, Ia.	June 19
July 1	Marshall, Ark.	May 22
July 1	Benkelman, Neb.	June 12
July 1	New York Adv. June 12.	June 12
July 2	Grand Rapids, Minn.	June 12
July 2	Santa Ana, Cal.	June 19
July 2	New Jersey	June 19
July 2	Greensburg, Ga.	June 19
July 2	Bemidji, Minn.	June 19
July 2	Burlington, N. J. Adv. June 12.	June 12
July 2	Hayes Center, Neb.	June 12
July 2	Albuquerque, N. M. Adv. June 19.	June 19
July 3	Beaver, Pa.	June 19
July 3	Pittsburgh, Pa.	June 19
July 3	Stockville, Neb.	June 12
July 5	Omaha, Neb.	June 12
July 5	Brunswick, Ga. Adv. June 5 and 12.	June 12
July 7	Indianapolis, Ind.	June 5
July 7	Leeburg, Fla.	June 19
July 7	Sanford, Fla.	June 19
July 7	Albert Lea, Minn.	June 19
July 7	Woodstown, N. J. Adv. June 19.	June 19
July 7	Riverside, Cal.	June 19
July 8	Pipestone, Minn.	June 19
July 8	Harrisonville, W. Va.	June 19
July 8	Kingston, N. C.	June 19
July 8	Elkins, Va. Adv. June 12 and 19.	June 12
July 9	Delaware	June 19
July 16	Springfield, O.	June 19
July 30	California	June 19

EXCAVATION AND DREDGING

June 21	Thornwell, La.	June 12
June 25	Jackson, Tenn.	June 12
July 1	Edwardsville, Ill.	May 15

INDUSTRIAL WORKS

June 20	Park Falls, Wis.	June 19
June 20	Sheboygan, Wis.	June 19
June 21	New York, N. Y.	June 19
June 24	Columbus, S. C.	June 19
June 26	Potsdam, N. Y.	June 19
June 30	Port Arthur, Ont.	June 12
July 1	Shawenegan Falls, Que.	June 12
July 1	Hastings, Minn.	June 19
July 9	Los Angeles, Cal.	June 19
July 15	Flushing, N. Y.	June 19
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

June 23	Greensburg, N. Y.	June 19
June 23	New York, N. Y.	June 19
June 23	Duluth, Minn.	June 19
June 23	Camden, N. J.	June 12
June 23	Newark, N. J.	June 12
June 23	Brighton, Colo.	June 12
June 23	Englewood, Colo.	June 12
June 24	Springfield, O.	June 19
June 24	Ossining, N. Y. Adv. June 12.	June 12
June 24	Minneapolis, Minn.	June 19
June 25	Two Rivers, Wis.	June 12
June 25	Hartford, Conn.	June 19
June 25	Marshfield, Ore.	June 19
June 26	Detroit, Mich.	June 19
June 26	Moorhead, Minn.	June 19
June 26	San Jose, Cal.	June 12
June 27	Russell, Minn.	June 12
June 27	Lansing, Mich.	June 19
June 29	Pittsburg, O.	June 19
June 30	Ecorse, Mich.	June 19
June 30	St. Hilarie, Minn.	June 19
July 1	Austin, Minn.	May 22
July 1	Akron, O.	June 19
July 1	Wauwatosa, Wis.	June 19
July 1	Bimidji, Minn.	June 12
July 1	Middletown N. Y.	June 12
July 1	Youngstown, Alta.	June 12
July 1	Raymond, Alta.	June 12
July 1	Omaha, Neb.	June 19
July 1	Milledge, Ga.	June 19
July 2	Duluth, Minn.	June 19
July 2	Sterling, Wis. Adv. June 19.	June 19
July 2	Huntington, W. Va. Adv. May 29, June 5 and 12.	May 29
July 2	Fargo, N. D. Adv. June 5 and 12 .	June 12
July 4	West Bethlehem, Pa.	June 12
July 5	Mountain Lake, Minn.	June 19
July 10	Blooming Prairie, Minn.	June 19
July 15	Fraserville, Que.	June 12
Aug. 1	Kenosha, Wis.	May 15
Aug. 1	Virginia, Minn.	June 19

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
June 20	Pump House—Washington D. C.	June 19
June 23	Steel, Forgings, Castings, etc.—Wheeling, W. Va. Adv. May 29 to June 19.	May 29
June 23	Dredging—New York, N. Y. Adv. May 22 to June 19.	May 29
June 23	Road Work — Holbrook, Ariz.	June 12
June 23	Sewage Disposal System — Washington, D. C. Adv. June 5	June 5
June 23	Skeleton Steel Tower—Milwaukee, Wis. Adv. June 19.	June 19
June 24	Dredging—Portland, Me. Adv. May 29 to June 19.	May 29
June 25	Cell House—Spec. 3943—Cape May, N. J.	June 19
June 25	Painting Towers — Spec. 3925—Annapolis, Md.	June 19
June 25	War Heads and Detonator Storehouses—Spec. 3812—Pensacola, Fla.	June 19
June 25	Pipe System—Spec. 3961—Philadelphia, Pa.	June 19
June 25	Flood Lighting System — Spec. 3963 — Cape May, N. J.	June 19
June 25	Railroad Extension—Spec 3947—Hampton Roads, Va	June 19
June 25	Crane Runaway—Spec 3678—New York, N. Y	June 19
June 25	Piles and Lumber—New Orleans, La Adv. May 29 to June 19.	May 29
June 25	Cranes—Spec 3933—New York, N. Y	June 5
June 25	Elevators — Spec. 3934 — New York, N. Y.	June 5
June 25	Pattern Shop—Spec. 3478—Philadelphia, Pa	June 5
June 25	Administration Building, Roads and Walks—Spec. 3922—San Diego, Cal.	June 5
June 25	Hospital — Spec. 3931 — Pearl Harbor, H. T.	June 12
June 25	Assembly Shop—Spec. 3927—Philadelphia, Pa.	June 12
June 25	Pipe Line—Spec. 3939—San Diego, Cal.	June 12
June 25	Rebuilding Shipbuilding Ways—Spec. 3590 — New York, N. Y.	June 5
June 25	Distributing System—Spec 3921—San Diego, Cal.	June 5
June 25	Bulkhead — New Orleans, La. Adv. May 29 to June 19	May 29
June 25	Sprinkler System — Spec. 3954—Philadelphia, Pa.	June 19
June 25	Fire Escape—Spec. 3932—Philadelphia, Pa.	June 19
June 25	Radio Towers—Spec. 3965—San Francisco, Cal	June 19
June 25	Extending and Altering Fire Alarm System—Spec. 3951—Coddington Point, R. I.	June 19
June 25	Extending and Altering Fire Alarm System—Spec. 3951—Coasters Harbor, R. I.	June 19
June 25	Extending and Altering Fire Alarm System—Spec. 3951—Newport, R. I.	June 19
June 25	Cranes — Spec. 3903 — Mare Island, Cal.	June 19
June 25	Buildings—Hangars—Roads and Distributing System—Spec. 3905 — Anacosta, D. C.	June 19
June 25	Cranes—Spec. 3946—Boston, Mass.	June 19
June 25	Buildings — Spec. 3952 — Yorktown, Va.	June 19
June 25	Power Plant—Spec. 3924—Indianhead, Md.	June 19
June 25	Storage Building — Spec. 3948 — South Brooklyn, N. Y.	June 19
June 25	Road Work—Spec. 3950—Great Lakes, Ill.	June 19
June 25	Fire Alarm System—Spec. 3960—Hampton Roads, Va.	June 19
June 25	Sewer—Spec. 3959—Key West, Fla.	June 19
June 25	Clearing, Repairing and Resurfacing Roads—Spec. 3971—Ft. Mifflin, Pa.	June 19
June 25	Water Supply System — Spec. 3964—Paris Island, S. C.	June 19
June 25	Wet Pipe System—Spec. 3957—Philadelphia, Pa.	June 19
June 25	Addition to Shipfitters Shop — Spec. 3920 — Boston, Mass.	June 19
June 25	Power House, Electric Generator Equipment and Fire Protection System — Spec. 3956—Key West, Fla.	June 19
June 25	Piping and Electric System—Spec. 3969—Indianhead, Md.	June 19
June 25	Power House—Spec. 3889—Montauk, N. Y.	June 19
June 25	Oil Burning Equipment—Spec. 3847—Key West, Fla.	June 19
June 25	Tank and Tower — Spec. 3915—Ft. Mifflin, Pa.	June 19
June 26	Buildings — Washington, D. C. Adv. June 19.	June 19
June 27	Air Compressors—Florence, Ala. Adv. June 12 and 19.	May 29
June 27	Dredging—Newport, R. I. Adv. May 29 to June 19.	June 5
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La. Adv. May 29, June 5, 12 and 19.	May 29
June 30	Building Wing — West Point, N. Y. Adv. June 5 to 19.	June 12
June 30	Revetment Repairs — Milwaukee, Wis.	June 12
July 1	Post Office—Towah, Wis.	June 5
July 1	Fuel Oil — Washington, D. C.	June 12
July 2	Dredging—New York, N. Y. Adv. May 29, June 5, 12 and 19.	June 5
July 2	Grading, Excavation and Filling—Spec. 3256—Puget Sound, Wash.	June 19
July 7	Steel—Philadelphia, Pa. Adv. June 5, 12 and 19.	June 5
July 7	Locks and Dam—Pittsburgh, Pa. Adv. June 12 and 19.	June 12
July 7	Gas Mains — Stapleton, N. Y. Adv. June 19.	June 19
July 8	Gate—Operating Machinery—Cincinnati, O. Adv. June 12 and 19.	June 12
July 8	Post Office — Pittsburg, Tex.	June 12
July 9	Post Office — Montevideo, Minn. Adv. June 5, 12 and 19.	June 12
July 10	Post Office—Vinton, Ia.	June 19
July 18	Silt Diversion Works—Los Angeles, Cal. Adv. June 19.	June 19

MISCELLANEOUS

June 20	Paving Brick—Carrick, Pa.	June 12
June 23	Dam—Morris Plains, N. J.	June 19
June 24	Parks, etc.—Boston, Mass.	June 19
June 24	Wharf—de Bellchase, Que.	June 19
June 24	Conduct Water Drainage Levees—Philadelphia, Pa.	June 19
June 24	Cast Iron Pipe—Brooklyn, N. Y.	June 19
June 25	Break Water—Port Arthur, Ont.	June 19
June 25	Brass Service Pipe Fittings etc.—Baltimore, Md.	June 19
June 25	Cast Iron Pipes—Medford, Mass.	June 19
June 27	Power Plant Equipment — Los Angeles, Cal.	June 12
June 27	Auto Sprinkler and Oiler—Woonsocket, R. I. Adv. June 19.	June 19
June 30	Lever, Bridge — Junction, Kan.	June 12
June 30	Flood Prevention Project—Lebanon, Pa. Adv. June 12.	June 12
July 1	Boilers, Piping, etc.—Central Islip, N. Y. Adv. June 19.	June 19
July 2	Water Tube Boilers and Stokers and Radial Brick Chimney—Lorain, O.	June 12
July 15	Freight and Trailers, etc.—New York, N. Y. Adv. June 12 and 19	June 19

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Malone—City election soon to vote on $30,000 bonds to lay 2 mi. 12 in. pipe line from Shepherd Bridge to reservoir, to increase daily flow to 1,500,000 gal. A. Handley, clk.

N. Y., Old Forge—Village having tentative plans prepared and estimates made for extending water system, involving 2500 ft 8 in. water pipe for mains and [illegible] ft 4 in. pipe for pumping into reservoir. H. C Weller, village engr.

N. C., Statesville—City plans to build 2 filters and 1 clear water basin, lined with concrete, 750,000 gal. capacity. About $150,000. R. L. Greenlee, Statesville, engr.

Ala., Gadsden—City Council had plans prepared installing water mains in Oak Park addition to West Gadsden. About $14,000. E. Smith, city engr.

Mich., Dearborn—Village soon lets contract building watermains involving 41,850 ft. 6-10 in. c.i. pipe and necessary valves, fittings and hydrants.

Mich., Ecorse—Village having preliminary plans prepared by R. A. Murdok, engr., Ecorse, building 500,000 gal. reservoir, tank, pump and extension to water mains.

Mich., Ferndale (Royal Oak P. O.)—Village soon lets contract furnishing labor and material laying 8500 ft. 8 in. and 40,000 ft. 6 in. c.i. water mains with necessary specials and fittings. About $99,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr. Noted Oct. 3.

Mich., Pontiac—City voted $126,000 bonds to extend waterworks system. H. H. Barnett, city engr.

Wis., Eau Claire—City plans to improve waterworks system. Plans include new well, centrifugal pump, water wheel generator at pumping station and concrete flume. About $100,000. A. R. Garnock, 1000 Guardian Life Bldg., St. Paul, Minn., engr.

Minn., Annandale—See "Sewers."

Minn., Harmon—City soon lets contract building 10 x 40 ft. compressed air water tank and pump house. Druar & Smith, 513 Globe Bldg., St. Paul, engrs.

Minn., Hinckley—City plans to build addition to water and sewerage systems. About $55,000. L. P. Wolff, Guardian Life Bldg., St. Paul, consult. engr.

Minn., Hinckley—See "Industrial Works."

Minn., Hoffman—Bd. Educ. having plans prepared by F. Tustison, engr., 355 Auditorium Bldg., Minneapolis, for water supply system for high and grade school. About $10,000.

Minn., Wells—See "Industrial Works."

Mo., Cameron—City having plans prepared for improving filtration plant. Bonds for $35,000 voted for project. E. E. Harper, 2408 East 30th St., Kansas City, consult. engr.

Tex., Houston—City voted $25,000 bonds to extend waterworks system.

Okla., Garber—City soon lets contract building water tank, capacity 30,000-50,000 gals., and 100 ft. tower, also 2 wells, casing 36 in. and depth 21 ft. Well screens to be furnished by city. Black & Veatch, 507 Interstate Bldg., Kansas City, Mo., engrs.

Okla., Mounds—City soon receives bids extending waterworks and improving sewerage system.

Okla., Tulsa—City plans to build waterworks system; water to be taken from Spavinaw Creek. Total estimated cost, $4,853,020. Plans include solid masonry, rein.-con. or wooden dams, 30, 35 and 50 ft. high, and hydro-electric power house cost $248,445, 42 in. c.i., rein.-con. or wooden stave pipe conduits, $2,900,405; three 20,000,000 gal. capacity reservoirs, $225,000; one 80,000,000 gal. capacity reservoir, $314,000; power plant, $225,000; pumping plant, $150,000; transmission lines, $360,000; engineering, $230,170; land and clearing, $150,000; right of way, $50,000.

Idaho, Buhl—City soon lets contract replacing and relaying sprinkling and fire hydrants, also 2021 ft. 6 in., 3858 ft. 4 in., 3725 ft. 8 in., and 2720 ft. 12 in. water mains. G. B. Brazeau, city clk.

Utah, Salt Lake City—City receives bids about July 1, building feeder water mains and rein.-con. water supply conduit from mouth Parley's Canyon to Northeast Bench. About $300,000. S. Q. Cannon, city engr.

Ariz., Mesa—City election July 8 to vote on $35,000 bonds to build extensions to waterworks system.

Ariz., Miami—City defeated $300,000 bonds to build waterworks system.

Ore., Salem—Clackamas Power & Irrigation Co., Clackamas, filed applications with H. Nunn, state highway engr., for development of 11,705 hp. plant, 1000 acre ft. of water to be taken from Clackamas River. Plans include 400 ft. dam, 103 ft. water fall, 6.6 mi. flume and ditch. About $1,250,000.

Waterworks (Continued)

Ore., **Salem**—Portland Ry., Light & Power Co., Electric Bldg., Portland, filed water application with H. Nunn, state highway engr., Salem, for storage of 40,400 acre ft. of water to be taken from Oak Grove Creek, also building reservoir. About $300,000.

Cal., **Altadena**—Rubio Canyon Land & Water Assn. plans to install pumping plant on Sacramento St. and lay pipe line to reservoir. About $10,000.

Cal., **Lancaster**—Bd. Educ., Los Angeles plans to form waterworks Dist. No. 4, embracing town of Lancaster, to include land, wells, pumping plant, mains, steel tower and tank. About $30,250. A. M. McPherrin, clk.

Ont., **Owen Sound**—J. Legate, chn. utilities comn., soon lets contract building rein.-con slow sand filter at No. 1 Spring, Derby Twp. About $35,000. R. McDowell, engr. utilities comn.

Ont., **Watford**—City election June 30, to vote on by-law for $55,000 to build pump house, standpipe, pumping equipment and 4 and 6 in. watermains. W. S. Fuller, engr.

Alta., **Calgary**—City Council appropriated $273,316 bonds to build extension to gravity water system.

BIDS DESIRED

N. Y., **Hoffman Island**—Until June 23, by L. E. Coffer, health officer, Port of New York, Rosebank, S. I., building new well for water supply, Quarantine Sta. L. F. Pilcher, Capitol, Albany, state archt.; advertised in this issue.

N. Y., **New York**—Until June 25, by N. J. Hayes, comr. water supply, gas and electricity, Municipal Bldg., furnishing, delivering and laying water mains and appurtenances in Riverside Dr., West 134th and West 142nd Sts., Manhattan Boro. and in East 147th, East 170th, Amethyst, Emmett and Rosewood Sts., Matthews, Newton, Olinville and Rhinelander Aves. Crotona Parkway, Elsmere Pl. and Unionport Rd., Bronx Boro.

N. J., **Salem**—Until June 30, by city, building mechanical filtration plant including coagulating basin, chemical house, filter house and all appliances and appurtenances complete. W. E. Dunn, recdr.; advertised in this issue.

Pa., **Bethlehem**—Until June 23, by Bureau of Water, furnishing and installing 2,000,000 gal. capacity electrically driven centrifugal pump. R. L. Fox, city engr.; advertised in this issue.

Ill., **Salem**—Until July 1, by city, for completing mechanical gravity filter plant, consisting of 2 units with 300,000 gal. capacity each per day. Caldwell Eng. Co., Jacksonville, engr.; advertised in this issue.

Minn., **Bemidji**—Until June 23, by G. Stein, city clk., extending and improving waterworks system, involving 6710 lin.ft. 6-10 in. pipe and hydrants, pulling up and relaying 1200 ft. 4-6 in. pipe. About $20,000.

Minn., **Milaca**—See "Sewers."

Mont., **Denton**—Until July 15, by City Council, building 200,000 gal. reservoir, supply mains, distribution system and fire hydrants, involving 18,000 ft. 10-12 in. wood and 8000 ft. 6-8 in. c.i. pipe. Bonds for $50,000 voted for project. W. B. Saunders, Helena, engr. Noted May 22.

Ont., **Timmins**—Until June 24, by Sutcliffe & Neelands, engrs., New Liskeard, Ont., extending and improving waterworks system, involving 20,000 ft. 6-18 in. vitr. pipe, 8500 ft. 6-10 in. c.i. pipe, 91 manhole heads and covers. About $50,000. Noted Mar. 6.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., **Boston**—City let contract building portion of new high pressure system on Federal St., to C. & R. Constr. Co., Boston, $31,351. Work involves 4650 ft. 8-16 in. c.i. pipe, 5400 cu.yd. earth and 50 cu.yd. rock excav., 300 lb. steel, 300 cu.yd. concrete, etc.

★Pa., **Mont Alto**—State Dept. Health, Harrisburg, let contract building extension to water supply system at Pennsylvania State Sanitorium for Tuberculosis, near here, to W. M. Anderson, 600-612 Schuylkill Ave., Phila. About $31,759. Work involves 17,000 ft. 8-in. c.i. and 2500 ft. w.i. pipe. Noted May 15 under "Buildings—Harrisburg."

★Mich., **Grosse Pointe**—Village let contract furnishing material and laying 2120 ft. 6 in. c.i. pipe, etc., in University Pl., Kercheval Ave. and Cadieux Rd., to Cronin & Son, Grosse Pointe. About $5000.

★Mont., **Baker**—City let general contract improving waterworks and sewerage systems, to Gidney & Murphy, Minneapolis, Minn., $22,787; c. i. pipe, to Natl. Cast Iron Pipe Co., Chicago, $31,061, hydrants, to R. D. Wood, 400 Chestnut St., Phila., $3392. Noted Feb. 20.

★Mont., **Hardin**—City let contract laying 13,910 lin.ft. 4-6 in. Matheson pipe, 22 hydrants, necessary valves and fittings, to Yergey & Brandriff, Bozeman. About $24,000. Noted May 8.

★Tex., **Stamford**—City let contract building 2 reservoirs, furnishing material and laying 14 mi. pipe line from Brazos River to here, to Amer. Cast Iron Pipe Co., Birmingham, Ala., using Standard Bell and Spigot c.i. pipe on entire line. About $200,000. Incorrectly noted in our issue of June 5.

★Ont., **Sarnia**—City let contract building 900 ft. 24 in. steel intake pipe and converting present basins into sedimentation basins, to Dunbar & Sullivan, Windemere Ave., Detroit. About $35,000.

Sewers

PROPOSED WORK

Mass., **Wellesley** (Boston P. O.)—Metropolitan Water & Sewer Bd., Boston, had plans prepared for extending concrete trunk sewer 2 mi. About $225,000. F. D. Smith, 1 Ashburton Pl., Boston, engr.

Conn., **East Lyme**—White Beach Sanitorium, c/o S. J. Maher, 212 Orange St., New Haven, plans to build sewage disposal plant at sanitorium for tubercular children, here. Ford, Buck & Sheldon, 60 Prospect St., Hartford, engrs.

N. Y., **Binghamton**—Common Council adopted ordinances to build storm sewers in State and Mill Sts. and sanitary sewers in Broad Ave., Louisa, Clifford and Abbot Sts. About $80,000. U. E. Weller, city engr.

N. Y., **Salamanca**—See "Streets and Roads."

N. J., **Camden**—Dept. Highways soon lets contract laying 5300 ft. sewers and drains in Mechanic St. from 8th to 9th Sts. and Cooper St. from 12th St. to Delaware Ave. L. E. Farnham, city engr.

N. C., **Statesville**—City plans to build sewer in Main St., involving 15,000 ft. 8 in. rein.-con. pipe, 14,000 ft. 10 in. vitr. pipe and 15,000 cu.yd. excav. R. K. Greenlee, Statesville, engr.

S. C., **Andrews**—City plans to lay 8 mi. vitr. sewer mains in various streets, also build sewage disposal plant. About $50,000. Tomlinson Eng. Co., Loan & Exch. Bank Bldg., Columbia, engrs.

O., **St. Paris**—City soon receives bids building sewage disposal plant. Work involves rein.-con. septic tank and sand filter bed. About $10,000. P. Lethig, Springfield, engr.

O., **Springfield**—City soon lets contract laying 2945 ft. 30 in. vitr. sewer pipe in alley west of Fountain Ave. to McCreight St. About $15,555. O. E. Carr, city engr.

Mich., **Dearborn**—City having plans prepared by C. W. Hubbell, engr., 2348 Penobscot Bldg., Detroit, for 40,000 ft. 12, 15 and 18 in. vitr. storm lateral sewers.

Mich., **Muskegon**—B. H. Tellman, city recdr., soon lets contract furnishing labor and material building complete sewerage system in Dist. 28, southeastern section of city, involving 15,785 lin.ft. 10-24 in. and 6 mi. 8 in. vitr. pipe, together with specials, manholes, lampholes, etc.

Mich., **Pontiac**—City had plans prepared for sewer in Bagley St., involving 12-20 in. vitr. pipe and sewer lift in sump well. About $12,190. H. H. Barnett, city engr.

Wis., **Oostburg**—City having plans prepared by J. Donohue, engr., York Bldg., Sheboygan, excavating and laying storm and sanitary sewers in Main and 1st Sts. to city limits, involving 3000 ft. 10-12 in. vitr. pipe. About $25,000.

Minn., **Annandale**—G. G. Shierts, city clk., receives bids in July building sewerage and water systems. Druar & Smith, 513 Globe Bldg., St. Paul, engrs. Noted May 29.

Minn., **Hinckley**—See "Waterworks."

Kan., **Pratt**—City soon lets contract building sanitary sewers in Dist. No. 4, involving 23,400 lin.ft. 8 in. pipe. G. W. Ellis, Pratt, consult. engr.

Mont., **Lewistown**—City plans to build sewers in Storm Sewer Dists. Nos. 5 and 6. About $8000 and $62,000 respectively. R. P. Longshore, Lewistown, engr.

Mont., **Scobey**—City election June 30 to vote on $45,000 bonds to build 20,000 lin.ft. sewerage system. W. B. Saunders, Helena, engr.

Okla., **Mounds**—See "Waterworks."

Ariz., **Mesa**—City election July 8 to vote on $34,000 bonds to build sewerage system.

Ariz., **Miami**—City voted $125,000 bonds to build sanitary sewerage system. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs.

Ore., **Portland**—City council plans to build sewers in 59th Ave., S. E., and Knight St. from 44th St., S. E., to proposed sewer in East 39th St., East 38th St. from Everard St. to Harold Ave., 58th Ave., S. E., and Ramona Ave. from 44th St., S. E., to proposed sewer in East 39th St., 57th Ave., S. E. and Everard St. from 44th St., S. E., to proposed sewer in East 38th St., East 39th St. from Knight St. to proposed sewer in Everard St., including vitr. or cement pipe catch basins, manholes, sewer service pipes and branches. About $14,200. O. Laurgaard, city engr.

Cal., **Bishop**—A. D. Schively, town clk., rejected bids received June 2, building sanitary sewerage system and sewage treatment tank. About $35,000. New bids will soon be received. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs. Noted May 15.

Cal., **Los Angeles**—City voted $135,000 bonds to build sewerage system, including pumps, sewers, etc., in Wilmington Dist. V. T. Knowlton, City Engr.'s Office; engr. Noted Oct. 24.

Cal., **Oakland**—See "Streets and Roads."

Cal., **Redwood City**—City voted $25,000 for 340 lin.ft. 18 in. vitr. pipe outfall sewer; $60,000 for 7 rein.-con. bridges; $5000 for macadam pavement on Webster St.; $5000 for retaining wall on Maple Ave. and $25,000 for fire engine house. C. E. Dimmick, city engr. Noted May 1.

Ont., **St. Catharines**—City having plans prepared by W. P. Near, engr., City Hall, building sanitary sewers and sewage disposal plant. About $50,000.

Alta., **Calgary**—City Council appropriated $350,000 bonds for sewage disposal plant, $28,439 bonds for sewer in Centre St., and $16,000 bonds for sewer in Killarny St.

BIDS DESIRED

O., **Barberton**—Until June 24, by G. Seiberling, dir. pub. serv., building West End Sanitary Lateral Sewers, involving 66,000 lin.ft. 6-15 in. sewer, excav., manholes, house connections, repaving and other appurtenances, and 2 ejector stations complete with ejector equipment. R. W. Pratt, Hippodrome Bldg., Cleveland, consult. engr. Noted May 29.

O., **Lancaster**—Until June 25, by Dir. Pub. Serv., building South Broad St. sewer, estimated cost $11,069; also paving Park St., cost $7903. W. W. Graf, city engr.

Mich., **Detroit**—Until June 27, by Dept. Pub. Wks., furnishing all labor and material (except manhole rings and covers) building and finishing complete together with backfilling, 9982 ft. Joy Rd. Pub. Sewer in Daily and Highfield Aves., Joy Rd. and in private property in lines extended of Lawton Ave. and proposed Atkinson Ave. from Livernois to Linwood Aves., brick or monolithic concrete,; 3663 ft. in Sect. 5 Lynch Rd. Sewer in McLean, Halleck and Joseph Campau Aves. from Moran St. to Davison Rd., brick and monolithic concrete; 3820 ft. Sect. 6 Lynch Rd. Sewer in Davison Rd. from Joseph Campau Ave. to Grand Trunk R.R., brick, monolithic concrete or rein.-con. (This section to be tunnelled in Davison Ave. from Grand Trunk R.R.); 4075 ft. Sect. 3 Linwood Ave. in Linwood Ave. from Davison to Fenkell Aves., brick or monolithic concrete. C. W. Hubbell, city engr.

Wis., **Sheboygan**—Until June 30, by C. U. Boley, engr., City Hall, excavating and laying 4950 lin.ft. 10 in. pipe sewer in South 15th St. from Kentucky to Indiana Aves., cost $15,000; 7000 lin.ft. 10 in. vitr. pipe sewer in South 17th St. to Georgia Ave., $20,000.

Ia., **Sidney**—See "Streets and Roads."

Minn., **Albert Lea**—See "Streets and Roads."

Minn., **Duluth**—See "Streets and Roads."

Sewers (Continued)

Minn., Duluth—Until June 24, by J. A. Farrell, city comr., laying storm sewers in Woodland and Wallace Aves. About $40,288. Work involves 9580 ft. 12-40 in. concrete pipe. L. Ayers, city engr.

Minn., Milaca—Until July 16, by E. A. Magnuson, city clk., building sewer and water mains, involving 2972 lin.ft. 15-18 in. sewer pipe and 1572 lin.ft. 4-6 in. c. i. water mains. J. B. Gray, Milaca, engr.

Minn., North Mankato—Until July 14, by village, building sewerage system, involving 24,100 ft. 8-15 in. vitr. clay pipe, 24,200 ft. trench, 5-16 ft. deep, 3 pumping stations or lifts, 75 manholes and two 14 in. valves; advertised in this issue.

N. M., Albuquerque—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., Stratford (Bridgeport P. O.)—Bd. Sewer Comrs. received lowest 3 bids June 9, furnishing material and labor to complete 4 mi. sewers, 8-24 in. diameter from N. Mangine, 17 Cliff Ave., Yonkers, N. Y., $90,144; Ambrosio & Delbalso, 1737 Main St., Bridgeport, $97,903; Forgione & Romano Co., 811 Fidelity Bldg., Portland, Me., $99,604. Noted May 15.

★Pa., Mont Alto—Dept. Health, Harrisburg, let contract furnishing labor and material and building and equipping extensions to sewage disposal plant at State Sanitorium for Tuberculosis, near here, to Simpson & Brown, 90 West St., New York City, $23,031. Work involves 175 cu.yd. Class "A" and 50 cu.yd. Class "B" rein-con., 3½ tons steel, 3000 sq.ft. expanding metal, 350 cu.yd. broken stone, 375 ft. 6-12 in. terra cotta pipe and specials, 355 ft. 6-12 in., c.i. pipe and specials, 400 ft. 4-8 in. w. i. pipe and specials, 16 gate valves, etc. Noted May 15 under "Buildings—Harrisburg."

★Pa., Pittsburgh—City let contract to M. O'Herron Co., South 1st and McKean Sts., laying sewers in Harbor. Hetzell Asylum, Bader and Admiral Sts., and Fall Way, $10,671; in Hillside St., $2412. Noted June 12.

★Pa., Wilkinsburg—Boro. let contract building concrete culvert to enclose Nine Mile Run, to Federal Constr. Co., Pittsburgh. About $15,150. Noted June 12.

O., Cleveland—City received bids laying 30 ft. 12 in. vitr. pipe and 660 ft. 7 ft. 10 in. and 25 ft. 6 ft. 9 in. brick sewers in Russel Rd. from Wade Park Ave. north, from Hanson Co., 345 The Arcade, $20,249; Gallagher Burke Co., 1339 Irene Ave., $22,177; Gawne Constr. Co., 10510 Euclid Ave., $22,235.

O., Cleveland—City received bids building (a) 815 ft. Nos. 2 and 3 C brick sewers in St. Clair Ave. from Woodworth Ave. to East 138th St., involving 865 ft. 12-24 in. vitr. pipe, etc., and (b) 1600 ft. Nos. 3-6 C brick sewers in St. Clair Ave. from East 154th St. to London Rd., involving 1055 ft. 18-30 in. vitr. pipe, from River Constr. Co., 12109 Mayfield Rd., (a) $18,658; W. P. Gibbons, 340 Leader-News Bldg., (a) $18,718, (b) $38,584; Brookside Constr. Co., 3905 West 20th St., (a) $19,177; Randell & Cooper, Lorain, (b) $27,216; Gallagher-Burke Co., 1339 Irene Ave., (b) $37,171. Noted June 5.

★Mich., Pontiac—City let contract building Pontiac sewage treatment works involving 2052 lin.ft. outfall sewer, grit chamber, 2 story settling tanks, etc., to Pittsburgh Constr. Co., Diamond Bank Bldg., Pittsburgh, Pa., $295,796. Noted May 22.

★Minn., Biwabik—City let contract building storm sewers, to Lawrence & McCann, Eveleth, $14,507.

★Mont., Cut Bank—City let contract building sewerage system, to Two Miracles Co., 437 Ford Bldg., Great Falls, $42,847. Noted May 29.

★Okla., Tulsa—City let contract building sanitary sewers in Kendall Addition, Dist. 153, to Tibbetts & Pleasant, 204 Daniels Bldg., $131,216.

★Okla., West Tulsa—City let contract building submain outlet in new sewerage system, to Comstock & Hansom, 431 Iowa Bldg., $31,188.

★Wash., Seattle—Bd. Pub. Wks. let contract building 2 mi. trunk sewer and outfall in 42nd Ave. S., et al., or Empire Way, et al., involving 12,983 ft. rein.-con. pipe, to Colson Constr. Co., Seattle, $362,262. Noted May 8.

Ore., Portland—City received bids building sewers in (a) East 74th, 75th, 76th and Halsey Sts., (b) Lambert Ave., (c) Malden Ave., (d) East 78th St., (1) vitr., (2) cement, from E. Sandberg, (a1) $14,561, (b1) $2987, (c1) $2982; Jacobsen-Jensen Co., 407 Stanton St., (a2) $16,599, (b2) $3626, (c2) $2987, (d2) $1586; Azar & Co., (b1) $2836, (c1) $2495, (d1) $1323. Noted May 1.

★Cal., Riverside—City let contract building sewers in Drainage Impvt. Dist. No. 3, to Wattson & Wattson, 4907 Melrose Ave., Los Angeles, $34,872. Work involves 17,514 ft. 8-24 in. tile block, 18 concrete manholes, 9 sewer inlets and 1 outlet.

Bridges

N. Y., Lyons—E. S. Walsh, supt. pub. wks., Capitol, Albany, soon receives bids building plate girder bridge over Lock 28-A. About $50,000.

N. Y., Syracuse—See "Industrial Works."

N. J., Newark—Essex and Hudson Counties have retained F. A. Reemer, engr. Essex Co., T. J. Wasser, engr. Hudson Co., and H. W. Hodge, of Boller, Hodge & Baird, 149 Bway., New York City, to have charge of the construction of a bridge between here and Bayonne, to be 2 mi. long. Cost will exceed $1,000,000. H. A. Meade, ch. engr. of Pub. Utilities Comn., will also be on the com. Noted Mar. 6.

Va., South Hill—South Hill—Henderson Bridge Corp. soon lets contract building 720 ft., steel and cement bridge, here. About $50,000. W. Hunter, South Hill, secy.

W. Va., Barker—See "Railways."

W. Va., Fairmount—Baltimore & Ohio, Baltimore, Md., soon receives bids building steel bridge over Monongahela River, here, approach on solid concrete and paved with wooden blocks. About $30,000. M. A. Long, Baltimore, Md., engr. Noted Jan. 10.

N. C., Troy—State Highway Comn., Raleigh, soon receives bids building steel bridge here. About $80,000. W. S. Chief, Raleigh, engr.

S. C., Lancaster—Comrs. Lancaster Co. plan to build one 50 ft. and one 90 ft. rein.-con. bridges over Waxhaw Creek and Cane Creek slough, 16 ft. wide. About $15,000. J. R. Pennell, Commercial Bank Bldg., Columbia, engr.

S. C., McCormick—Supervs. McCormick Co. plan to build 41 ft. rein.-con. girder bridge with center pier, over Hard Labor Creek, 16 ft. wide. About $22,545. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

Wis., Prairie du Sac—Village plans election June 24, to vote on proposition to build 1474 ft. steel bridge over Wisconsin River between Prairie du Sac and West Point. About $144,000; cost to be borne by village, Sauk and Columbia Counties and West Point Twp.

Minn., Minneapolis—Hennepin Co. having plans prepared for bridge over Lake Nakomis. About $200,000. E. E. Terrell, co. engr.

Mont., Great Falls—Comrs. Cascade Co. receive bids in about 30 days, building 970 ft. rein.-con. bridge over Missouri River, on 1st Ave., 42 ft. wide, cost $235,000; 1200 ft. rein.-con. bridge, over Missouri River on 10th St., $230,000. P. D. Pratt, c/o State Highway Dept., Helena, engr. Noted Oct. 10.

Utah, Salt Lake City—City receives bids about July 1, building 3 bridges over Jordan River and Surplus Canal. About $35,000. S. Q. Cannon, city engr. Noted Jan. 30.

Cal., Redwood City—See "Sewers."

Ont., Owen Sound—R. McDowell, engr. Grey Co., soon lets contract for following bridges and culverts: 19 pipe culverts on Garafraxa Rd. from Mt. Forest to Durham, 3 rein.-con. arches; 12 pipe culverts on Garafraxa Rd. from Chatsworth to Owen Sound, 1 rein.-con. arch; 13 pipe and 5 box culverts on St. Vincent Rd. from Owen Sound to Woodfords and 4 rein.-con. arches; 14 pipe and 10 box culverts on Toronto and Sydenham Rds. from Dundalk to Flesherton, 4 rein.-con. arches; box culverts at Holstein and Ceylon; rein.-con. arch with 40 ft. span at Elmwood; rein.-con. arch over Pretty River, Collingwood Twp.; flat top arch at Feversham; steel bridge with 50 ft. span and concrete abutments at Holland. About $45,000. J. Johnston, co. rd. supt.

Ont., Parry Sound—Town voted in favor of by-law for $15,000 to build bridge with 2 steel spans, center pier and 2 concrete abutments. C. H. and P. H. Mitchell, Bank of Hamilton Bldg., Toronto, engrs.

Man., Springfield—H. C. Christopherson, secy. municipality Oakbank, soon lets contract building concrete bridge with 20 ft. span over Edies Creek, to consist of 2 rein.-con. headwalls, 4 headwalls for steel culverts and 3 rein.-con. culverts with 30 ft. spans.

BIDS DESIRED

Connecticut—See "Streets and Roads."

N. Y., Elmira—Until July 7, by Bd. Pub. Wks., building 830 ft. concrete bridge, 30 ft. high, consisting of 8 arches, over Chemung River on Main St. L. C. Andrew, clk.; advertised in this issue.

N. Y., Riparius—Until July 10, by B. Glassbrook, clk. Warren Co. bd. supervs., Lake George, building New Riverside Bridge over Hudson River here, between Chester and Johnsburgh Twps., one 300 ft. clear through truss steel span, 19 ft. clear roadway of wood block pavement, with live road capacity of 1235 lbs. per foot of bridge or 15 ton road roller, plus 25% impact, new concrete abutments and wing walls are to be built of 3rd class concrete, bridge to be built on upstream or north side of existing suspension bridge. About $49,750; advertised in this issue.

Pa., Leetsdale—Comrs. Allegheny Co. (Pittsburgh), cancelled bids building Bridge No. 1 over Sewickly Creek, between Allegheny and Beaver Counties. new bids now being received. Noted May 8.

Pa., Mercer—Until June 23, by Comrs. Mercer Co., building substructure and superstructure of Jewell Bridge, concrete arch; Beerman Bridge, Otter Creek Twp., concrete slab; Campbell Bridge, Wolf Creek Twp., concrete slab; also placing concrete flooring and encasing superstructure of Craig Bridge, Fairview Twp., and Frampton Bridge, Pymatuning Twp. M. M. Simons, clk.

Ga., Augusta—Until June 23, by Comrs. Richmond Co., building 2 rein.-con. pile and slab bridges over Spirit and Little Spirit Creeks, rein.-con. abutments, piles and deck slabs. Work involves 750 cu.yd. wet and 380 cu.yd. borrow excav., 223 cu.yd. Class A concrete for two spans, 1242 lin. ft. 14 x 14 in. piles, 20, 220 lb. steel, 1400 ft. hog wire, etc.

Ga., Monroe—Until July 7 (change of date), by Comrs. Walton and Oconee Counties, building bridge with 4 steel spans, at Carithers Mills, 11 mi. from here. Garrett & Slack, Bell Bldg., Montgomery, Ala., engrs. Noted May 8.

Michigan—Until June 25, by F. F. Roger, comr. state highways, Lansing, furnishing material and labor for building Trunk Line Bridge No. 252 over Paw Paw River, steel truss, 75 ft. long, 24 ft. wide, rein.-con. abutments, 12 ft. high, involving 439 cu.yd. plain concrete, Watervliet Twp.; No. 170, over White River, Reed Twp.; No. 239 Hesperia Twp., Oceana Co.; No. 103 over Baltimore River, Standard Twp., Ontanogan Co.

Mich., Port Huron—See "Streets & Roads."

Wis., Menasha—Until June 24, by City Council, building 430 ft. rein.-con. arch bridge over Fox River at Washington St., 59 ft. wide. Parsons & Obert, 627 M. & M. Bank Bldg., Milwaukee, consult. engrs.; advertised in this issue. Noted May 29.

Ia., Cedar Rapids—Until July 15, by City Council, building 6 span rein.-con. arch highway bridge over Cedar River at its intersection with 1st Ave., 700 ft. long, 90 ft. wide, including all appurtenances, etc. L. J. Storey, city clk.; advertised in this issue. Noted Dec. 19.

Ia., Pocahontas—Until July 2, by Bd. Supervs. Pocahontas Co., building 25 x 34 ft. concrete deck girder, 17 ft. concrete abutments, 20 x 24 ft. skew concrete slab, 12 ft. abutments, 20 x 24 ft. skew concrete slab, 13 ft. abutments, 16 x 20 ft. concrete slab, 14 ft. abutments, 25 x 32 ft. I beam with concrete floor and handrails, 14 ft. concrete abutments; also removing and placing on pile abutments one 16 x 55 ft., two 16 x 45 ft., one 16 x 40 ft., and one 16 x 35 ft. light steel pony trusses; advertised in this issue.

Minn., Bemidji—See "Streets and Roads."

Minn., Duluth—Until June 23, J. A. Farrell, city comr., building 250 ft. triple span concrete bridge, at Chester Park, 40, 54

Bridges (continued)

and 90 ft. spans, 38 ft. roadway, with two 25 ft. sidewalks. About $37,653. Work involves 2000 cu.yd. rein.-con., 1000 cu.yd. concrete and 37 tons steel. E. K. Coe, city Eng.'s Office, engr.

Minn., Mora—Until June 30, by A. V. Sander, aud. Kanabec Co., building Bridge No. 3005 on State Rd. No. 1, 5, 30 ft. rein.-con. through girder, 18 ft. roadway on rein.-con. abutments, 14 ft. from top of curb to bottom of footings. About $10,000. R. G. Streetley, Mora, engr.

Minn., Princeton—Until July 14, by W. Peltier, aud. Millelacs Co., building 60 ft. concrete and steel bridge over west branch Rumsey River, 18 ft. roadway, concrete abutments. About $10,000. McCabe & McCabe, 602 Metropolitan Life Bldg., Minneapolis, engrs.

Wyo., Lander—Until June 23, by State Highway Comn., Cheyenne, building two 125 ft. steel span bridges over Wind River, on Lander-Dubois Rd., Fremont Co.

Wyo., Moorcroft—Until June 23, by State Highway Comn., Cheyenne, building one 60 ft. steel span bridge over Belle Fourche River, north of here, Crook Co.

Okla., McAlester—Until July 7, by W. J. Kindrick, clk. Pittsburg Co., building 345 ft. steel bridge over Gaines Creek, consisting of three 118 ft. spans, 18 ft. roadway; advertised in this issue.

Wash., Richland—Until June 23, by State Highway Bd., Olympia, building 190 ft. steel span bridge over Yakima River, near here, Benton Co. J. Allen, state highway engr.

Ont., Toronto—Until June 28 by A. F. Stewart, ch. engr., Canadian National Rys., 27 Wellington St., E., building concrete culverts and bridge abutments between mileage 56, Peffelaw, and 94, Sparrow Lake on Muskoka Subdivision, about $21,000; also concrete culverts, abutments and piers between mileage 82, Porlock and 108, Coniston, Sudbury Subdivision, about $32,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Stratford (Bridgeport P. O.)—State Highway Comn., Hartford, let contract building 864 ft. concrete bridge over Housatonic River between Stratford and Milford Twps., Fairfield and New Haven Counties, main structure to be 100 ft. clear span, 60 ft. wide, 5 arches, 2 girder approach spans about 52 ft. long, to be paved, to F. Stuart & Sons, Newtonville, Mass., $929,435 without steel draw.

★Virginia—State Highway Comn., Richmond, let contract building bridge over Seneca Creek near Michell's Mill and one over Lime Rock Branch, near Lawyer's Sta., Campbell Co., also one over Indian Creek near Copper Valley, Floyd Co., all rein.-con., to R. A. Figgatt, Roanoke, $12,811.

★W. Va., Danville—Comrs. Boone Co. (Madison) let contract building steel highway bridge over Little Coal River, here, two 126 ft. spans, 16 ft. wide, to Roanoke Iron & Bridge Co., Roanoke, Va., $13,430. Noted May 22.

★W. Va., Madison—Comrs. Boone Co. let contract building steel highway bridge over Coal River, here, two 105 ft. spans, 16 ft. wide, to Roanoke Iron & Bridge Co., Roanoke, Va., $10,840. Noted May 22.

★Mich., Detroit—City let contract building 40 ft. clear span rein.-con. arch bridge, 34 ft. roadway with abutments 10 ft. 6 in. high with 5 ft. footings supported on 60 wooden piles, and 170 ft. rein.-con. retaining wall, 7 ft. high with 6½ ft. footing and gas pipe hand rail, to Corrick Bros., 507 Owen Bldg., $19,150. Noted June 12.

★Mich., Flint—City let contract building 70 ft. rein.-con. bridge over Theat Creek on 2nd St., 26 ft. wide, to Price Bros. Co., East Jordan, $23,500. Noted May 15.

★Que., Marieville—Municipal Council let contract building iron bridge, to La Compagnie de Constr. Co., St. Ours. About $21,000.

Que., Yamachiche—Municipal Council received bids building concrete and steel bridge over Yamachiche River, from L. A. Beauchemin, Montreal, $12,248; Vaillancourt & Gauthier, Yamachiche, $12,765; Bourassa & Bellerive, Three Rivers, $13,954. Noted May 29.

★Ont., Arthur—Bowman & Connor, engrs., 31 Queen St., Toronto, let contracts building bridges for Wellington and Peel Counties as follows: Cormack Bridge, to C. J. Callahan, Arthur, $2224; Parkers and Hagarty bridges, to P. McGivney, Arthur, $792 and $620, respectively; O'Donnell and McNab bridge, to J. Langdon, Arthur, $1000; Bethany and Roy Bridges, to E. J. Marlin, Elmira, $1590; Shantz Bridge, to J. Wilkinston, Morriston, $825; Caldwell Bridge, to C. Mattaine, Caldwell, $1180; McConnell Bridge, to E. Simmons, McConnell, $625; Peel Twp. Bridge, including abutments, to Standard Steel Constr. Co., Port Robinson, $6437, all concrete. Noted May 15.

Structural Steel

PROPOSED WORK

Va., South Hill—See "Bridges."

Mich., Port Huron—See "Miscellaneous."

Wis., Prairie du Sac—See "Bridges."

Ont., Toronto—See "Buildings."

Reinforced Concrete

PROPOSED WORK

Ill., Chicago—See "Buildings."

Ont., Owen Sound—See "Waterworks."

Ont., Owen Sound—See "Bridges."

BIDS DESIRED

Wis., Menasha—See "Bridges."

Minn., Duluth—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Cambridge—See "Industrial Works."

★Mass., Newton (Boston P. O.)—See "Industrial Works."

★N. Y., New York—See "Industrial Works."

★Pa., Pittsburgh—See "Industrial Works."

Md., Westport (Baltimore P. O.)—See "Miscellaneous."

Virginia—See "Bridges."

★Ont., Arthur—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Boston—City plans to pave Columbus Ave. from Center to Washington Sts., cost $59,600; Center St. from Elliott to Allandale St., $56,700; Tremont St. from Dover to Northampton Sts., $152,000; Newton St. from Albany St. to Shawmut Ave., $15,500, all asphalt; Cambridge St. from Brighton Ave. to Henshaw St., bituminous macadam, $81,200; Kilby St. from Water to Mill Sts., $20,000, Washington St. from Beach across Eliot St., $5300; East 4th St. from K St. across P St., $71,000; Beacon St. from Massachusetts Ave. to Ralph St., $44,000, all wood block; Beverly St. from Washington to Causeway Sts., $24,100; Cambridge St. from North Russell to Charles Sts., $36,100; Federal St. from Milk St. to Dewey Sq., $20,000; Congress St. from State to Milk Sts., $45,700, Friend St. from Traverse to Causeway Sts., $31,400, Main St. from City Sq. to Alford St., $171,500, East 1st St. from Dorchester to Summer Sts., $22,300, Washington St. from Archdale Rd. to Ashland St., $81,000, all granite; Newbury St. from Arlington to Fairfield Sts., $47,600, Exeter St., $65,000, both bitulithic. T. F. Sullivan, comr. pub. wks.

Mass., Chicopee—City plans to pave Montgomery and East Main Sts. About $42,000. D. P. Coakley, mayor.

Mass., Medford (Boston P. O.)—City had plans prepared for paving and building curbs on Main and Grove Sts. and Medford Sq. Estimate cost paving, $35,000, curbing $32,000. F. Charnock, city engr.

Mass., West Springfield—Town appropriated $20,000 for concrete highway on Riverdale St. F. H. Sibley, clk.

Conn., Danbury—City having plans prepared for paving various streets with sheet asphalt on concrete foundation and napped and reclipped granite blocks on concrete foundation. Election will be held to vote on $100,000 bonds. C. D. Pollock, 13 Park Row, New York City, engr.

N. Y., Mechanicsville—City election July 8, to vote on $36,000 bonds to pave various streets. C. Hicks, city engr.

N. Y., Salamanca—Common Council rejected bids paving Front and Kent Aves., High, Washington and Linden Sts.; also building sewers in Washington, Center, East and Clinton Sts. Work will be readvertised. C. C. Cheney, city engr.

N. Y., Syracuse—City soon receives bids paving South Ave. from West Onondaga to Cortland Sts., cost $31,000; South West St. from Seymour to Shonnard Sts., $2700; Cortland Ave. from South Salina to Midland Aves., $24,000; Graves St. from Douglas to Highland Sts., $2700; H. C. Allen, city engr.

N. Y., Syracuse—Common Council authorized $140,000 bond issue to resurface Walton St. from South Clinton to South Franklin Sts., College Pl. from University Pl. to Euclid Ave., Bellevue Ave. from Midland to South Aves., Wolf St. from North Salina to North 7th Sts., South West St. from Gifford St. to Erie Canal, Euclid Ave. from Lancaster to Westcott Sts., Irving Ave. from East Genesee to Harrison Sts., East Adams St. from South Salina to South State Sts., Leavenworth Ave. from West Genesee to Park Sts., East Fayette St. from Warren to Montgomery Sts., and Oak St. from James St. to Highland Park. H. C. Allen, city engr.

N. Y., Watertown—City having plans prepared for 24 ft. concrete pavement on Hewitt St. and Walden Ave., cost $13,000; South Massey St. from Ives St. to city limits and portion of Pearl St., cost between $15,000 and $18,000. E. W. Sayles, city engr.

N. J., Trenton—City plans to widen West State St. from Sterling alley and South Willow St. to Front St. About $87,000. J. R. Fell, 134 North Clinton Ave., engr.

Pa., Bellevue (Pittsburgh P. O.)—Boro plans to grade, pave and curb various streets, vitr. brick. About $100,000. P. H. Martin, 4th Ave., Pittsburgh, engr.

Pa., Kittanning—Armstrong Co. voted $1,000,000 bonds to improve roads. Noted May 8.

Pa., Pittsburgh—City Council plans to grade, pave and curb Veronica St. from Sundeman St. to Straubs Plan of Lots, $11,400; Armitage Way from North Fairmount St. to distance 216 ft. easterly, $4000; St. Martins St. from Birmingham to Monastery Sts., $32,000; Melwood St. from Ridgeway to Denver Sts., $90,000; also reimproving and reestablishing grades on Sylvia Ave. from Taft to Gearing Aves., $26,700. T. Reed, City County Bldg., engr.

Pa., Scranton—City Council passed ordinance to grade, pave and curb Penn Ave. from New York St. to Sunset St., in 13th And 2nd Wards, sheet asphalt and stone blocks on concrete base. About $35,935. W. A. Schunk, city engr.

W. Va., Charleston—Kanawha Co., Malden Dist., plans election soon to vote on $100,000 bonds to improve roads. F. G. Burdette, Charleston, engr.

W. Va., Clay—Comrs. Clay Co. having plans prepared grading and draining 4 mi. Middle Creek Rd., 18 ft. wide, cost $10,000; 13 mi. Elk River Rd., 12 ft. wide, $10,000. E. Carr, Clay, engr.

W. Va., Hinton—Summers Co., Jumping Branch Dist. voted $30,000 bonds and soon receives bids for improving roads. H. L. Batten, Hinton, engr.

W. Va., Keyser—Mineral Co., Elk Dist., voted $137,000 bonds and soon receives bids building roads. E. Smith, Piedmont, engr. Noted Apr. 10.

W. Va., Madison—Comrs. Boone Co. having plans prepared grading 5 mi. Danville-Peytona Rd., 20 ft. wide, involving 60,000 cu.yd. excav. About $66,000. S. E. Bradley, Madison, engr.

W. Va., Marlinton—Comrs. Pocahontas Co. rejected bids building 2.25 mi. Marlinsbottom Turnpike, 16 ft. wide, involving 22,110 sq.yd. waterbound macadam using local limestone. About $26,000. F. Baxter, Marlinton, engr. Noted May 22.

W. Va., Moundsville—Marshall Co., Cameron Dist., plans election soon to vote on $220,000 bonds to improve roads. S. H. Bonar, Moundsville, engr.

W. Va., Wayne—Comrs. Wayne Co. soon receive bids grading, draining and paving 4 mi. Twelve Pole Valley Rd., grading 26 ft. wide, surfacing, 16 ft. wide, brick or concrete. About $100,000. H. A. Levering, Ceredo, engr.

W. Va., Webster Springs—Comrs. Webster Co. soon receive bids grading 4 mi. Cowan Webster Springs Rd. About $24,000. P. B. Cogar, Webster Springs, engr.

North Carolina—State Highway Comn., Raleigh, soon receives bids for paving 6.9 mi. Raleigh-Cary Rd., Wake Co. About $50,000. C. M. Miller, Raleigh, engr.

North Carolina—State Highway Comn., Raleigh, soon receives bids for sandclaying 73 mi. highway from here to Albermarle. About $200,000. W. S. Fallis, Raleigh, engr.

Streets and Roads (Continued)

N. C., Raleigh—City plans to pave 5 mi. Bloodworth, Fayetteville, South and Saunders Sts. Cost between $40,000 and $50,000.

S. C., Anderson—Comrs. Anderson Co. plan to grade, drain and surface 240 mi. roads, concrete. Bonds for $1,400,000 voted for project. W. A. Sanders, Anderson, engr. Noted Mar. 20.

S. C., Columbia—Columbia Ry., Gas & Electric Co., Arcade Bldg., plans to pave 14,000 sq.yd. between double street car tracks, probably concrete, 20 ft. wide. V. E. Wright, genl. mgr. Tomlinson Eng. Co., Loan & Exch. Bldg., engrs.

S. C., Edgefield—Comrs. Edgefield Co. soon receive bids grading, re-locating, draining and surfacing 8.42 mi. Dixie Highway from Edgefield to Turkey Creek, 30 ft. wide. About $35,062. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Greenville—Comrs. Greenville Co. plan to resurface 3.55 mi. Dixie Highway, 30 ft. wide. About $26,763. J. W. Norwood, chn. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Greenwood—Comrs. Greenwood Co. plan to relocate, grade, drain and surface 20 mi. Dixie Highway, from here to Edgefield Co., 30 ft. wide. About $40,844. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Laurens—Comrs. Laurens Co. soon let contract relocating, grading, draining and surfacing with top soil, 17 mi. road from here to Princeton, 28 ft. wide. About $58,000. N. C. Hughes, Jr., County Court House, engr.

O., Dayton—City soon lets contract paving 2000 ft. 3rd St. from Perry to St. Clair Sts., 60 ft. wide, involving 13,400 sq.yd. wood block, 4200 lin.ft. granite curbing, 2000 sq.ft. 6 in. cement sidewalks, estimated cost $112,500; 1300 ft. Louie St. from Norwood to Washington Sts. and 350 ft. Norwood Ave. from 5th to Louie Sts., 40 ft. wide, involving 7400 sq.yd. brick block and 3300 lin.ft. granite curbing, $450,000 and $11,000 respectively. F. O. Eichelberger, city engr. Noted May 1.

Ind., Boonville—City plans to build 6 mi. concrete sidewalks.

Ind., Indianapolis—Bd. Pub. Wks. soon lets contract resurfacing 3584 ft. South West St. from South to Morris Sts., 40 ft. wide, involving 15,929 sq.yd. vitr. brick, wood block, asphalt or bituminous concrete, 350 lin.ft. reset curbing, and 940 lin.ft. straight curbing, cost $36,015; and 3722 ft. Michigan St. from East St. to Indiana Ave., 40 ft. wide, 16,542 sq.yd. vitr. brick, wood block, asphalt or bituminous concrete, 7129 lin.ft. concrete curbing and guttering, $61,592. F. C. Linginfelter, city engr.

Ind., Indianapolis—Bd. Pub. Wks. soon receives bids resurfacing 870 mi. Ohio St. from Senate Ave. to West St., 40 ft. wide, involving 3866 sq.yd. vitr. brick, wood block, asphalt or bituminous concrete. About $14,450. F. C. Linginfelter, city engr.

Ind., Indianapolis—City soon receives bids grading roadway of Cornell St. from 23rd to 27th Sts., resurfacing Merrill St. from Miridian to Union Sts. with wood block, asphalt, bituminous concrete or brick. F. C. Linginfelter, city engr.

Ind., Indianapolis—Comrs. Marion Co. soon let contract grading, draining and paving 11,016 ft. English Ave. from Grace St. to Brookville Rd., 60 ft. wide, involving 73,440 sq.yd. concrete. About $87,638. J. J. Griffith, co. engr.

Mich., Detroit—City soon lets contract paving Moran St. with sheet asphalt on 6 in. concrete foundation, Berea, Medina or other curbstone. Arizona, Brandon, Garfield, Minnesota, Maxwell, Philadephia, Richter, Solvay and Walbridge Aves. with asphaltic concrete on 6 in. concrete foundation, Berea, Medina or other curbstone, 24 and 26 ft. wide, involving 23,527 cu.yd. excav., 27,194 lin.ft. curbstone, 44,519 sq.yd. paving, etc.; also following alleys with 1 course concrete, Alleys Nos. 1015, 1016, 107, 108, 109, 1020, 1021, 1022, 1023, and 1024, involving 4231 cu.yd. excav., 11,693 sq.yd. paving, etc. C. W. Hubbell, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on 6 in. concrete base, Amherst or Medina curb, Kirby Ave. from Van Dyke to Baldwin Aves., cost $9412; Gladstone Ave., from Wilson to 12th St., $11,966; Canfield Ave. from Crane to Rhons Aves., $6255, all 26 ft. wide; with 1 course concrete, east and west alley between Woodward 2nd. Calvert and Collingwood Aves., $3750, north and south alley between Hastings and Crystal Sts., Trombly and Milwaukee Aves., $4200, both 20 ft. wide; T. alley between Greenwood, 4th, Hancock and Warren Aves., $4710, 16-20 ft. wide; alley east of and parallel to Dexter Blvd. from Hogarth to Northwestern Aves., $1250; alley between Belvidere, McClellan, Warren and Moffatt Aves., $5655; H. alley between Lycaste, Hart, Jefferson and Kercheval Aves., $6020; alleys between Meadowbrook, Montclair, Marsh and Jefferson Aves, $8480; T alley between Lenox, Drexel, Freud and Jefferson Aves., $7025, all 18 ft. wide. C. W. Hubbell, city engr.

Mich., Highland Park (Detroit P. O.)—D. C. Gowing, city clk., soon receives bids paving Waverly Ave. from Hamilton Blvd. to Lincoln Ave., cost, $10,055; Moss Ave. from Hamilton Blvd. to Puritan Ave., $7724; both sheet asphalt on 6 in. concrete base.

Mich., Pontiac—Comrs. Oakland Co. plan to grade, drain and surface 10½ mi. Saginaw Turnpike from Potters Corners to Genessee Co. line, probably concrete. Federal Government and State will appropriate toward cost.

Mich., St. Clair—City voted $20,000 bonds to grade and pave Belle River Rd. from Mary St. to southerly city limits, concrete, 18 ft. wide.

Ill., Chicago—Cook Co. receives bids about July 1, improving 2274 ft. Sect. 59-15d, Crawford Ave. beginning at Chicago city limits, 18 ft. wide, involving 4807 sq.yd. concrete, 1100 cu.yd. earth excav., 68 cu.yd. concrete in culverts, bridges and walls. About $15,303. B. D. Barker, co. supt. highways.

Ill., Edwardsville—City appropriated $65,000 bonds to improve Victory Paving Dist. Total cost, $90,000.

Ill., Mason City—Bd. Local Impvts. soon lets contract for following improvements in Paving Dist. "A:" 1878 sq.yd. 54 ft. pavement, 7 and 9 in. thick, reinforced, $2.75 per sq.yd., total cost, $5164; 2496 sq.yd. 44 ft., 7 and 9 in. thick, reinforced, $2.75, $6864; 6702 sq.yd. 36 ft. 6 and 8 in. thick, reinforced, $2.55, $17,090; 60 cu.yd. concrete, $9 per cu.yd., $540; 23,510 lb. extra reinforcing for reinforcing Federal and state aid strip along center of street, $1176; 2305 cu.yd. excav., $0.50 per cu.yd., $1152; 8 catch basins, $400; 16 c.i. storm water inlets, $480; 550 lin.ft. salt-glazed inlet pipe, $1.10 per lin.ft., $605; 68 C-L Aprons, 30 x 60 in., $1020; court costs, costs of making assessment collection and engineering and attorney's fees and all other lawful expenses, $2069.

Wis., Ashland—City plans to pave 15 blocks of 3rd St., from 2nd Ave. E. to 14th Ave.

Wis., Janesville—Rock Co. soon lets contract building 6 mi. concrete highway between here and Town Line Bridge, north of Beloit.

Wis., Jefferson—Comrs. Jefferson Co. plan election to vote on $2,000,000 bonds to build permanent roads.

Wis., Kiel—City plans to grade and pave Main St., 20 ft. wide, involving 21,000 sq.yd. 2 course concrete and 9000 lin.ft. concrete curb and gutter. F. Muth, City Hall, engr.

Wis., Sheboygan—City plans to grade and pave 1.9 mi. Martin Ave. to Calumet Dr., 20 ft. wide, involving 3900 sq.yd. 2 course concrete and 2000 lin.ft. concrete curb and gutter, cost $20,000; 3 mi. North 11th, North 14th and portion North 6th Sts., 18 ft. wide, involving 5900 sq.yd. 2 course concrete and concrete curb and gutter, $40,000. C. U. Boley, city engr.

Wis., Whitefish Bay—Village voted $20,000 bonds to build roads.

Ia., Albia—Comrs. Monroe Co. rejected bids received June 4, grading 8.3 mi. Federal Aid Project No. 20, 24 ft. wide, involving 1250 lin.ft. drain tile and 116,444 cu.yd. excav., etc. About $49,900. Work will be readvertised. C. U. Bair, Albia, engr.

Minn., Buffalo—Comrs. Wright Co. rejected bids grading and graveling State Rd. No. 2, Job No. 5. Work will be readvertised. F. W. Van Krevelin, Buffalo, engr. Noted May 8.

Minn., Little Falls—Comrs. Morrison Co. soon lets contract building 11.9 mi. Federal Aid Project No. 24, State Rd. No. 3, involving 37,900 cu.yd. excav. and 13,000 cu. yd. surfacing, etc. About $60,000. A. J. Fenn, Little Falls, engr.

Minn., Mantorville—Comrs. Dodge Co. received no bids June 3, building 12 mi. Federal Aid Project No. 66, State Aid Job No. 1802, 24 ft. wide. About $6[illegible]00. Work will be readvertised. R. D. Jo[illegible]ens, Hayfield, engr. Noted May 29 under "Hayfield."

Minn., Pipestone—Comrs. Pipestone Co. voted $250,000 bonds to build roads. T. A. Bailey, aud.

Neb., Madison—City soon lets contract paving 3400 ft., Madison, 2nd, 3rd and 8th Sts., Dist. No. 2, 24-50 ft. wide, involving 12,182 vertical fiber on 5 in. concrete base, 6204 lin.ft. concrete curb and 3714 cu.yd. earth excav. About $53,200. W. D. J. Steckelberg, city engr. Noted May 29.

N. D., Grand Forks—City plans to pave 3000 ft. University Ave. from Westcott St. to Columbia Rd., 20 ft. wide, concrete, cost, $34,000; 2700 ft. Skidmore Ave. from 3rd to 5th Sts., north along Great Northern Ry. tracks to city limits, 28 ft. wide, concrete, cost, $25,000; Federal Government will appropriate toward cost. C. S. Giles, city engr.

N. D., New Rockford—Comrs. Eddy Co. rejected bids received June 4, building 5.5 mi. Federal Aid Project No. 6, gravel. Noted May 15.

Mont., Hardin—City plans to improve 25 blocks concrete sidewalks. About $10,000. E. C. Flickenger, Hardin, engr.

Mont., Lewistown—City plans to pave streets in Paving Dists. No. 28 and 29, cost $16,000 and $64,000 respectively. R. P. Longshore, Lewistown, engr.

Mo., Bolivar—Johnson Twp., Polk Co. voted $25,000 bonds to build highway from Cedar Hickory to St. Clair. T. S. Leavitt, co. engr.

Ark., Forrest City—St. Francis Co. Rd. Impvt. Dist. No. 4 receives bids about August building gravel roads, 14 ft. wide. About $160,000. L. C. Torrence, Forrest City, engr.

Ark., Osceola—Comrs. Mississippi Co. rejected bids received June 2 grading 20 mi. earth roads, 22 ft. wide, in Etowah Rd. Impvt. Dist. No. 2, 75 mi. in. Luxora & Little River Rds. Impvt. Dist. No. 2, 22 ft. wide; 26 mi. road in Burdette Rd. Impvt. Dist. No. 3, 22 ft. wide; received no bids grading 12½ mi. road, 22 ft. wide, in Osceola & Little River Rd. Impvt. Dist. No. 1. Pride & Fairley, Osceola, engrs. Noted May 22.

Tex., Cameron—Milam Co. having plans prepared building road in Branchville Dist., between Temple-Taylor Rd. and Waco-Houston Rd. About $25,000.

Tex., Dime Box—City voted $50,000 bonds to build roads.

Tex., Granbury—Hood Co. plans to surface with crushed rock (waterbound macadam), clear, grub, grade and build concrete drainage structures on 6.6 mi. Highway No. 10 from Erath Co. line to Tolar, 24 ft. wide. About $67,805. A. E. Firmin, Granbury, engr.

Tex., Mt. Pleasant—Titus Co. plans to clear, grub, grade, gravel, surface, etc. 12.46 mi. El Paso-Texarkana Rd. from point 2 mi. east of Mt. Pleasant to Morris Co. line, 9 ft. wide. Plans include 2 bridges. About $56,040. Wilder & O'Neal, Chronicle Bldg., Houston, engrs. Noted Apr. 3.

Tex., Robert Lee—Coke Co. election June 28, to vote $60,000 bonds to build and improve roads.

Tex., Seguin—Comrs. Guadalupe Co. plan to grade and improve 15.7 mi. Highway No. 3, from Seguin to Gonzales Co. line, 16 ft. wide, involving 53,025 lin.ft. machine grading, rein.-con. concrete drainage structures and timber bridge. About $69,790. Hess & Skinner, South Western Life Bldg., Dallas, engrs.

Tex., Sherman—Grayson Co. plans to improve, drain, grade and surface with 6 in. gravel, 11.467 mi. state highway from Sherman through Denison to Colbert Bridge at Red River, 15 ft. wide. About $42,522. J. C. Field, 410½ West Main St., Denison, engr.

Tex., Sonora—Sutton Co. voted $300,000 bonds to build roads.

Wash., Ridgefield—Mayor authorized city council to pass ordinance for hardsurfacing Pioneer Ave., Main and Lake Sts. N. C. Hall, mayor.

Wash., Tacoma—Pierce Co. voted and sold $2,500,000 bonds to build 100 mi. road during year.

Wash., Vancouver—Comrs. Clarke Co. receive bids about July 15, building 6 mi. 4th Plain Rd. from city limits to Brush Prairie. B. L. Dorman, co. engr.

Streets and Roads (Continued)

Oregon—State Highway Comn., Salem, voted $2,500,000 bonds to build Roosevelt Highway along Pacific coast from Washington to California state lines. About $5,000,000. Federal government appropriated balance of cost. H. Nunn, state highway engr. Noted Mar. 6.

Ore., Albany—Linn Co. voted $600,000 bonds to improve county roads. Noted Apr. 17.

Ore., Astoria—City rejected bids paving Bond St. and Taylor Ave. Work will be readvertised. G. T. McClean, city engr. Noted Apr. 17.

Ore., Astoria—Council having plans prepared for improving 29th St., Floral Ave., 2nd St. from Spokane, Portland & Seattle R. R. to Astor and 37th Sts. G. T. McClean, city engr. Noted May 29.

Ore., Baker City—Baker Co. voted $500,000 bonds to improve county roads.

Ore., Beaverton—City soon lets contract paving, grading, curbing and draining Watson St. from Front to 1st Sts., Front St. from Watson to Hall Sts., B'way. from Watson St. to city limits, in Local Dist. No. 1, bitulithic or asphaltic concrete pavement, concrete curbing and vitr. or cement pipe. G. Thyng, city clk.

Ore., Bend—Deschutes Co. voted $125,000 bonds to improve county roads.

Ore., Condon—Gilliam Co. voted $250,000 bonds to build roads.

Ore., Corvallis—Benton Co. voted $220,000 bonds to hard-surface and grade county roads.

Ore., Dallas—Polk Co. voted $265,000 bonds to improve county roads.

Ore., Enterprise—Wallowa Co. voted $300,000 bonds to improve county roads.

Ore., Fossil—Wheeler Co. voted $44,000 bonds to build county roads.

Ore., Heppner—Morrow Co. voted $290,000 bonds to improve and build county roads.

Ore., Klamath Falls—Klamath Co. voted $347,704 bonds to improve roads.

Ore., Lakeview—Lake Co. voted $200,000 bonds to improve county roads.

Ore., McMinnville—Yamhill Co. voted $360,000 bonds to hard-surface and grade county roads. Noted May 15.

Ore., Marshfield—City Council plans to improve 6th St. from Central Ave. to south end of street, concrete or rock asphalt on concrete base, 26 ft. wide, 5 ft. parking, 6 ft. concrete sidewalk. Estimate cost, rock ashpalt on concrete base, $26,235, concrete, $25,282. E. K. Burton, city engr.

Ore., Salem—Marion Co. voted $850,000 bonds to build and improve roads. U. G. Boyer, clk.

Ore., Tillamook—Tillamook Co. voted $430,000 bonds to improve county roads. Noted Apr. 17.

Ore., Toledo—Lincoln Co. voted $180,000 bonds to build roads.

Cal., Exeter—City plans to pave 13 blocks, probably concrete or oil macadam and for crushed rock drives and cement walks in city park.

Cal., King City—City voted $46,000 bonds to build 1½ mi. road.

Cal., Martinex—Contra Costa Co. election July 22 to vote on $2,600,000 bonds to build county roads.

Cal., Oakland—City having plans prepared paving, building concrete gutters, cement curbs, sewers, etc., in 5 blocks of Oak St., 6 blocks Harrison St., 5 blocks Alice St., 7 blocks Castro St., 1 block Washington St., 12 blocks Grove St., 6 blocks Jefferson St., 5 blocks 11th St., 6 blocks 8th St., 6 blocks 10th St., 15 blocks 5th St., 6 blocks 8th St., 15 blocks 14th St., 15 blocks 12th St., 8 blocks 13th Ave., 3 blocks 9th St.; also building sewers in 16 blocks Madison and Jackson Sts. and 14 blocks Bush and West Sts. About $1,000,000. P. F. Brown, city engr.

Cal., Red Bluff—Tehama Co. election July 1 to vote on $86,000 bonds to build roads.

Cal., Redwood City—See "Sewers."

Cal., San Diego—City having plans prepared paving and improving Moore, Tide, Lytton, Rosecrans, Talbot, Santa Barbara, De Foe, Abbott, Voltaire and Tennyson Sts., Chatsworth, Catalina and West Point Loma Blvds., Point Loma and Newport Aves. and Canyon Rd., total length 12½ mi., 20 ft. wide. Cost $500,000, of which city will pay $115,000.

Cal., Visalia—Comrs. Tulare Co. plan to grade, gravel and oil 40 mi. roads between Ducor and Angiola, and 13 mi. between Worth and Springville. About $25,000. G. R. Prestidge, co. clk.

Que., Dorion—Municipal Council soon receives bids building concrete and waterbound macadam roads. Bonds for $665,000 sold for project.

Ont., Owen Sound—City soon receives bids building permanent roads, asphalt or concrete. About 2 mi. to be done this summer, cost $100,000; total cost, $300,000. D. H. Fleming, engr.

Ont., Pembroke—Town having plans prepared by W. A. Moore, engr., for macadam pavements. About $36,000.

Ont., Sandwich East (Sandwich P. O.)—Township plans to pave 2 sections on River Rd., concrete. About $45,614 and $23,400 respectively. McCall & Fletcher, Gas Bldg., Windsor, engrs.

Man., Springfield—H. C. Christopherson, secy. municipality, Oakbank, soon lets contract grading 10¾ mi. roads.

Alta., Calgary—City Council appropriated $40,500 bonds to pave 4th Ave.

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BIDS DESIRED

Massachusetts—Until June 24, by State Highway Comn., Boston, for 2000 ft. bituminous macadam road, 18 ft. wide, Avon Twp.; 5600 ft. bituminous concrete, 15 ft. wide, Falmouth Twp.; 3100 ft. concrete, 18-24 ft. wide, West Springfield Twp. A. W. Dean, Boston, state highway engr.

Mass., Boston—See "Miscellaneous."

Connecticut—Until June 20, by State Highway Comn., Capitol, Hartford, improving 51,691 ft. 3 in. bituminous macadam over 7 in. native stone base on Norwich Westerly Rd., Preston, Ledyard, North Stonington and Stonington Twps.; 9722 lin.ft. 7 in. native stone macadam on North Granby Rd., Lebanon Twp.; 3000 lin.ft. 7 in. native stone macadam on North Granby Rd., Granby Twp.; 6600 lin.ft. 3 in. bituminous macadam over 4 in. stone base, on Abington Rd., Pomfret Twp.; 4770 lin.ft. 7 in. native stone macadam on Newent Rd., Lisbon Twp.; 3800 lin.ft. 5 in. gravel and 3 in. trap rock top and one 18 ft. span rein.-con. slab bridge on Bozrah St., Bozrah Twp.; one 21 ft. span rein.-con. slab bridge with one 6 ft. sidewalk over Hop Brook on trunk line from Simsbury to Avon, Simsbury Twp. C. J. Bennett, state highway engr.

Conn., Hartford—Until June 24, by Bd. Contr. & Supply, Municipal Bldg., paving 6175 ft. Wethersfield Ave., involving 36,590 sq.yd. asphalt on 6 in. concrete base. R. N. Clark, city engr.

N. Y., Brooklyn—Until June 25, by E. Riegelmann, boro. pres., regulating and laying cement sidewalks on both sides of Bay Ridge Pl. from Bay Ridge to Ovington Aves.; on west side of Ocean Ave. from Ave. L to Ave. M; grading sidewalk space and laying cement sidewalks on south side of Elmwood Ave. from Gravesend Ave. to East 2nd St.; regulating and grading Bay 38th St. from 86th St. to Benson Ave.; regulating, recurbing and paving with permanent asphalt on 6 in. concrete base; roadway of 64th St. from 13th to 14th Aves.; regulating and paving with permanent asphalt on 6 in. concrete base, roadway of 76th St. from 17th to 18th Aves.

N. Y., Ilion—Until June 27, by Bd. Trustees, Union St., building 14,000 sq.yd. pavement including curbing, catch basins, tile, etc. S. M. Hubbard, clk.; advertised in this issue.

N. Y., Long Island City—Until June 23, by M. E. Connolly, pres. Queens Boro., regulating and repaving with improved granite block on 6 in. concrete base, between outer rails within the railroad franchise area, 13th St. from 2nd to 9th Aves., College Point, 3rd Ward; Jackson Ave. from Thomson Ave. to Bridge Plaza S. to 2nd Ave., 1st Ward; Jackson Ave. from 2nd Ave) to Old Newtown Rd., 1st Ward; with improved granite blocks and sheet asphalt on 6 in. concrete base, Main St. from Bway. to Jamaica Ave., Flushing, 3rd Ward.

N. Y., Long Island City—Until June 26, by M. E. Connolly, pres. Queens Boro., regulating, grading, curbing and laying sidewalks on 93rd Ave. from 102nd St. to Rockaway Beach Division of Long Island R.R., 4th Ward; Olmstead Pl. from Myrtle Ave. to Cypress Hills Cemetery, 2nd Ward; 16th Ave. from Grand Ave. to line about 285 ft. southwesterly thereof, 1st Ward; Hancock St. from Wyckoff Ave. to Evergreen Branch of Long Island R.R., 2nd Ward; also regulating and repaving with improved granite blocks on concrete foundation between curbs and rails and outside rails, Jackson Ave. from Bridge Plaza South to 2nd Ave., 1st Ward.

N. Y., New York—Until June 24, by H. Bruckner, pres. Bronx Boro., resetting curbs and repaving with sheet asphalt on concrete foundation, roadway of Cypress Ave. from East 135th to East 136th Sts.; repaving with granite blocks on concrete foundation, roadway of Cypress Ave. from East 132nd to East 138th Sts.

N. Y., New York—Until June 25, by F. L. Dowling, pres. Manhattan Boro., regulating and repaving with sheet asphalt on concrete base, roadway of Lexington Ave. from curb to rail, from 86th to 95th Sts., and from 97th to 98th Sts.; Lenox Ave., from 110th to 124th Sts.; 110th St. from 2nd to 5th Aves.; 119th St. from 1st to 3rd Aves.; 121st St. from 2nd to Lexington Aves.; with granite block on concrete base, West Bway. from Vesey to Franklin Sts., More St. from South to Water Sts.; also repairing asphalt pavements in railroad area in borough when and where directed by chief engineer.

N. Y., S. I., St. George—Until June 25, by C. D. Van Name, pres. Richmond Boro., repairing with wood block pavement roadways of Water St. from Bay to Wright Sts.; Richmond Terrace from Ferry St. to Staten Island Rapid Transit Ry.; Richmond Ave. from south side Richmond Terrace to ferry landing.

New Jersey—Until July 2, by State Highway Comn., Broad St. Bank Bldg., Trenton, building State Highway Route No. 1, Sect. 3, Robbinsville to Windsor, Mercer Co., involving 26,843 sq.yd. concrete surface. A. L. Grover, ch. clk.; advertised in this issue.

N. J., Jersey City—Until June 24, by city, repaving roadway on Newark Ave. from Warren to Brunswick Sts., also on Newark Ave. from Summit to Palisade Aves., sheet asphalt on present concrete foundation. About $50,000. C. A. Van Keuren, city engr.

N. J., Ridgefield Park—Until July 1, by Village Comrs., Municipal Bldg., 234 Main St., improving Hackensack Ave., Poplar and Park Sts. M. D. Starker, clk.; advertised in this issue.

N. J., Woodstown—Until July 7, by Village Council, repairing various streets, seal coat surface on repaired bituminous concrete foundation, involving 27,475 sq.yd. surface pavement. Keasbey & Sparks, Mecum Bldg., Salem, engrs.; advertised in this issue.

Pennsylvania—Until July 8, by State Highway Dept., Harrisburg, building roads in counties as follows:

Bradford Co., 45,051 lin.ft. rein.-con. or bituminous surface course and Hillside vitr. brick on concrete foundation.

Bucks Co., 14, 883 lin.ft. rein.-con. or bituminous surface course on concrete foundation.

Butler Co., 41,673 lin.ft. rein.-con. and Hillside vitr. brick.

Centre Co., 12,355 lin.ft. rein.-con. or bituminous surface course on concrete foundation.

Clearfield Co., 30,995 lin.ft. rein.-con. and Hillside vitr. brick.

Clinton Co., 2903 lin.ft. rein.-con. or bituminous surface course on concrete foundation.

Delaware Co., 24,900 lin.ft. bituminous surface course on concrete foundation and Hillside vitr. brick or rein.-con. and Hillside vitr. brick.

Fayette Co., 30,197 lin.ft. rein.-con. and Hillside vitr. brick.

Lehigh Co., 46,297 lin.ft. rein.-con. and Hillside vitr. brick.

Luzerne Co., 22,705 lin.ft. rein.-con. and Hillside vitr. brick.

Somerset Co., 80,363 lin.ft. rein.-con. and Hillside vitr. brick.

Sullivan Co., 17,412 lin.ft. rein.-con. or bituminous surface course and Hillside vitr. brick.

Susquehanna Co., 30,335 lin.ft. rein.-con.

Tioga Co., 28,831 lin.ft. rein.-con. or bituminous surface course on concrete foundation and Hillside vitr. brick.

Westmoreland Co., 32,047 lin.ft. rein.-con. and Hillside vitr. brick.

Streets and Roads (Continued)

Lackawanna and Wyoming Counties, 71,063 lin.ft. rein.-con. or bituminous surface course on concrete foundation.

York Co., 32,744 lin.ft. rein.-con. and Hillside vitr. brick. L. S. Sadler, state highway comr.; advertised in this issue.

Pa., Beaver—Until July 3, by Comrs. Beaver Co., building 8500 ft. road from Dougherty Twp. line, north to Eastvale Rd. Address E. L. Johnson and J. O. Brown.

Pa., Clairton—Until June 23, by H. M. Gates, boro. clk., grading, paving and sewering section of Miller Ave., involving 800 cu.yd. grading, 950 lin.ft. 8 x 12 in. storm sewer, 200 lin.ft. 8 in. vitr. pipe, elbows, etc., 350 lin.ft. 8 in. sanitary sewer, 200 lin.ft. 6 in. vitr. pipe, 3850 sq.yd. paving with concrete base, 1185 sq.yd. repaving concrete base, 2500 lin.ft. combined curb and gutter, lowering 325 lin.ft. combined storm and sanitary sewer, etc.; Van Kirk St., 300 cu.yd. grading, 3910 sq.yd. rein.-con. paving, 2500 lin.ft. combined curb and gutter, 2000 ft. 12 in. vitr. storm sewer, 110 lin.ft. 8 in. vitr. pipe, etc.; Thompson Ave., 200 cu.yd. grading, 800 sq.yd. rein.-con. paving and 500 lin.ft. curb and gutter.

Pa., Greensburg—Until July 2, by J. S. Sell, controller Westmoreland Co., building and improving 0.96 mi. Gossas-Hill Rd., Allegheny Twp. from Hyde Park Boro to Sproul Route No. 69, rein.-con. pavement on all grades up to and including 6%, and concrete base with integral curb, brick surface on all grades above 6%, also for waterbound macadam pavement on 7 in. Telfor foundation; 2.20 mi. Irwin-Hahnstown Rd., North Huntingdon Twp., concrete base with integral curb, brick surface on all grades above 6% with rein.-con. pavement on all grades up to and including 6%, or brick surface on entire road with concrete base with integral curb; 1.79 mi. Webster to Pittsburgh-Uniontown Pike Rd., Rostraver Twp., concrete base with 12 x 12 in. concrete curb and brick surface, also concrete base with 6 in. integral curb with brick surface on all grades above 6% and rein.-con. pavement on all grades up to and including 6%.

Pa., North East—Until June 28, by Twp. Rd. Supervs., building 8000 ft. rein.-con. pavement on road leading from here to Findley Lake. Hill & Hill, Marine Bank Bldg., Erie, engrs.; advertised in this issue.

Pa., Pittsburgh—Until July 3, by Controller Allegheny Co., improving 2¼ mi. Elizabeth Rd., in Forward Twp., 18 ft. wide, rein.-con. or asphaltic concrete surface; also 5286 ft. Thompson Run Rd. Extension in Ross and McCandless Twps., 16 ft. wide. R. V. Warren, Court House, engr.

Delaware—Until July 9, by State Highway Dept., Dover, building 0.42 mi. state highway involving 21,500 cu.yd. grading, 10 cu.yd. concrete masonry, 300 lb. reinforcement, 50 lin.ft., 15 in. and 34 lin.ft., 30 in. rein.-con. pipe, 6 bounds, 1500 tons stone for macadam and 600 sq.yd. penetration macadam, Contr. No. 15; 4.91 mi. state highway, 7.5 acres clearing and grubbing, 56,000 cu.yd. grading, 1020 cu. yd. concrete masonry, 32,000 lb. reinforcement, 706 lin.ft. 15-36 in. rein.-con. pipe, 50 bounds, 3000 lin.ft. piles, 3500 lin.ft. wood guard rail, 100 tons stone for macadam, 9380 cu.yd. cement concrete roadway, 250 joints and 2000 sq.yd. roadway reinforcement. Contr. No. 16; 2.94 mi. state highway involving 1 acre clearing and grubbing, 21,000 cu.yd. grading, 200 cu.yd. concrete masonry, 2000 lb. reinforcement, 410 lin.ft. 15-36 in. rein.-con. pipe, 30 bounds, 75 tons stone for macadam and 5600 cu.yd. cement concrete roadway and 150 joints, Contr. No. 17, New Castle and Kent Counties. C. M. Upham, ch. engr.; advertised in this issue.

Virginia—Until June 30, by State Highway Comn., Richmond, building 6.6 mi. road from Lynchburg to Forest, 16 ft. wide, 8 in. waterbound macadam, Project No. 37, Campbell and Bedford Counties; 4 mi. 2 in. penetration macadam and 1¾ mi. waterbound macadam road, 6 in. deep, from Lynchburg to Judith's Creek, 16 ft. wide, Project No. 48A, Bedford Co.; 2 mi. road from Bocock to Rustburg, penetration macadam, 16 ft. wide, Project No. 50, Campbell Co. G. P. Coleman, state highway comr.

W. Va., Fairmont—Until June 28, by Comrs. Marion Co., building 1.5 mi. Brandonville-Fishing Creek Rd., 16 ft. wide, concrete. About $32,000. W. M. Linn, Fairmont, engr.

W. Va., Harrisonville—Until July 7, by Comrs. Ritchie Co., grading, draining and paving 5 mi. Northwestern Turnpike Rd., Federal Aid Project No. 29, in Clay Dist. beginning at or near Fair Grounds at Pennsboro and extending through Ellenboro, 16 ft. wide, concrete. Noted May 8.

W. Va., Lewisburg—Until July 1, by Comrs. Greenbrier Co. grading and draining proposed road leading from Ronceverte, west to Ft. Springs Dist. line, or so much thereof as funds available will permit. About $70,000 has been appropriated for project. F. K. Rader, co. engr.; advertised in this issue.

W. Va., Lewisburg—Until July 1, by Comrs. Greenbrier Co., building 2 mi. penetration macadam pavement, 16 ft. wide, beginning at end of present pavement, 3 mi. north of Lewisburg and extending along Marlins Bottom Turnpike. F. K. Rader, co. engr.; advertised in this issue.

W. Va., Martinsburg—Until June 23, by Comrs. Berkley Co. building 7 mi. bituminous road. J. W. Sperow, co. engr.

N. C., Kinston—Until July 8, by H. C. Hines, secy. Lenoir Co., paving Central Highway, involving 18,820 sq.yd. concrete, sheet asphalt or Warrenite pavement, 3282 cu.yd. excav., 4356 lbs. reinforcement steel, 242 cu.yd. concrete box culverts; advertised in this issue.

Fla., Leesburg—Until July 7, by City Council, paving, draining and curbing 50,000 sq.yd. Main St. About $175,000. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., engrs.

Fla., Miami—Until June 26, by City Council building concrete curb and gutter and vitr. brick, sheet asphalt or asphaltic concrete pavement in streets known as Highway Improvements H131, H135, H137 and H138, involving 6750 sq.yd. vitr. brick, 10,800 sq.yd. sheet asphalt on concrete base and 1200 lin.ft. concrete curb and gutter. W. B. Moore, clk. C. W. Murray, City Hall, engr.

La., Krotz Springs—Until June 28, by Bd. Supervs. Rd. Dist. No. 1, 4th Police Jury Ward of St. Landry Parish, Krotz Springs, building Krotz Springs Highway. Work consists of 60,000 cu.yd. earth embankment, timber bridges and drainage ditches. J. Andre, chn. F. S. Robert, Opelousas, engr.

O., Cleveland—City receiving bids paving Nordica Ave. from West 73rd to 80th Sts., involving 1125 cu.yd. excav., 18,950 sq.ft. 5 in. brick paving and 700 ft. 12 in. sewer pipe; Eichorn Ave. from West 45th to 54th St., 2355 cu.yd. excav., 41,575 sq.ft. 4 in. brick paving on 6 in. concrete base and 3160 ft. 5 in. stone curbing; Henley Ave. from West 92nd to 99th Sts., 1255 cu.yd. excav. and 17,800 sq.ft. 5 in. brick paving; Trivole Court from East 57th St. to Ashland Ave., 125 cu.yd. excav. and 17,180 sq.ft. 5 in. brick paving. R. Hoffman, city engr.

O., Lancaster—See "Sewers."

O., Springfield—Until July 16, by O. E. Carr, city mgr., paving 4563 ft. Limestone St., Sect. 1 from Washington to Clark Sts., wood or granite block, Sect. 2 from Clark to Rice Sts., sheet asphalt, bitulithic or brick, 45 ft. wide, involving 11,400 sq.yd. paving and 9100 ft. concrete curbing. O. E. Carr, city engr.

Indiana—Bd. Co. Comrs. building roads in following counties:

June 28, Shelby Co., Shelbyville, building gravel road in Addison Twp., to be known as J. M. Moberly Rd., F. W. Fagel, co. aud.

June 30, Decatur Co., Greensburg, 8145 ft. macadam road, Sandcreek Twp., 13,335 ft. macadam road, Adams Twp., 13,425 ft. macadam road, Fugit Twp., 14,430 ft. concrete road, Washington Twp., J. C. Barbe, co. aud.

Marshall Co., Plymouth, gravel road North Twp. O. H. Weber, co. aud.

Mich., Port Huron—Until June 21, by D. D. Worcester, rd. mgr. St. Clair Co., grading, shaping, building drainage ditches, culverts and bridges on 7½ mi. Church Rd., Assessment Dist. No. 25, 16 ft. gravel, Ira Twp.; 3½ mi. Yale-Lynn Rd., Assessment Dist. No. 20, 16 ft. gravel, Lynn Twp., 4¼ mi. Harris Rd., Assessment Dist. No. 5, 16 ft. gravel, in vicinity of Lake Shore Twp.

Mich., Port Huron—Until June 25, by D. D. Worcester, rd. mgr. St. Clair Co., building 4½ mi. North and South Starville Rd., Assessment Dist. No. 13, Class B gravel, Class C slag with gravel top or penetration type, 16 ft. wide, Cottrellville Twp.

Illinois—Until June 25, by Dept. Pub. Wks. & Bldgs., Div. of Highways, Springfield, improving roads in following counties: Sangamon Co., 26,205 ft. Sect. G, Springfield-East St. Louis Rd., 29,982 ft. Sect. H, both 16 and 18 ft. wide, 30,011 ft. Sect. C, 24,508 ft. Sect. P-15d; Macoupin Co., 34,940 ft. Sect. D, 9525 ft. Sect. L-15d, 33,040 ft. Sect. E, 29,109 ft. Sect. F; Marshall Co., 22,714 ft. Sect. A1, Henry Morris Rd., 12,598 ft. Sect. A2, all 16 ft. wide. Alternate bids will be received on Portland cement concrete, 3 in. and 4 in. monolithic brick, bituminous concrete with or without binder course (Spec. C1, C2, C3 or CT). C. Older, ch. highway engr.; advertised in this issue.

Wisconsin—Until June 24, by State Highway Comn., Madison, improving Barron-St Croix Falls Rd., Federal Aid Project No 22, Polk Co., involving 8.99 acres clearing and grubbing, 75,739 cu.yd. earth and 7134 cu.yd. borrow excav., 332 cu.yd. Class "A" concrete, 1600 sq.yd. gravel surfacing, 642 lin.ft. 15 in. vitr. pipe and 6886 lin.ft. guard rail; Frederic-Webster Rd. Federal Aid Project No. 89, Polk and Burnett Counties, 4.63 acres clearing and grubbing, 71,343 cu.yd. earth and 190 cu.yd. borrow excav., 306 cu.yd. Class "A" concrete and 8785 lin.ft. guard rail; Spooner-Cumberland Rd., Federal Aid Project No. 98, Washburn Co., 3.44 acres clearing and grubbing, 5458 cu.yd. earth and 35 cu.yd. borrow excav., 43.36 cu.yd. Class "A" concrete and 605 lin.ft. guard rail.

Ia., Adair—Until June 26, by city, for 15,542 ft. curbing and 20,678 yd. paving, concrete, asphaltic concrete, brick, sheet asphalt, bituminated concrete or bituminous macadam. T. S. Delay, Creston, consult. engr. Noted May 27.

Ia., Creston—Until June 30, by C. Davenport, city clk., building 20,000 ft. curbing and 30,000 yd. paving, concrete, asphaltic concrete, sheet asphalt, brick block, verticle fiber brick or creosoted wood block. P. K. DeVoe, city engr.

Ia., Elliott—Until June 27, by city, for 19,539 ft. curbing and 26,433 yd. paving, concrete, asphaltic concrete, brick, sheet asphalt, bituminated concrete or bituminous macadam. T. S. Delay, Creston, consult. engr. Noted Feb. 20.

Ia., Mystic—Until June 27, by city, for 8000 yd. brick, concrete, asphaltic concrete or bitulithic paving and 3300 ft. curbing M. G. Hall, Centerville, engr.

Ia., Sidney—Until June 26, by city, for 38,000 sq.yd. pavement, vertical fibre brick, asphaltic concrete or concrete; also for 6700 ft. 10-24 in. storm sewers. Archer & Stevens, New England Bldg., Kansas City, Mo., engrs.

Ia., Tabor—Until July 1, by city, for 5219 ft. curbing and 21,686 yd. paving, concrete, asphaltic concrete, brick, sheet asphalt, bituminated concrete or bituminous macadam. T. S. DeLay, Creston, consult. engr.

Ia., Villisco—Until June 24, by city, for 20,611 ft. curbing, and 32,330 yd. paving, concrete, asphaltic concrete, brick, sheet asphalt, bituminated concrete or bituminous macadam. T. S. Delay, Creston, consult. engr.

Minn., Albert Lea—Until July 7, by F. Tavis, aud. Freeborn Co., grading and graveling 11.5 mi. Federal Aid Project No. 61, State Rd. No. 6, 24 ft. wide. About $60,000. No bids received June 2. Noted May 22.

Minn., Albert Lea—Until June 27, by city, paving various streets, involving 29,669 sq.yd. pavement, 8439 cu.yd. excav., 2575 lin.ft. cement curb, 4662 lin.ft. pipe, 59 manholes, 39 catch basins and 10 lin.ft. 10 in. sewer. Bids will be received for creosoted wood block, rein.-con., asphaltic concrete, bitulithic or Tarvia pavement on concrete foundation.

Minn., Bemidji—Until July 2, by A. D. Johnson, aud. Beltrami Co., improving 16 mi. Federal Aid Project No. 57, 24 ft. wide About $100,000. Work involves 104 acres clearing, 142,538 cu.yd. excav., also building Bridge No. 3112, having three 75 ft. spans. S. D. Snyder, Bemidji, engr.

Minn., Duluth—Until June 23, by J. A. Farrell, city comr., grading and paving with 1 course concrete 5920 ft. Cooke St. from 40th Ave. to Superior St., grading 42 ft. wide with 20 ft. concrete in center. About $59,624. Work involves 9069 ft. concrete curbing, 10,509 sq.yd. concrete and 8785 cu.yd. excav.

Minn., Duluth—Until June 23, by J. A. Farrell, city comr., grading 5795 ft. 59th Ave. W., from Main to Elinor Sts., 40 ft. wide, involving 13,690 sq.yd. concrete, 11,585 lin.ft. concrete curbing, 2000 sq.ft. concrete sidewalk, 7677 cu.yd. excav. and 3599 ft. 12-36 in. sewer pipe and 12,677 ft. 3 in. tile. Noted June 5.

Minn., Grand Rapids—Until June 24, by Comrs. Itasca Co., grading and graveling 3 mi. road, connecting Sand Lake and Trout Lake Rds., 24 ft. wide. About $18,000. O. J. Lidberb, Grand Rapids, engr.

Streets and Roads (Continued)

Minn., Pipestone—Until July 8, by T. A. Bailey, aud. Pipestone Co., improving Job No. 1905, State Rd. No. 4, involving 27,392 cu.yd. gravel, etc.; Job No. 1904, State Rd. No. 6, 33,951 cu.yd. grading, 13,082 cu.yd. excav., 76,500 cu.yd. overhaul, 12,166 cu.yd. gravel, etc. About $95,000. E. Keeler, Pipestone, engr.

Minn., Solana—Until June 28, by A. E. Arndt, Solana, grading and graveling 5.6 mi. road in Dick Twp., Range 22, 24 ft. wide. About $35,000.

Kan., Lawrence—Until June 30, by Douglas Co., building 8⅜ mi. Fort to Fort Rd., 18 ft. wide, concrete, and Mud Creek Bridge, consisting of two 80 ft. span girders and 20 ft. concrete roadway. About $450,000. L. Duffee, co. engr.

N. D., Bismarck—Until June 30, by city, laying 21,420 ft. sheet asphalt, bituminous concrete or concrete pavement, 24-30 ft. wide, in Impvt. Dist. No. 3. T. R. Atkinson, city engr.

Wyoming—Until June 23, by State Highway Comn., Cheyenne, building roads as follows:

Lincoln Co., 13.29 mi. Big Piney Rd., from Marbleton south, involving 37,000 cu.yd. excav. and embankment, 2200 cu.yd. gravel surfacing, 553 lin.ft. culverts, 2640 cu.yd. concrete; 15,300 lb. reinforcement and one 60 ft. steel span bridge; 17.65 mi. Cokeville-Star Valley Rd. from Cokeville north, 54,000 cu.yd. excav. and embankment, 26,000 cu.yd. shale surfacing, 2500 lin.ft. culverts, 427 cu.yd. concrete, 20,000 lb. reinforcement and structural steel, estimated cost, $117,084.

Crook Co., 19.25 mi. Sundance-Beulah Rd., 80,000 cu.yd. excav. and embankment, 28,500 cu.yd. gravel surfacing, 740 cu.yd. concrete, 2162 lin.ft. culverts, 51,000 lb. reinforcement, 2000 lb. structural steel and one 45 ft. steel span bridge, $169,500.

Platte Co., 12.60 mi. Yellowstone Highway north and south of Chugwater, 68,000 cu.yd. excav. and embankment, 21,200 cu.yd. surfacing, 316 cu.yd. concrete; 1144 lin.ft. culverts, 19,000 lb. reinforcement, one 60 ft. span concrete and I beam bridge. About $100,848.

Mont., Bozeman City—Until June 23, by City Council, paving 4300 sq.yd. Lindley Pl. and Olive St., 4400 sq.yd. College St., and 2600 sq.yd. Dickerson St., bitulithic. C. Widener, city engr. Noted June 5.

Mo., King City—Until June 24, by City Clk., paving 7 blocks Vermont, Connecticut and Ohio Sts., involving 12,770 sq.yd. concrete. About $40,000. Archer & Stevens, New England Bldg., Kansas City, Mo., engrs.

Ark., Rison—Until June 26, by Comrs. Rd. Impvt. Dist. No. 2, Cleveland Co., at office of State Highway Dept., Little Rock, building 10½ mi. road. Work involves 28 acres clearing and grubbing, 4 mi. fence moving, 35,000 cu.yd. earth excav., 1.5 mi. grading machine work, 216 cu.yd. Class A and 119 cu.yd. Class B concrete, 504 lin.ft. 18 in. and 622 lin.ft. 24 in. concrete or corrugated iron pipe, three 4 ft., one 60 ft. and one 80 ft. steel truss spans, and 260 lin.ft. wooden pile bridges. Moreland & Bennett, Pine Bluff, engrs.; advertised in this issue.

N. M., Albuquerque—Until July 2, by A. R. Hebenstreit, city mgr., paving and building storm sewers, in various streets, involving 105,000 sq.yd. pavement, 50,000 lin.ft. curb and gutter and 12,000 sq.yd. alley pavement, bithulithic, asphaltic concrete and reinforced cement concrete; also laying 12,400 ft. 8-36 in. clay vitr. pipe sewer, including necessary manholes and catch basins; advertised in this issue.

Washington—Until June 23, by State Highway Bd., Olympia, paving 3.9 mi. Sunset Highway east of Spokane, Permanent Highway No. 4-D, Post Rd. Project No. 23, concrete, Spokane Co.; 8 mi. Pacific Highway east of Everett, concrete, Snohomish Co.; surfacing 5.2 mi. Pacific Highway from Woodland to Martins Bluff, gravel, Cowlitz Co.; clearing, grading, draining and surfacing 7 mi. Pacific Highway south, concrete, Thurston Co.; 7.8 mi. Chelan-Okanogan Highway from Tonasket to Oroville, State Rd. No. 10, Post Rd. Project No. 15, gravel, Okanogan Co.; 7.8 mi. Chelan-Okanogan Highway from Brewster to Malott, State Rd. No. 10, Post Rd. Project No. 14, gravel, Okanogan Co; 4.9 mi. Sunset Highway east of Hartline, Grant Co. J. Allen, state highway engr.

Wash., Vancouver—Until June 28, by Comrs. Clark Co., paving 4 mi. Pioneer-Ridgefield Rd., crushed rock. About $96,000. B. L. Dormann, co. engr.

Wash., Washougal—Until June 23, by H. C. Carpenter, town clk., improving 3rd St. from Main to Webber Sts., by grading 20 ft. wide in center, paving 12 ft. center with crushed rock macadam 8 in. deep and sloping to 5 in. at edges.

California—Until June 30 (change of date), by State Highway Comn., 515 Forum Bldg., Sacramento, building 2.8 mi. road between Freshwater Lagoon and Orick, Humboldt Co., involving 38,610 cu.yd. excav., 65 cu.yd. class "A" Portland cement concrete, etc.; 7.9 mi. between Last Chance Slide and Cushion Creek, Del Norte Co., 236,400 cu.yd. excav., 380 cu.yd. class "A" Portland cement concrete, etc. A. G. Fletcher, state highway engr. Noted June 5.

Cal., Riverside—Until July 7, by Bd. Supervs. Riverside Co., paving 1700 ft. Ontario Ave., Route 15, involving 587 cu.yd. excav., 1700 lin.ft. shaping, 419 cu.yd. Class "A" concrete paving. Alternate bids will be taken for 27,200 sq.ft. 5 in. oiled macadam paving. A. F. Fulmor, Riverside, engr.

Cal., Santa Ana—Until July 2, by Bd. Supervs. Orange Co., paving 3.62 mi. Santa Ana Canyon Rd., involving 1500 cu.yd. excav., 650 lin.ft. cement curbs, 3480 cu.yd. concrete pavement, 56,000 lbs. triangular mesh reinforcement. County will furnish cement, reinforcement and crushed rock. J. M. Backs, clk. Noted June 12.

Ont., Sarnia—Until June 23, by J. A. Baird, city engr., resurfacing with sheet asphalt 40,000 sq.yd. asphalt block pavement on Christina, George, Victoria, Davis, Cromwell, Lochiel Sts. About $55,000. Noted May 29.

Ont., Toronto—Until June 24, by T. L. Church, chn. bd. control, paving Davenport Rd. from Avenue Rd. to Bedford Rd., Hastings Ave. from Doel Ave. to South Sawden Ave., Indian Grove from Bloor St. to point 700 ft. north, Indian Grove from Bloor St. to Glenlake Ave., Orchard Park Blvd. from Orchard Park Rd. to east end and Seaforth Ave. from O'Hara Ave. to point 134 ft. east, all asphalt; Orchard Park Rd. from Queen St. to Orchard Park Blvd. and Prescott Ave. from St. Clair to Rockwell Ave., bitulithic; Indian Grove, 700 ft. north of Bloor St. to 350 ft. north, brick block; building concrete sidewalks on Dorval Rd. from Bloor St. to Edna Ave., Edna Ave. from Indian Rd. to Indian Grove, Fernwood Park Ave. from Fir Ave. to point 333 ft. south, Glenmore Rd. from Wrenson Rd. to Gerrard St., Kennedy Ave. from Bloor to S. S. Colbeck St., Miller St. from Lindner St. to point 109 ft. north, Seaforth Ave. from O Hara Ave. to point 134 east, Walpole St. from Morley Ave. to Hiawatha Rd.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., South Portland (Portland P. O.)—See "Industrial Works."

Massachusets—State Highway Comn., Boston, received bids June 10, building 11,200 ft. state highway, 18 ft. wide, in Taunton Twp., from J. Reilly, Taunton, $67,575; Eastern Constr. Co., Brockton, $77,403; Coleman Bros., Chelsea, $77,533. Work involves 4100 sq.yd. concrete and 15,300 cu.yd. earth excav. Noted June 5.

★Massachusetts—State Highway Comn., Boston, let contract building state highway, 18-24 ft. wide, in Lincoln Twp., to J. Gaffney, Medford, $23,330. Work involves 17,000 gal. bituminous macadam, 1000 cu.yd. earth and 250 cu.yd. rock excav., 3190 cu.yd. borrow.

★Mass., Boston—Bd. Pub. Wks. let contract building sidewalks on Blue Hill Ave., Moraine, Beach and Gray Sts. to J. Singeralla, et al., 88 Broad St., $12,072. Work involves 12,000 sq.yd. granolithic.

N. Y., Binghamton—Bd. Contr. & Supply received bids paving Prospect Ave. (a) concrete, (b) Binghamton brick, (c) Olean brick, (d) Mack brick, (e) Oneonta brick, (f) Corning brick, from Seaman & De Angelo, Savings Bank Bldg., (a) $2.60 per sq.yd., (b) $3.30; M. Barber, (a) $2.90, (b) $3.68, (e) $3.85, (f) $3.73; E. V. Chappelle, 27 Wall St., (a) $2.92, (b) $3.24, (c) $3.71, (d) $3.71; G. Serafine, (a) $2.64, (b) $3.55, (e) $3.81, (f) $3.63. Noted May 29.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids June 11, regulating, grading, curbing and laying sidewalks on (a) East 38th St., (b) 51st St., regulating and repaving with permanent asphalt on 6 in. concrete foundation strip 18 ft. wide in center of roadway of (c) 47th St., (d) 51st St., from J. Massio, (a) $4315; Cassell Bros., (a) $4378; Grimm Constr. Co., 460 Herold Ave., Richmond Hill, (a) $4548, (b) $4435; Uvalde Asphalt Paving Co., 1 Bway., New York City, (c) $42,426, (d) $10,681; Cranford Co., 52 9th St., (c) $43,928, (d) $10,848; Brooklyn Alcatraz Asphalt Co., 407 Hamburg Ave., (c) $45,015, (d) $11,022. Noted June 5.

N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, received lowest 3 bids June 10, clearing, grading, draining, building culverts and guard rails on 7.75 mi. road around Schoharie reservoir, in Gilboa and Conesville Twps., Schoharie Co., Prattsville Twp., Greene Co. and Roxbury Twp., Delaware Co., Contr. 202, from Schunnemunk Constr. Co., Highland Mills, $176,700; Beaver Eng. & Contg. Co., 51 Chambers St., New York City, $188,751; S. Beskin, Beacon, $196,665. Noted May 22.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids June 11, regulating and repaving with granite block on concrete foundation, roadway of (a) James Slip, (b) Leroy St.; with sheet asphalt on concrete foundation, (c) Wall St., (d) Lexington Ave., (e) 79th St., (f) Bway., from W. J. Fitzgerald, 547 West 45th St., (a) $18,977, (b) $25,300; C. Hellbroock Co., (a) $19,104, (b) $27,621; P. J. Kern, (a) $19,225, (b) $25,400; M. J. Sachs, (a) $20,171, (b) $26,256; Sicilian Asphalt Paving Co., 41 Park Row, (c) $21,564, (d) $3417; Uvalde Asphalt Paving Co., 1 Bway., (c) $23,590, (d) $3596, (e) $46,281, (f) $48,282; Asphalt Constr. Co., 2197 Madison Ave., (a) $20,282, (d) $3628, (e) $45,494, (f) $47,669; J. L. Brusstar, Harlem River and 150th St., (c) $24,618, (d) $3742, (e) $43,922; Cleveland Trinidad Paving Co., Flushing, (e) $45,621, (f) $47,986. Noted June 5.

★N. J., Perth Amboy—City let contract paving portion of Smith St., asphalt, to Utility Constr. Co., New Brunswick, $62,300.

★Pa., Bellevue (Pittsburgh P. O.)—Boro let contract grading, paving and curbing West St., to M. O'Herron, South 1st and McKean Sts., Pittsburgh, $4200; Florence St., to R. B. Baldwin, Coraopolis, $7200. Noted May 29.

★Pa., Ebensburg—Supervs. Conemaugh Twp., Cambria Co., let contract building 8600 ft. brick road on 5 in. concrete base leading from Franklin Boro. line to Frankstown Rd., in Conemaugh Twp., 18 ft. wide, to Thermic Coal & Supply Co., Hollidaysburg, $55,595; also for 650,000 No. 1 repressed vitr. bricks, to Custer & Custer, Johnstown, $19,916, who sub-let same to Clearfield Brick Mfg. Co., Clearfield. Noted May 22.

★Pa., Ebensburg—Supervs. East Carroll Twp., Cambria Co., let contract building 3.1 mi. Barnesboro-Hastings Rd., 18 ft. wide, to Bell-Bockel Co., Central Trust Bldg., Altoona, $169,252. Noted May 22.

★Pa., Greensburg—Comrs. Westmoreland Co. let contract rebuilding 3 mi. Harrison-City Trafford Rd., to McCrady Bros., 300 6th Ave., Braddock, $69,221.

★Pa., Mont Alto—State Dept. Health, Harrisburg, let contract building and repairing roads at Pennsylvania State Sanitorium for Tuberculosis, near here, to Bester-Long Co., Hagerstown, Md. About $79,950. Work involves 27,000 sq.yd. waterbound macadam on surface course, 5500 sq.yd. Telford macadam base, 2000 cu.yd. grading, 200 cu.yd. excav. and refill, 4000 sq.yd. rubble gutter, 18,000 sq.yd. scarifying or napping existing base course, 600 lin.ft. corrugated metal pipe culverts, 2000 lbs. reinforcing steel, etc. Noted May 15 under "Buildings, Harrisburg."

★Pa., Pittsburgh—Allegheny Co. let contract placing block floors on various bridges, to Farris Eng. Co., Empire Bldg. About $12,250.

★Pa., Pittsburgh—Allegheny Co. let contracts building 5280 ft. brick and concrete roadway on West Run Rd. from 8th Ave., Homestead Boro, to 1 mi. southwardly, 16 ft. wide, to R. Swan, Jenkins Arcade, $45,251; also for 6000 ft. waterbound macadam on Tarentum-Culmerville Ridge Rd., Frazer Twp., 16 ft. wide, to T. Cronin Co., 17th and Muriel Sts., $51,645. Noted June 12.

Streets and Roads (Continued)

★Pa., Pittsburgh—Allegheny Co. let contract placing wood block sidewalks and roadway on bridge over Allegheny River at entrance to Highland Park, to Farris Eng. Co., Empire Bldg., $30,100. Noted Apr. 24 under "Bridges."

Pa., Scranton—City received bids for (1) city maintenance work, replacing wearing surface, binder and concrete foundation, (2) replacing wearing surface, binder and concrete foundation, not exceeding 4½ in. thickness, (3 and 4) restoring pavements over trenches and same as 1 and 2, from H. B. Sproul Constr. Co., 105 South Division St., Peekskill, N. Y., (1) $4 per sq.yd., (2) $2.50 per sq.yd., (3) $4 per sq.yd., (4) $2.50 per sq.yd.; Gaynor Contg. Co., Bd. Trade Bldg., (1) $3.82 per sq.yd., (2) $2.44 per sq.yd., (3) $3.82 per sq.yd., (4) $2.44 per sq.yd.; Sweeney Bros., Miller Bldg., (1) $4.35 per sq.yd., (2) $1.39 per sq.yd., (3) $4.35 per sq.yd., (4) $2.50 per sq.yd.; M. Stipp & Sons, 435 Moir Court, (1) $3.21 per sq.yd., (2) $1.71 per sq.yd., (3) $6 per sq.yd., (4) $2.50 per sq.yd.; R. C. Ruthven, Carter Bldg., (1) $3.75 per sq.yd., (2) $1.74 per sq.yd., (3) $3.75 per sq.yd., (4) $2 per sq.yd.

★Virginia—State Highway Comn., Richmond, let contract building 5⅜ mi. top soil road from Fredericksburg to Comorn, King George Co., to Ross Bros., Burkeville, cost $26,000; 8 mi. slag road from Wilson's Creek to Long Dale Furnace, Allegheny Co., to Carpenter Major Bros., Clifton Forge, $80,860. Noted May 15.

★W. Va., Grafton—Comrs. Taylor Co. will build 2 mi. Fetterman-Pruntytown Rd., 16 ft. wide, brick on concrete base. About $50,000. Work will be done by day labor. Noted May 8.

★W. Va., Wayne—Comrs. Wayne Co. let contract building 2 mi. Wayne Village Rd., grading 26 ft. wide, surfacing 16 ft. wide, involving 15,000 cu.yd. excav. and 17,051 sq.yd. brick pavement on concrete base, to Wayne Constr. Co., Wayne, $86,776.

★North Carolina—State Highway Comn., Raleigh, Beaufort Co., let contract paving 3¼ mi. road between here and Chocowinity, 18 ft. wide, to Simmons-Whitten Co., Charlotte, $88,665.

★N. C., Albemarle—Comrs. Stanly Co. let contract grading and top soiling 11 mi. road to Gibson Constr. Co., Knoxville, Tenn. About $71,000. Noted May 8.

★N. C., Statesville—City let contract paving 300,000 sq.yd. main streets, involving 48,000 sq.yd. asphalt and 48,000 sq.yd. bituminous concrete on 4 and 5 in. concrete base, to Thompson, Caldwell & Co., Charlotte. About $299,000.

★Ga., Griffin—City let contract grading, paving and curbing with granite and concrete, and building storm drains in 46,000 yd. main streets, to Pittman Constr. Co., Rhodes Bldg., Atlanta. About $180,000. Work involves 16,000 sq.yd. vitr. brick, 30,000 sq.yd. concrete, 36,000 lin.ft. granite curbing, 10,000 cu.yd. earth excav. Noted May 8.

★Ga., Griffin—Comrs. Spalding Co. let contract building 6.1 mi. concrete road on Overland Highway, 18 ft. wide, to McDougald Constr. Co., Atlanta, $160,299. Work involves 63,110 sq.yd. 6½ in. concrete. Noted May 29.

★Fla., West Palm Beach—Palm Beach Co. let contract building 20 mi. road along bank of Lake Worth-Lake Okeechobee canal, to Bryan & Snyder, Ft. Lauderdale. About $145,000.

★Miss., Greenwood—City let contract draining, paving, curbing and guttering streets with asphalt macadam to Hornaday Constr. Co., Memphis, Tenn. About $51,000.

★Miss., Indianola—Sunflower Co. let contract building 25 mi. gravel roads, to Healey Constr. Co., Meridian. About $75,000.

★Ky., Frankfort—Comrs. Franklin Co. let contract to R. B. Tyler Co., 114 South 4th Ave., Louisville, repaving and carpeting 10 mi. Owenton Pike, 16 ft. wide, with 40% asphalt road oil, cost $10,000; Louisville Turnpike from Shelby Co. line to Woodford Co. line; $15,000.

★Ohio—State Highway Comn., Columbus, let contracts grading, building bridges and culverts and paving 3.38 mi. Mansfield-Ashland Rd., Sec. P, bituminous macadam, and 1.92 mi. Belleville-Lexingon Rd., Sect. B, bituminous macadam, Richland Co., to Galion Constr. Co., Galion, cost $113,979 and $47,496 respectively; 4.83 mi. Sect. A and 3.21 mi. Sect. B, Lincoln Highway, brick, Holmes Co., to Holmes Constr. Co., Millersburg, $234,628 and $155,768. Noted May 15.

Ohio—State Highway Comn., Columbus, received bids June 13, building roads in following counties:

Delaware Co., Sect. "a-2," Delaware-Marysville Rd., 2.85 mi. grading, constructing bridges and culverts and paving with waterbound macadam, from S. C. Kissner & Sons, Delaware, $53,210; Winchell, Royce & McDaniels, Columbus, $53,480; A. W. Burns, 55 East State St., Columbus, $55,048; bituminous macadam, Winchell, Royce & McDaniels, $56,810; A. W. Burns, $57,202; S. C. Kissner & Sons, $57,528.

Sect. "B," Delaware-Marysville Rd., 5.02 mi., grading, constructing bridges and culverts and paving with waterbound macadam, Winchell, Royce & McDaniels, $96,858; A. W. Burns, $99,017; Neff & Rader, Circleville, $100,152; bituminous macadam, Winchell, Royce & McDaniels, $100,620; A. B. Shaw, Delaware, $100,887; A. W. Burns, $100,971.

Fairfield Co., Sect. "C," Columbus-Lancaster Rd., widening roadway and rebuilding bridge, Wooten & McCready, New Lexington, $4845; Brown & Crook, Lancaster, $4906; J. A. Swingle, Zanesville, $4921.

Huron Co., Sect. "O," Oberlin-Norwalk Rd., 1.28 mi. grading, and paving with monolithic brick; A. J. Balter, Norwalk, $48,672.

Montgomery Co., Sect. "D," Dayton-Chillicothe Rd., 2.63 mi., grading berms and ditches, constructing drainage structures, reshaping present road and paving with bituminous macadam, Walter Huber, Tippecanoe City, $55,127; Billiter & Connell, Dayton, $56,340; W. A. Wroe, 605 Union Bank Bldg., Dayton, $57,039; plain concrete, Williams & Little, Cleveland, $57,665; W. A. Wroe, $59,246; Walter Huber, $61,067.

Ottawa Co., Sects. "J" and "K-3,' Toledo-Elmore Rd., 7.15 mi., grading, constructing bridges and culverts and paving with concrete, Williams & Little, $223,428. Witte Constr. Co., Elmore, $224,778; P. A. McIntyre, New Lexington, $227,458.

Sect. "F," Oak Harbor-Genoa Rd., 1.99 mi., grading and paving with concrete, Barnes & Tobbirt, Rocky Bridge, $54,236; Marsman & Green, Grand Rapids, Mich., $54,920; Muldoon & Bergman, Tippecanoe City, $58,085.

Sandusky Co., Sect. "J," Fremont-Bellevue Rd., 5.76 mi., grading, constructing drainage structures and paving with brick, Modern Constr. Co., Fremont, $333,000; bituminous concrete, Modern Constr. Co., $294,101; bituminous concrete, different type, Modern Constr. Co., $279,000.

Union Co., Sect. "B-1," Marysville-Kenton Rd., 2.88 mi., grading, constructing bridges and culverts and paving with waterbound macadam, C. O. Hurd, Marysville, $41,109; Neff & Rader, Circleville, $41,192; J. C. McCann, 262 Midland Ave., Columbus, and W. M. Gray, Bowling Green, $44,171.

Geauga Co., Sect. "A2," Cleveland-Kent Rd., 94 mi. resurfacing with 3 in. bituminous macadam, J. C. Devine, Alliance, $10,599; Henderson Bros., Chagrin Falls, $10,729.

Lorain Co., Sects. "C-2" and "H," Ashland-Oberlin Rd., 3.29 mi., grading roadway, widening pavement and resurfacing with bituminous macadam, Hart & Kemp, Elyria, $39,095; Elyria Constr. Co., Elyria, $39,634; Highway Constr. Co., Elyria, $41,798.

Ottawa Co., Sect. "D2," Oak-Harbor-Genoa Rd., 3.56 mi., grading and resurfacing with bituminous macadam, Wise Bros. & Berman, Elmore, $32,802; Muldoon & Bergman, Genoa, $33,094; Marsman & Green, Grand Rapids, Mich., $33,510. Noted June 12.

★O., Cleveland—City let contracts to Cleveland Trinidad Co., The Arcade, paving Carnegie Ave., from East 89th to 100th Sts., cost $91,410, Roanoke Ave. from West 30th St. to Broadview Rd., $19,674; Gould & Maybach, 823 East 150th St., McElhatten Ave from East 136th to 140th Sts., $17,979; Roshl Bros., West 25th St. and Clark Ave., Trent Ave. from Fulton Rd. to West 41st St., $22,910, Hodgeson Ave. from Fulton Rd. to West 44th St., $11,271, West 35th St., from Mapleside Ave. to Trowbridge Ave., $37,156; Rieley Bros., 357 The Arcade, East 49th St. from Czar Ave. to Barkwill Ave., $10,020, Independence Rd. from Fleet Ave. to city limits, $16,390, Marsh Ave. from East 93rd to 102nd Sts., $26,576; A. M. Pejsa, 2359 East 93rd St., East 121st St. from Kinsman Rd. to Luke Ave., $27,678; Freshwater Paving Co., 11,712 Detroit Ave., West 58th St. from Bridge to Detroit Aves., $29,213, West 95th St. from Almira to Maywood Aves., $21,453; Baldwin Bros., 4500 Euclid Ave., East 125th St. from Phillips to Castlewood Aves., $11,861, East 119th St. from Kinsman Rd. to Union Ave., $20,783, East 117th St. from Kinsman Rd. to east end, $20,9[illegible] Hamlin Ave. from East Blvd. to East 121st St. $20,856, East 125th St. from Kinsman Rd to Union Ave., $16,372; O. J. [illegible], 751 East 117th St., Bessemer Ave. from East 65th to 75th Sts., $64,696. Noted May [illegible] and 22.

O., Cleveland—City received bids paving (a) North Moreland Blvd. from Shaker Blvd. to Woodland Ave., (b) Livingston Rd. from East 132nd St. to Abell Ave., (c) Ashland Ave. from East 132nd St. to city limits, (d) East 132nd St. from Shaker Blvd. to Griffing Ave., (e) Ripley Ave. from Hampton Rd. to Ashwood Ave., (f) South Moreland Blvd. from Shaker Blvd. to Buckeye Rd., (g) Hampton Rd. from 132nd St to Albion Rd., (h) Albion Ave. from Hampton Ave. to city limits, (i) East 137th St from Livingston Rd. to Abell Ave., (j) South Moreland Blvd. from Shakerheights Blvd. to Drexmore Ave., (k) Southington Rd. from Livingston Rd. to city limits, (l) Ludlow Ave. from East 132nd St. to city limits, (m) Keswick Rd. from Hampton Ave. to city limits, (n) Drexmore Rd. from South Moreland Blvd. to city limits, (o) Corby Ave. from Hampton to Ludlow Rds., (p) Chadbourne Rd. from Drexmore Rd. to city limits, (q) Bechet Rd. from Hampton Rd. to city limits, from Cleveland Trinidad Co., The Arcade, (a) $11,887, (b) $32,036, (c) $31,355, (d) $63,049, (e) $12,359, (f) $34,786, (g) $32,851, (h) $15,153, (i) $13,262, (j) $34,786, (k) $11,669, (l) $27,148, (m) $10,081, (n) $14,134, (o) $10,076, (p) $11,556, (q) $26,447; Gould & Maybach, 823 East 150th St., (a) $14,231, (b) $36,465, (c) $35,327, (d) $71,119, (e) $13,996, (f) $39,678, (g) $54,162, (h) $17,054, (i) $15,090, (j) $39,678, (k) $13,213, (l) $30,640, (m) $11,368, (n) $16,043, (p) $13,220, (q) $30,077; Rieley Bros., 357 The Arcade, (a) $14,987, (b) $34,900, (c) $34,058, (d) $68,429, (e) $13,515, (f) $38,141, (g) $52,384, (h) $17,430, (i) $14,458, (j) $38,141, (k) $12,761, (l) $[illegible]528, (m) $10,952, (n) $15,513, (o) $1[illegible],099, (p) $12,726, (q) $29,089. Noted June 5.

★O., Toledo—City let contract paving Vermaas Ave. from Phillips to Cornelia Aves., to J. H. Horan, 420 Valentine Bldg., cost $24,500; Kingston St. from Navarre Ave. to Earl St., to Russel & Jennison, 2463 Bway., $16,149; Berkley Dr. from Sylvania to Berdan Aves., to Peters Bros., 237 Marion St., $14,264; Burnham Ave from Sylvania to Maple Aves., to McKinney Bros., 371 Spitzer Bldg., $19,600; all rein-con, Noted June 5.

★Ind., Indianapolis—Comrs. Marion Co let contracts to Bergen & Jefferys, Indianapolis, grading and paving 3 mi county highway, 18 ft. wide, involving 31,680 sq.yd. vitr. brick, cost $106,000; and 21st St. from Belt R.R. to Dearborn St., 18 ft. wide, vitr. brick, $23,538.

★Mich., Detroit—City let contract, to Otis Cement Constr. Co., 806 Hammond Bldg., paving Alley No. 1003, cost $7007, No. 1004, $8434, No. 1007, $5458, No. 1014, $892; H Richmond, Penobscot Bldg., No. 1005, $5933; R. J. Powelson & Co., 1577 Iriquois Ave., No. 1006, $5651, No. 1008, $5642, No 1009, $4836, No. 1012, $4847; Lennane & McIlvenna, 809 Union Trust Bldg., No 1010, $1570, No. 1013, $1376; T. E. Currie, 20 McGraw Bldg., No. 1011, $1417 Noted June 5.

★Mich., Detroit—City let contract to Otis Cement Constr. Co. 806 Hammond Bldg. paving Alley No. 1003, cost $7007, No. 1004, 991, cost, $4785, No. 992, $4482, No. 996, $3545, No. 997, $3412, No. 998, $4044, No 999, $4692; Lennane & McIlvenna, 809 Union Trust Bldg., No. 993, $1756, No 995, $1752; Talbot Co., Penobscot Bldg., No 994, $2541, No. 1000, $2958, No. 1002, $2609; R. J. Powelson Co., $1577, Iroquois Ave., No. 1001, $2974. Noted May 15.

★Mich., Detroit—City let contract, to Cleveland Trinidad Paving Co., 2940 Woodward Ave., paving 12th St., cost, $121,970, Sunset Pl., $9596; Detroit Asphalt Paving Co., 20 McGraw Bldg., Weher Ave., $8974, Sargent St., $8017, Pittsburg Ave., $16,220, Lakewood Blvd., $12,120, Fremont Pl., $13,720, Casgrain Ave., $27,259, Tireman Ave., $25,053, Harper Ave., $28,503; W. B. Brady Constr. Co., 1972 Grand River Ave.; Collingwood Ave., $17,053. Noted May 29.

Mich., Detroit—W. T. Dust, comr. parks and blvds., received bids grading and paving 1100 ft. driveways in Roosevelt Park

Streets and Roads (Continued)

and entrance to Michigan Central Ry. Sta., 40-50 ft. wide, from J. Porath, 34 McGraw Bldg., $49,063; R. Porath, 1131 McKinley Ave., $51,711; laying 9103 sq.yd. asphalt surface only, Cleveland Trinidad Paving Co., 2940 Woodward Ave., $15,020; 9103 sq.yd. wearing surface, Dept. Pub. Wks., City Hall, $13,155. Noted June 12.

★Mich., Grosse Pointe—R. H. Erley, village engr., let contract paving Maryland Ave. from Jefferson to Kercheval Aves., Hampton Ave. from Maryland Ave. to westerly village limits and Wayburn Ave. from Fox Creek bridge to Hampton Ave., to Lennane Bros., 809 Union Trust Bldg., Detroit, $36,000. Noted May 15.

★Mich., Highland Park (Detroit P. O.)—City received no bids paving 600 ft. Grand Ave., from Hamilton Blvd. to Lincoln Ave., 30 ft. wide; 2800 ft. Oakland Ave., from alley north of Farrand Ave. to Manchester Ave., 46 ft. wide; 1600 ft. Davison Ave., from Oakland Ave. to easterly city limits, 46 ft. wide; 500 ft. George Ave. from Pilgrim to Puritan Aves., 30 ft. wide, all sheet asphalt on concrete foundation. Work will be done by day labor.

★Mich., Pontiac—City let contract paving Park St., to J. H. Baker & Son, Port Huron, cost, $16,017; Sanderson Ave., to Bartling & Haomes, Pontiac, $14,357.

★Ill., Belvidere—Lake Co. let contract paving 53,760 sq.yd. Belvidere Rd., Sect. G-15d (without cement), to Standard Paving Co., 326 West Madison St., Chicago, $99,610.

Ill., Chicago—Bd. Local Impvts. received bids June 4, paving (a) alley between Harrison and Flournoy Sts., Spaulding and Homan Aves.;
(b) Alley between Van Buren and Congress Sts., Washtenaw and California Aves.;
(c) Alley between Blackhawk and Division Sts., Holt and Dickson Aves.;
(d) Alley between Wabausia and North Aves., and Kedzie and Sawyer Aves.;
(e) Alley between Montrose and Cullom Aves., Ashland Ave. and Paulina St.;
(f) Archer Ave., from Kedzie to Central Park Aves.;
(g) Devon Ave., from Clark St. to Ravenswood Ave.;
(h) Harrison St., from Cicero to Laramie Aves.;
(i) Hayne Ave., from West 47th to West 51st Sts.;
(j) Karlov Ave., from West 12th to West 16th Sts.;
(k) Keating St., from Belmont to Addison Sts.;
(l) Kolin St., from 14th to 16th Sts.;
(m) Lawrence Ave., from Milwaukee to Austin Aves.;
(n) Leavitt St., from Wabausia St. to Milwaukee Ave.;
(o) Longwood Dr., from 114th Pl. to 119th St.;
(p) Morgan St., from West 75th to West 76th Sts.;
(q) Otto St., from Robey St. to Ravenswood Ave.;
(r) South Chicago Ave., from East 87th to East 89th Sts.;
(s) South Park Ave., from East 95th to East 104th Sts.;
(t) West 35th Pl., from Halsted to Morgan Sts.;
(u) South Wabash Ave., 429 ft. extending north and south of East 108th St.;
(v) Windsor Ave., from Milwaukee Ave. to Lavergue St.;
(w) West 18th St., from Central Park Ave. to 1st alley west and alley between West 16th St., Ogden Ave., Central Park and Millard Aves.;
(x) Lafayette Ave., from West 65th to West 69th Sts., West 66th St. from State St. to Wentworth Ave., West 68th St., from Vincennes to Wentworth Aves.;
(y) North Claremont St. from Devon to Granville Aves., Oakley St. from Devon to Granville Aves., Irving St. from Devon to Granville Aves., Rosemont Ave. from West Ave. to Leavitt St., Highland Ave. from Irving to Leavitt Sts., Thom Ave. from Irving to Leavitt Sts.;
(z) Cornelia Ave. from Kildare Ave. to Chicago, Milwaukee & St. Paul R.R. tracks, Roscoe St. from Kedvale Ave. to Chicago, Milwaukee & St. Paul R.R. tracks, Henderson St. from Karlov Ave. to Chicago, Milwaukee & St. Paul R.R. tracks, School St. from Karlov Ave. to Chicago, Milwaukee & St. Paul R.R. tracks, Melrose St. from Karlov Ave. to Chicago, Milwaukee & St. Paul R.R. tracks, Karlov Ave. from School St. to Milwaukee Ave., Kedvale Ave. from Henderson St. to Milwaukee Ave., Keeler Ave. from Belmont St. to Milwaukee Ave., Lowell Ave. from Roscoe to Milwaukee Ave., from J. Dillon & Co., 179 West Washington St.,

(a) $5261, (c) $16,070; Central Paving Co., 179 West Washington St., (a) $5298, (b) $9372, (c) $15,880, (d) $7513, (e) $7281, (n) $5250, (w) $19,647;

Marquette Constr. Co., 133 West Washington St., (a) $5329, (b) $9342, (c) $16,097, (d) $7459, (e) $7328, (g) $19,817;

P. J. O'Brien Co., 29 South La Salle St., (b) $9251, (d) $7567;

Contg. & Material Co., 10 South La Salle St., (e) $7422, (n) $5429, (w) $19,631, (y) $63,361;

Reidy & Callahan, (f) $66,452, (r) $58,115, (s) $80,890;

J. A. Sackley & Co., 133 West Washington St., (f) $67,108, (g) $19,718, (h) $46,545, (m) $101,083, (s) $80,610, (w) $19,926, (y) $62,649;

Smith & Brown, 128 North La Salle St., (f) $67,096, (g) $19,569, (h) $47,303, (m) $100,995;

Ryan Co., 4500 West Division St., (h) $47,208, (m) $99,267, (r) $57,830;

R. F. Conway Co., 133 West Washington St., (i) $34,395, (j) $35,925, (k) $30,806, (n) $5429, (p) $10,226, (q) $14,832, (t) $14,642, (v) $11,888, (x) $59,659, (y) $63,361, (z) $112,187;

Amer. Asphalt Paving Co., 133 West Washington St., (i) $34,637, (j) $35,544, (k) $31,429, (l) $11,533, (o) $39,758, (p) $10,148, (q) $14,812, (t) $14,714, (v) $11,969, (x) $59,261, (z) $112,831;

White Paving Co., 17 North La Salle St., (i) $34,985, (k) $31,373, (o) $41,113, (p) $10,302, (q) $15,033, (t) $15,047, (z) $110,149;

Standard Paving Co., 29 South La Salle St., (j) $35,007, (l) $11,455, (x) $60,390;

F. P. McCormick Co., (l) $11,563, (v) $12,014;

Calumet Teaming & Contg. Co., (r) $57,046, (s) $80,890, (u) $5810;

Farr Bros., 356 West 111th St., (s) $76,378, (u) $5494;

J. A. McGarry Co., 189 West Madison St., (y) $61,381. Noted June 5.

★Ia., Des Moines—Comrs. Polk Co. let contract paving West 23rd St. from Washington to Lincoln Aves., Olive St. from 16th to 20th Sts. and Park St. from 15th to 16th Sts., asphaltic concrete, 40-60 ft. wide, to J. Horrabin & Co., 1422 Walnut St., $3.29 per sq.yd.

★Minn., Austin—Comrs. Mower Co. let contract grading and graveling 27 mi. Federal Aid Project No. 38, State Rd. No. 1, to Boynton & Church, Minneapolis, $106,935. Noted May 22.

★Minn., Cambridge—Comrs. Isanti Co. let contract grading and graveling 5.5 mi. Federal Aid Project No. 41, State Rd. No. 1, to S. J. Grove & Sons, 100 Kasota Bldg., Minneapolis, $0.46 per cu.yd. for excav. and $1.10 per cu.yd. for graveling to 1 mi. haul. Noted May 15.

Minn., Glenwood—Comrs. Pipe Co. received bids grading and graveling 12 mi. Federal Aid Project No. 47, State Rd. No. 2, 24 ft. wide, from H. H. Beal, Glenwood, $69,515; Studer & Manion, Excelsior, $76,200; Groves & Son, 100 Kasota Bldg., Minneapolis, $76,400. Noted May 15.

★Minn., Mahnomen—Comrs. Mahnomen Co. let contract building 4 mi. Federal Aid Project No. 102, State Rd. No. 3 (renumbered 50), to D. W. Daggett, Frazee. $13,691. Noted May 8.

★Minn., Red Wing—Comrs. Goodhue Co. let contract building 5.5 mi. road, to Grant Smith Co., 1505 Pioneer Bldg., St. Paul. $2.04 per sq.yd. Work involves 1200 cu.yd. excav., 55,120 sq.yd. pavement, etc.

★Minn., Warren—Comrs. Marshall Co. let contracts, to Moer, Sollam & Gjovik, Warren, building, grading and graveling 6½ mi. Job No. 1902, State Rd. No. 4, involving 24,407 cu.yd. excav., 3543 cu.yd. overhaul, 1422 cu.yd. hand ditching, etc., cost $9558; to S. G. Ensbak, Warren, grading and graveling Job No. 1904, State Rd. No. 4, $7822; 13 mi. Job No. 1906, State Rd. No. 3, 60,000 cu.yd. grading, 5000 cu.yd. excav., 5 acres clearing and grubbing, etc., $13,335; P. P. Reverson, Warren, Job No. 1807, State Rd. No. 4, $1548.

Minn., Worthington—Comrs. Nobles Co. received bids paving 5.5 mi. and grading and graveling 24 mi. Federal Aid Project No. 58, 18-24 ft. wide, from Johnson & Drake, 905 Plymouth Bldg., Minneapolis, $2.99 for paving, $0.60 for excav.; Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $3.10 paving; Lameroux Bros., Sioux City, Ia., $3.50 paving, $0.47 excav. Noted May 22.

★Neb., Albion—City let contract to Natl. Roofing Co., 627 Paxton Blk., Omaha, paving various streets, 18,000 yd. paving, at $2.88 per yd., 10,000 ft. curb and gutter, $1.20 per ft. Total cost, $63,840.

★Neb., Lincoln—City let contract paving and grading 2500 ft. 22nd, Starr, 30th, Franklin and J Sts., to Abel Constr. Co., 318-19 Terminal Bldg., $19,584.

★Neb., Omaha—Douglas Co. let contracts to Murphy Constr. Co., 204-6 Karbach Blk., repaving 2613 lin.ft. Vinton St. from 13th to 20th Sts., 40 ft. wide, $44,500; paving 1 mi. Martha St. from 10th to 24th Sts., 24 ft. wide, involving 2000 cu.yd. grading, and 12,114 sq.yd. concrete on 6 in. concrete base, $30,558; 1950 lin.ft. Browne St. from 25th Ave. to 30th St., 24 ft. wide, involving 2000 cu.yd. grading and 4742 sq.yd. concrete on 6 in. concrete base, $12,333.

★N. D., Minot—Comrs. Ward Co. let contract building 5.04 mi. Federal Aid Project No. 25, gravel, to Minot Constr. Co., Minot, $31,513. Noted May 15.

★Wyoming — State Highway Comrs., Cheyenne, let contracts grading and graveling 11.27 mi. Hat Creek-Warren Rd., Niobrara Co., to W. F. Dunn, Casper, cost $20,948; 26.87 mi. Laramie-North Park Rd. between Laramie and Woods Landing, Albany Co., to Cook & O'Brien Constr. Co., Kansas City, Mo. $122,289.

★Mont., Hardin—City let contract paving Custer, Center and Cheyenne Aves., to S. Birch & Son, 211 Front St., Fargo, N. D. About $101,000. Noted May 15.

★Ark., Harrisburg—Comrs. Ozark Trail Rd. Impvt. Dist., Poinsett Co., Marked Tree, let contract, to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., building 16 mi. earth embankment, involving 21 acres clearing at $40 per acre, 36 acres clearing and grubbing at $200 per acre, 227,200 cu. yd. earth excav., $0.45 per cu.yd., 5000 cu.yd. ditch excav., $0.30 per cu.yd., 90 cu.yd. plain Class "B" concrete $24 per cu.yd. 1340 lin.ft. 18 in. and 450 lin.ft. 24 in. corrugated metal pipe, $2.25 and $3.00 per lin.ft. respectively. Total cost, $118,305. Noted May 8.

★Ark., Osceola—Comrs. Rd. Impvt. Dist. No. 5, Mississippi Co., let contract to J. R. Drace, Main St., Deckerville, grading 45 mi. earth road, 22 ft. crown, involving 136 acres clearing and grubbing at $25 and $175 per acre; 140,000 cu.yd. excav. at $0.40 per cu.yd.; 1530 lin.ft. 18 in., 480 lin. ft. 24 in. and 100 ft. 36 in. concrete pipe at $1.50, $2.50 and $5.00 per lin.ft.; 1530 lin.ft. 18 in., 480 lin.ft. 24 in., 100 lin.ft. 36 in. vitr. pipe at $1.50, $2.50 and $5.00 per lin. ft.; 1530 lin.ft. 18 in., 480 lin.ft. 24 in. and 100 lin.ft. 36 in. corrugated pipe at $1.50, $2.50 and $5.00 per lin.ft., 70 cu.yd. concrete at $25 per cu.yd. Noted May 22.

★Ariz., Tombstone—Comrs. Cochise Co. let contract grading 16 mi. Douglas-East Highway to R. Mackey, Johnson.

★Wash., Ellensburg—Comrs. Kittitas Co. let contract building 2.4 mi. Permanent Highway No. 8, 26 ft. wide, involving 12,352 cu.yd. grading, to Anderson & Hutter, Cle Elum. About $10,400.

★Wash., Seattle—Comrs. King Co. let contract grading and paving 4.5 mi. Kent-Auburn Rd., concrete, 20 ft. wide, to Galtz & Brennan, Seaboard Bldg., $117,500. Noted Bay 15.

Wash., Vancouver—Comrs. Clarke Co. received bids June 7, building 6½ mi. Sara-Ridgefield Rd. from Permanent Highway No. 6 and Pacific Junction to Fruit Valley-Sara Bd., from Warren Constr. Co., Journal Bldg., Portland, gravel bitulithic, at $2.47 per yd., total cost $152,183; United Contg. Co., Northwest Bank Bldg., Portland, standard bitulithic at $2.49 per yd., $156,644. Noted May 29.

★Oregon—State Highway Comn., Portland, let contracts grading and macadamizing 12.3 mi. Arlington-Morrow Co. Line Rd., Gilliam Co., 16 ft. wide, involving 25,000 cu.yd. rock surfacing, 88,000 cu.yd. mixed excav., to M. J. Conley, Portland, $179,570; 6.2 mi. Newberg-West Dayton Sect. of West Side Highway, Yamhill Co., 12,400 cu.yd. rock and 27,000 cu.yd. earth excav., to E. E. Cummings, Portland, r.o.b. gravel and concrete pipe, $60,333; 6.7 mi. Roseburg-Dillard Rd., 7500 cu.yd. rock surfacing, 52,000 cu.yd. excav., to Logan & Colby, Glendale, broken stone and concrete pipe, $90,753; 7.2 mi. Jacques Pl.-Johns Pl. Rd., 11,200 cu.yd. rock surfacing, 28,000 cu.yd. excav., to Joplin & Eldon, Gasco Bldg., r.o.b. gravel and iron pipe, $70,810; grading and paving, 7.3 mi.

Streets and Roads (Continued)

Oakland-Wilbur Rd., 26,000 cu.yd. excav., to Clarke & Henry, Portland, bitulithic E, $204,204; 2.1 mi. The Dalles-Chenowith Sect. of Columbia River Highway, Wasco Co., 8000 cu.yd. excav., to United Constr. Co., Northwest Bank Bldg., bitulithic E, concrete pipe, $56,613; 1.5 mi. road on Benton Co. line, to O. Huber, Sherlock Bldg., Portland, bitulithic F, $31,635; paving 11.2 mi. Rainier-Catskanie Sect. Columbia River Highway, Columbia Co., to Warren Constr. Co., Journal Bldg., bitulithic E, $195,812; also grading 1.75 mi. Ruthton Hill-Hood River Sect. Columbia River Highway, Hood River, 12,000 cu.yd. excav., and 22.3 mi. Cascade Locks-Hood River Rd., to G. E. Kibbe, Portland, concrete pipe, $21,200, and bitulithic E concrete base and shoulder, $423,670, respectively.

★**Oregon**—State Highway Comn., Portland, let contracts, to Warren Constr. Co., Journal Bldg., Portland, paving 4.9 mi. Wolf Creek-Grave Creek Rd., Josephine Co., bitulithic E, $105,528, 20 mi. Deer Island-Rainier Rd., 12 ft. wide, asphaltic concrete, $353,319, 5 mi. Hemlock-Beaver Rd., bitulithic E, $109,043, 8.3 mi. from Richreall to Independence via Monmouth, bitulithic E, $204,122; to Pirham, Brown, Dean & Hague, 14 mi. Marshfield-Coquille Rd., Coos Co., concrete No. 2, $318,781; to A. D. Kern, 7 mi. road from Jefferson north, Marion Co., bitulithic E, $133,008; to L. O. Herrold, grading 14.2 mi. Scappoose-Deer Island Rd., Columbia Co., involving 70,000 cu.yd. excav., $68,581; to Joplin & Eldon, Gasco Bldg., Portland, 4.5 mi. Stage Rd. Pass to Wolf Creek, Josephine Co., 38,000 cu.yd. excav., $38,197; to J. H. Hawley & Co., Divide, 1.2 mi. road Divide to Douglas Co. line, Lane Co., 9500 cu.yd. excav., $11,145; to Clarke & Henry Constr. Co., 38 South Sutter St., Stockton, Cal., 8.9 mi. Central Point-Gold Hill Rd., bitulithic D, $231,690; to J. A. Hoskins, Baker, grading and graveling 18.75 mi. Baker-Middle Bridge Rd., 78,000 cu.yd. excav., 3500 cu.yd. gravel surfacing, $80,723. Noted Apr. 17.

★**Ore., Astoria**—City let contracts to Miller & Bauer, Panama Bldg., Portland, improving 4th St. from Spokane, Portland & Seattle R. R. right of way to 4th St., cost, $7218, from Astor St. to Spokane, Portland & Seattle R.R. right of way, $8338, 16th St. from Franklin to Duane Sts., $5647.

★**Ore., Astoria**—City let contract paving Jerome St., to J. Slotti, Astoria, $48,840. Work involves 7640 sq.yd. mixed concrete, 3810 lin.ft. concrete curbing, 5240 sq.ft. concrete sidewalk, 5230 cu.yd. earth excav., etc.

★**Ore., Marshfield**—City let contract paving North Bway. and 1 block of Park Ave., to Scandia Co., $38,122. Noted May 15.

Ore., Portland—City received bids June 4, improving sections of (a) Leland St. and Dekum Ave., (b) East Sherman St. from Stratford-Sydney Addition to 34th St., (c) East 11th St. from East Davis to Flanders Sts., from S. Simonsen, (a) asphaltic concrete No. 1 on crushed rock base in roadway, $1.80 per sq.yd., concrete No. 1 in track, $2.20 per sq.yd., total cost, $22,600; (b) asphaltic concrete No. 1 on crushed rock base, $1.90 per sq.yd., $1875; Warren Constr. Co., Journal Bldg., (a) asphaltic concrete No. 1 on crushed rock base, $1.90, concrete No. 1 in track, $2.00, $22,257, (c) asphaltic concrete No. 1, redress, $1.30, $2916; Cochran Bros., (a) concrete No. 1 in roadway, $2.05, concrete No. 1 in track, $2.05, $23,512, (b) concrete pavement No. 1, $2.00, $2026.

Ore., Portland—City received bids June 4, improving (a) East 51st St. from Sandy Blvd. to Fremont St., (b) East 33rd St. from East Glisan to Hoyt Sts., (c) Boise St. from East 39th to 42nd Sts., (1) concrete No. 1, (2) asphaltic concrete No. 1 on crushed rock base, (3) macadam, from Cochran Bros., (a1) $2.15 per sq.yd., total cost, $12,127; Warren Constr. Co., Journal Bldg., (a2) $1.90, $10,735, (b2) $1.94, $1789; S. Simonsen, (a2) $1.80, $10,343, (b2) $1.80, $1689; Star Sand Co., (c3) $4733. Noted June 5.

California—State Highway Comn., 515 Forum Bldg., Sacramento, received bids building Sect. D, Route 10, Div. 6, Federal Aid Project No. 11, Fresno Co., from J. G. Donovan, 2202 South Westmoreland St., Los Angeles, $128,997; W. A. Dontanville, Arroyo Grande, $138,467; Palmer & McBryde, Hooker & Lent Bldg., San Francisco, $148,534; Sect. F, Route 2, Div. 5, Federal Aid Project No. 15, Monterey Co., Healy-Tibbitts Constr. Co., 9 Main St., San Francisco, $234,317; Clinton Constr. Co. of California, 357 Pine St., San Francisco, $241,359; Cahill-Vensario Co., San Francisco, $242,872; Sect. A, Route 18, Div. 6, Federal Aid Project No. 12, Merced Co., J. E. Johnston, Tracy, $140,202; J. E. Lee, Tulare, $142,750; White & Gaskill, Long Beach, $147,960. Noted June 5.

★**Cal., Marysville**—City let contract improving B, 5th, 6th, D and 12th Sts., to Federal Constr. Co., Call Bldg., San Francisco, $83,779. Plans include concrete paving, cement curbs and gutters and concrete and galvanized iron culverts.

★**Cal., San Diego**—City let contract improving Jackdaw and Hunter Sts. and Avalon Ave., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $32,763. Noted June 12.

★**Cal., Santa Barbara**—City let contract improving West Montecito St. and Cliff Dr. to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, about $61,009. Noted May 29.

★**Ont., Niagara Falls**—City Council let contract paving 1¼ mi. River Rd. connecting Fort Erie, with Niagara on Lake, to Standard Paving Co., Central Chambers, Ottawa, $88,000.

★**Ont., Ottawa**—Bd. Control let contract repaving Bank St. subway, asphalt and wood block, to O'Learys Ltd., Rideau St., $34,048. Noted Feb. 13.

★**Ont., Pickering**—Dept. Highways, Toronto, rejected bids building highway from westerly limit of here, to Whitby. Work will be done by day labor at rate of $18,000 per mi. for waterbound macadam, $23,000 per mi. bituminous macadam, $28,000 per mi. cement concrete and $35,000 per mi. brick. Noted Apr. 17.

Railways

PROPOSED WORK

New Jersey—See "Miscellaneous" under Rahway.

West Virginia—Morgantown & Wheeling Ry., Morgantown, receives bids about July 1, extending line from Morgantown to Waynesburg, Pa., and rebuilding bridge at Barker. About $150,000. R. D. Hennen, Morgantown, ch. engr.

North Dakota—Dickinson & South Western Ry., Dickinson, plans to build 70 mi. line from Dickinson to Bierman, through Slope and Stark Counties. About $200,000.

North Dakota—Great Northern Ry., St. Paul, Minn., having surveys made for 2 mi. spur tracks from Noonan to mines southeast of city. A. H. Hogeland, ch. engr.

Texas—Atchison, Topeka & Santa Fe R. R. having preliminary plans prepared building extension to line from Plainville to Ft. Worth, 300 mi. F. M. Bisbee, Amarillo, ch. engr.

Oregon—See "Industrial Works" under Glenbrook.

Ontario—City of St. Thomas authorized M. Ferguson, city engr., to repair and overhaul street railway system, including new trackage, rebuilding cars, etc. About $42,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract-

★**Tennessee—Morristown** — Sneedville .& Kyle Ford Electric R. R., Charleston, will build 49.5 mi. railway and 4000 hp. hydro-electric power plant, including dam, tunnel, etc. About $500,000. Work will be done by day labor.

★**California**—Bd. Pub. Wks., San Francisco let contract relocating railway tracks from Franklin and Union Sts. to Van Ness Ave., to Healy-Tibbitts Constr. Co., 9 Main St., San Francisco, $23,274; for poles and wire for project, to Eccles & Smith, 71 1st St., San Francisco, $1424.

Excavation and Dredging

PROPOSED WORK

Miss., Macon—Draining—Noxubee Co. D. D. No. 1, recently organized, plans to drain Noxubee River swamp consisting of 50,000 acres of land. Address A. T. Dent, Macon.

Mich., Detroit—Excavation—See "Streets & Roads."

BIDS DESIRED

Fla., Sanford—Ditches—Until July 7, by Comr. Seminole Co., building 9.18 mi. ditches involving 58,660 cu.yd. excav. Former bids rejected. F. F. Williams, Sanford, engr. Noted May 22.

La., Krotz Springs—Ditches—See "Streets and Roads."

Minn., Bemidji—Excavation—See "Streets and Roads."

Minn., Duluth—Excavation—Until June 23, by J. A. Farrell, city comr., grading 4050 ft. 8th and 9th Sts. from 14th Ave. E., to Woodland Ave., 42 ft. wide, for approaches to Chester Creek Bridge. About $18,453. Work involves 14,300 cu.yd. earth excav.

Minn., Redwood Falls—Ditch—Until June 27, by Comrs. Redwood Co., building Ditch No. 49, Sect. 1, involving 147,202 cu. yd. excav., cost, $19,136; Sect. 2, 133,123 cu.yd. excav., $17,293; Sect. 3, 25,835 ft. 6-28 in. tile, 6 inlets and 1 bulkhead containing 5 cu.yd. concrete, $16,700. L. Myron, Redwood Falls, engr.

Ore., Salem—Ditch—See "Waterworks."

Cal., Sacramento — Excavation — See "Streets and Roads" under California.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pa., New Castle**—Excavation—City let contract for the change, alteration and relocation of course of Channel of Neshannock Creek; also building retaining wall along right bank, to Woods & Golder Constr. Co., Mechanic St., $59,906. Noted May 22.

★**Ga., Atlanta**—See "Industrial Works."

Miss., Marks—Dredging—Comrs. Newsum Lake D. D. received bids for 10 mi. levees and 12 mi. ditch work, in Quitman and Tallahatchie Counties, from McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $.185 per cu.yd. for levees and ditches; Kohler Contg. Co., 608 Globe Bldg., Minneapolis, $.145 cu.yd. for ditches only. Noted May 22.

★**Minn., Gaylord**—Ditch—Comrs. Sibley Co. let contract for labor building Judicial Ditch No. 7 in Sibley, Nicollet and Renville Counties, to E. D. Barr, Clements, $11.74 per cu.yd.; tile, to W. H. Guigsberg, Gaylord, $119,149. Noted May 15.

★**Neb., Tekamah** — Dredging — Burt-Washington D. D. let contract cleaning out 7 mi. main ditches and 8 mi. laterals, involving 330,000 cu.yd. excav., to Callahan-Walker Dredging Co., 410 Bee Bldg., Omaha, $55,800.

★**Ore., Portland** — Excavation — State Highway Comn., Portland, let contract removing slide from Myrtle Creek to Dillard, Douglas Co., to H. J. Hildeburn, Roseburg, $19,550. Work involves 30,000 cu.yd. excav.

Industrial Works

PROPOSED WORKS

Mass., Westfield—Natl. Pulp Corp., 505 5th Ave., New York City, plans to build plant along Westfield River. About $200,000.

R. I., Providence—A. H. Carruthers, Orms St., plans to build 2 or 3 story, 80 x 90 ft. brick addition to garage and service station, rein.-con. flooring, concrete foundation. About $30,000. Page & Page, 87 Weybosset St., archts.

Conn., Bridgeport—City having plans prepared by Davis & Dane, archts., 1024 Main St., for garage on Washington Ave. About $150,000. J. A. McElroy, city engr. Noted May 22.

Conn., Bristol — Station — New York, New Haven & Hartford R.R., New Haven, plans to build 2 story passenger station on North Main St., here. About $175,000. E. Gagel, New Haven, ch. engr.

Conn., Hartford—Automatic Refrigerating Co., 89 Willow St., plans to alter and build brick, concrete and steel addition to boiler house, rein.-con. flooring, concrete foundation, on Capital Ave. Ext. About $30,000.

Conn., Stamford—Carlisle-Cord-Tire Co. soon lets contract building 1 story, 150 x 250 ft. concrete and steel factory, rein.-con. flooring, concrete foundation, on Fairfield Ave. About $100,000. Noted Apr. 17 under "Bridgeport."

Conn., Winnipauk (Norwalk P. O.)—Norwalk Tire & Rubber Co. plans to build new rein.-con. addition to factory. About $100,000.

N. Y., Brooklyn—Koch & Wagner, archts., 42 Court St., receive bids about June 20, building 3 story, 30 x 40 ft. storage plant and 4 story, 70 x 180 ft. factory, brick and steel, rein.-con. flooring, concrete foundation, on 19th St. and 3rd Ave., for R. H. Comey & Co., 73 19th St. About $50,000.

Industrial Works (Continued)

N. Y., Brooklyn—L. Nodica, 250 Troutman St., having plans prepared by C. P. Cannella, archt., 1163 Herkimer St., for 1 story, 50 x 90 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Troutman St. and Knickerbocker Ave. About $35,000.

N. Y., Dansville—Power Specialty Co., Cumminsville St., having plans prepared for 2 story, brick addition to plant. About $25,000.

N. Y., Edmeston—Phoenix Cheese Co., Potsdam, had plans prepared by C. E. Eaton, engr., Sherman Bldg., Watertown, for cheese factory and milk station here. About $100,000. Address B. N. Snell, Potsdam, pres.

N. Y., Middletown—Dundee Textile Co., Clifton, N. J., had plans prepared by D. Seabury, engr., 12 East Ave., Pawtucket, R. I., for 1 story, 125 x 130 ft. and 25 x 30 ft. brick and mill construction mill, here. About $35,000.

N. Y., New York—D. Meenan, 1966 Bway., having plans prepared by J. C. Cocker, archt., 2017 5th Ave., for 6 story, 90 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 430-436 West 55th St. About $200,000.

N. Y., New York—New York Edison Co., Irving Pl. and 15th St., having plans prepared by W. Whitehill, archt., 32 Union Sq., for 3 story, 45 x 75 ft. brick and steel transformer station, rein.-con. flooring, concrete foundation, at 421-423 East 6th St. About $60,000.

N. Y., Syracuse—Ho-De-No-Sau-Nee Trading Co., Inc., recently incorporated with $350,000 capital stock, purchased site on Wolf and South West Sts. and plans to alter and build additions to present plant, cost $60,000; also build new side tracks from Lackawanna R.R. and new steel bridge over Onondaga Creek. Address J. R. Wertman, Syracuse, dir.

N. J., Rahway—See "Miscellaneous."

Pa., Chester—Aberfoyle Mfg. Co., 4th St. and Morton Ave., plans to build 3 story, 50 x 121 ft. addition to plant.

★**Pa., Phila.**—A. Spangler, Howard and Thompson Sts., let contract building 1 story, 109 x 500 ft. concrete and brick factory, to J. S. Rogers, Drexel Bldg. About $25,000.

Pa., Phila.—Vigogne Mills, Unity and Oakland Sts., having plans prepared by M. W. Easly, engr., 1420 Chestnut St., building 3 story, 65 x 250 ft. factory, brick and slow burning construction.

Pa., Imperial—Imperial Cooperative Assn. having plans prepared by J. H. Philips, archt., Fulton Bldg., Pittsburgh, for 2 story, 50 x 100 ft. warehouse, stone foundation.

Pa., South Bethlehem—J. Preletz, East 4th St., plans to build 3 story, 72 x 80 ft., concrete warehouse and garage. D. J. Pappans, 1401 South 13th St., archt.

Md., Baltimore—Williams & Wilkins Co., 2419 Greenmount Ave., plans to build 2 story, 80 x 110 ft., rein.-con., brick and stone, printing plant, concrete foundation, on Guilford Ave. near Chase St. About $75,000. H. F. Doelman, 507 North Charles St., engr., and J. E. Lafferty, 11 East Pleasant St., consult. archt.

Md., Baltimore—L. Rothchild, archt., 1225 Sanson St., Phila., receives bids about June 21, building 4 story, 40 x 110 ft., steel service and sales building on North Ave. and Oak St., for L. M. Reinhart, here.

Va., Richmond—Seventh St. Garage Co., 30 North 9th St., plans to build 3 story, 135 x 135 ft., rein.-con., steel and brick garage, granolithic flooring, on 7th and Leigh Sts. About $75,000. Committee from firm will close contracts for work without formal advertising and letting.

W. Va., Huntington—J. M. McCoach Co., 7th Ave. and 13th St., receives bids in fall building 4 story, brick, steel and concrete addition to ice and cold storage plant, to increase ice capacity from 120 to 225 tons daily and coal storage from 30,000 to 100,000 bbls. daily. About $200,000. Architect not selected.

Fla., Winter Haven—Winter Haven Citrus Growers Assn. soon receives bids building packing plant. About $75,000. Engineer or architect not selected.

O., Cleveland—Hudson Stuyvesant Co., 1923 Prospect Ave., had plans prepared for 1 story, 63 x 179 ft., rein.-con., steel and brick factory and office addition. About $40,000.

O., Dayton—Edwards Specialty Co., 1133 South Brown St., plans to build 2 story, 60 x 125 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, on Main and Bruen Sts. About $50,000. Frank-Hill-Smith Co., Inc., West 3rd St., Dayton, archts. and engrs.

O., Springfield—P. Crabill, c/o Central Brass Co., Jefferson and Ziegler Sts., plans to build 3 story, 50 x 180 ft., rein.-con. and brick garage and salesroom, rein.-con. flooring, concrete foundation, on West High St. About $65,000. R. Gable, Springfield, archt.

O., Springfield—Crowell Publishing Co., High and Wittenberg Sts., plans to build 5-story, 66 x 180 ft., rein.-con., brick and steel printing plant, rein.-con. flooring, concrete foundation, on West High St. About $100,000. Frank-Hill-Smith Co., Inc., West 3rd St., Dayton, archts. and engrs.

O., Springfield—Excelsior Drill Co., East Columbia St., plans to build factory. About $50,000. Architect not selected.

Mich., Detroit—Columbia Motor Car Co., 1256 Jefferson Ave., E., plans to build brick and steel factory to contain 150,000 sq.ft. floor space on Boyd and Fort St., E. A. T. O'Connor, secy.

Mich., Detroit—Liberty Starter Co., West Fort St., plans to build 4 story, rein.-con., brick and steel factory, rein.-con. flooring, concrete foundation, on Fort and 15th Sts. Mildner & Eisen, 924 Hammond Bldg., archts.

Mich., Escanaba—Escanaba Wood Fiber Co. plans to build 3 story paper mill. About $750,000. Engineer not selected.

Ill., East St. Louis—O'Neil Lumber Co., Kingshighway and Swan Aves., St. Louis, Mo., purchased site here along Terminal R. R. tracks from Lincoln to Collinsville Rds., and plans to build lumber mill, warehouses, switches and office building. About $75,000.

Ill., Woodriver—White Star Refining Co., Avery St. and Grand Trunk Ry., Detroit, Mich., having plans prepared for refinery and pipe line from here to Mississippi River. About $300,000.

Wis., Beaver Dam—E. Dode plans to build 2 story, 60 x 150 ft. brick garage. About $25,000.

Wis., Fond du Lac—Nunn, Bush & Weldon Shoe Co., 1110 5th St., Milwaukee, having plans prepared by H. J. Esser, archt., Camp Bldg., Milwaukee, for 3 story, 50 x 340 ft. brick, rein.-con. and steel factory, rein.-con. flooring, concrete foundation, on Superior St., here. About $200,000.

Wis., Milwaukee—Chevrolet Motor Co., Plankinton Arcade, plans to build 2 story rein.-con. and brick garage and show room, rein.-con. flooring, concrete foundation. About $100,000. Architect not selected.

Wis., Milwaukee—Inglis Mfg. Co., c/o A. Wiggins, 283 5th St., plans to build 3 story rein.-con. and brick factory, rein.-con. flooring, concrete foundation. About $125,000. Private plans.

Wis., Milwaukee—Jaeger Baking Co., Central Ave., plans to build 3 story, 100 x 100 ft. brick and steel bakery, rein.-con. flooring, concrete foundation. About $100,000. Work will be done by day labor under supervision of L. S. Beardsley, archt., 40 East 32nd St., New York City.

Wis., Milwaukee—Janke Shoe Mfg. Co., 762 32nd St., having plans prepared by G. A. Dick, archt., 811 State St., for 3 story, 35 x 120 ft. rein.-con. and brick factory, rein.-con. flooring, concrete foundation, at 762 32nd St. About $25,000. Noted Jan. 30.

Wis., Milwaukee—Sivyer Steel Casting Co., 37th Ave., plans to build 2 story addition to plant in Lake Twp. About $45,000.

Wis., Milwaukee—Zucker & Weinshel, 785 5th St., soon lets contract building 2 story, 40 x 130 ft. brick, rein.-con. and steel factory, rein.-con. flooring, concrete foundation. About $40,000. Leiser & Holst, Brumder Bldg., archts.

Wis., Plymouth—C. Kade Fixture Co., c/o C. Kade, plans to build 3 story, 60 x 110 ft., brick and rein.-con. factory, brick foundation, on Pleasant St. About $60,000. Architect not selected.

Wis., Sheboygan—R. R. Jahn, archt., Betsy Ross Bldg., soon lets contract building 2 story, 60 x 90 ft., brick, rein.-con. and steel garage on Center Ave., for Rummelle Auto Co., 706 Center Ave. About $52,000.

Wis., Sheboygan—Natl. Box & Novelty Co., 8th St., having plans prepared by Juul & Smith, archts., Imig. Bldg., for 4 story, 60 x 150 ft. brick, rein.-con. and steel factory, brick foundation, on 14th St. and Kentucky Ave. About $55,000. E. A. Juul, Imig. Bldg., engr. Noted June 12.

Wis., Sheboygan—Sells Bros. Co., c/o C. Sell, 901-907 North 8th St., plans to build 2 story, 40 x 90 ft. brick, rein.-con. and steel garage, rein.con. flooring, brick foundation, on 8th and Niagara Sts. R. R. Jahn, Betsy Ross Bldg., archt.

Wis., Vesper—J. B. Faas, Sheboygan, plans to build 2 story, 60 x 140 ft. rein.-con. and brick factory, concrete foundation, on Main St. About $30,000. Architect not selected.

Ia., Des Moines—Union Impvt. Trust Co., 607 Mulberry St., plans to build 2 story fireproof garage. About $200,000.

Minn., Austin—Bd. Educ. having plans prepared by F. Tustison, archt., 355 Auditorium Bldg., Minneapolis, building central boiler plant and installing mechanical equipment for junior and senior high school, old and new buildings. About $150,000.

Minn., Hinckley—City voted $30,000 bonds to build electric light plant and water-works. A. J. Hunt, city clk.

Minn., Minneapolis—See "Buildings."

Minn., Wells—City having plans prepared by C. L. Pillsbury Co., engrs., Metropolitan Bldg., Minneapolis, building electric power plant and distribution system and concrete reservoir. About $40,000. Noted May 15.

Kan., Topeka—J. C. Holland & Son, archts., 719 Mills Bldg., prepared plans for 2 story, 100 x 151 ft., rein.-con. and brick garage, rein.-con. flooring, concrete foundation. About $60,000. Owner's name withheld.

Kan., Wichita—E. W. Lewis soon receives bids building 5 story, 50 x 140 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on North Lawrence St. About $60,000. Schuler & Burlie, Wichita, archts.

N. D., Minot—Grams Bros. plan to build 50 x 140 ft. brick bakery. About $50,000. G. H. Bergenhagen, Minot, archt.

Mont. Great Falls—State Bd. Examiners, Helena, receives bids about July 1, building terminal grain elevator. About $230,000. J. Stewart Eng. Co., 110 South Dearborn St., Chicago, archts. Noted Feb. 27.

Mo., St. Louis—P. J. Bradshaw, archt., International Life Bldg., soon receives bids building 3 story, 150 x 250 ft., rein.-con., steel and brick machine shops and salesroom, rein.-con. flooring, concrete foundation, on 19th and Locust Sts., for Washington University Corp., Skinker Rd. and Lindell St. About $250,000. Weber Motor Car Co., 221-7 Locust St., and Weber Implement & Automobile Co., 1900 Locust St., lessees.

Mo., St. Louis—E. J. Hess, archt., 3226 Magnolia Ave., soon lets contract building 5 story, 54 x 135 ft., rein.-con., steel and brick factory, rein.-con. flooring, concrete foundation, at 1409-11 Washington Ave., for Golluber Millinery Co., 1329 Washington Ave.

Okla., Tahlequah—City voted $200,000 bonds for purchasing site, building and installing electric light plant, etc. E. M. Covel, clk.

Okla., Tulsa—Armour & Co., Union Stock Yards, Chicago, Ill., and 120 Bway., New York City, had plans prepared for 3 story, 75 x 175 ft. rein.-con. and steel packing plant, rein.-con. flooring, concrete foundation. About $200,000.

Industrial Works (Continued)

Idaho, Nampa—Wilson Orchard Co. plans to build 60 x 100 ft. packing house, capactiy 1600 boxes and 2 loading platforms, one 16 x 100 ft. and one 16 x 60 ft. Architect not selected.

Ariz., Mesa—City election July 8 to vote on $35,000 bonds to build extensions to electric light system.

Wash., Montesano—Hoquiam Sash & Door Co., Hoquiam, plans to rebuild Montesano plant recently destroyed by fire. Cost $200,000 of which ⅓ will be borne by company, balance already subscribed by Montesano citizens.

Wash., Wenatchee—New Phez Co. and L. Lachmund, 925 Court St., Salem, Ore., plan to build pastureized cider and preserving plant on site of H. E. Farwell property, consisting of 40 x 100 ft. concrete building; same to be replaced later by 200 x 400 ft. structure. P. G. Schmidt, Wenatchee, pres. Architect not selected.

Ore., Glenbrook—Alsea Lumber Co., Eugene, plans to build 150,000 ft. capacity sawmill at terminus of Alpine branch of west line of Spokane, Portland & Seattle R. R., also build logging railway from sawmill to their timber tract in Coast Range Mountains. E. B. Kingman, pres.

Ore., Klamath Falls—Klamath Heating Co. plans to build central heating plant; mill and sawdust refuse to be used for fuel. About $40,000; funds to be supplied by local capitalists.

Ore., Marshfield—See "Miscellaneous."

Ore., Salem — State Highway Comn., Portland, soon lets contract building 2 story, 60 x 80 ft. timber garage and 1 story, 70 x 80 ft. timber warehouse, at State Penitentiary brick yards here. H. Nunn, c/o State Highway Dept., Salem, engr.

Cal., Calexico—City defeated $325,000 bond issue to build electric light and gas plants. Noted May 1.

Cal., Coburn—Switzer & Meyerberg having plans prepared by F. R. Spangler, archt., King City, for 2 story, rein.-con. creamery, concrete foundation. About $45,000.

Cal., Long Beach—Riblet Carburetor Co., 319 East Bway., plans to build factory. About $25,000. E. S. Beggs, mgr.

Cal., San Francisco—N. Capro and A. Podesta, c/o L. Mastropasqua, archt., 580 Washington St., having plans prepared for 2 story, 67 x 136 ft., rein.-con. garage and shop, rein.-con. flooring, concrete foundation, on Vallejo St. near Powell St. About $25,000.

Que., Roberval—Municipal Council plans to build extension to hydroelectric plant. About $25,000. J. F. Grenon, Chicoutimi, engr.

Que., Val Jalbert—Chicoutimi Paper & Pulp Co., Chicoutimi, having plans prepared by A. Lamontagne, archt., Chicoutimi, building brick and concrete factory, concrete foundation. About $75,000.

Ont., Bancroft—Canada Marble Co., plans to build marble plant. About $500,000. Architect not selected.

Ont., Parry Sound—J. D. Broughton, twp. clk. & treas., soon lets contract building power plant, (1) general works, including power dam, intake, conduit, generating station and tailrace; (2) mill lake dam, (3) roadway fill; (4) hydraulic equipment; (5) electrical equipment. About $200,000. C. H. & P. H. Mitchell, Bank of Hamilton Bldg., Toronto, engrs.

Ont., Toronto—Cowan Co., Ltd., 72 Sterling Rd., having plans prepared by B. H. Prack, archt., Lumsden Bldg., for 5 story, steel and brick addition to present plant. About $40,000.

Ont., Weston—K and S Canadian Tire & Rubber Co. having plans prepared by Hynes, Feldman & Watson, archts., McKinnon Bldg., Toronto, building 1 story, brick and steel factory. About $80,000.

B. C., New Westminster—Canadian Western Cordage Co., recently organized, purchased site on banks of Fraser River and plans to build plant for manufacture of rope and twine. Cost, including machinery, $250,000.

BIDS DESIRED

N. Y., Flushing—Until July 15, by E. S. Walsh, supt. pub. wks., Capitol, Albany, building barge canal terminal and timber freighthouse here. Contr. 43; advertised in this issue.

N. Y., Long Island City—Until June 21, by Ballinger & Perrott, archts. and engrs., 47 West 34th St., for 4 story, 40 x 110 ft. rein.-con. and steel addition to factory, rein.-con. flooring, concrete foundation, on Van Dam St. and Borden Ave. here., for Patterson-Sargent Co., 8 Jay St., New York City. About $200,000.

N. Y., New York—Until June 21, A. G. Koenig, archt. and engr., 405 Lexington Ave., converting 3 story, 62 x 84 ft. rein.-con. and steel brewery into ice plant, rein-con. flooring, concrete foundation, on 169th St. and 3rd Ave., for J. Eichler Brewing Co., 3582 3rd Ave. About $37,000. Noted June 5.

N. Y., New York—Until June 21, by C. Kreymborg, archt. and engr., 163rd St. and Park Ave., building 1 story, 100 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Bush Ave. near 177th St., for Finkel Umbrella Frame Co., 2534 East 177th St. About $75,000.

N. Y., Potsdam—Until June 26, by T. E. Finegan, deputy comr. educ., Education Bldg., Albany, building 54 x 64 ft. steel boiler house, 45 ft. high, concrete walls, etc. About $65,000. L. F. Pilcher, Capitol, Albany, state archt.

Ill., Chicago—F. W. Perkins, archt., 7524 Stewart Ave., receiving bids for 2 story, 50 x 190 ft. brick and timber service building, brick foundation, at 2440 Michigan Ave., for Marion Motor Co., 2450 South Michigan Ave. About $60,000.

Wis., Park Falls—Until June 20, by E. Vincent, building 2 story, 50 x 120 ft. brick and tile garage and auto sales room, rein.-con. flooring, concrete foundation, on 9th St. About $60,000. R. A. Messmer & Bros., Majestic Bldg., Milwaukee, archts.

Wis., Sheboygan—Until June 20, by North Star Rubber Co., Michigan Ave., building 2 story, 60 x 90 ft. brick, rein.-con. and steel factory, concrete foundation, at 816-20 Michigan Ave. About $35,000. Noted June 12.

Minn., Hastings—Until July 1, by State Bd. Control, Capital, St. Paul, building 1 story, 45 x 140 ft., rein.-con. and brick power plant. About $150,000. C. L. Pillsbury, Metropolitan Life Bldg., Minneapolis, engrs. Noted May 15.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., South Portland (Portland P. O.)—Mexican Petroleum Co., Ligonia St., let contract building 1 story, 30 x 61 ft. rein.-con. and steel garage, concrete foundation and ¾ mi. concrete road, to T. I. Ellis, 171 Westminster St., Providence, R. I. About $40,000.

★Mass., Boston—W. London Co., 18 Tremont St., will build 2 story, 100 x 120 ft. rein.-con. garage and storehouse, rein.-con. flooring, concrete foundation, on Commonwealth Ave. About $125,000. Work will be done by day labor.

★Mass., Brighton (Boston P. O.)—W. London, 18 Tremont St., Boston, will build 2 story rein.-con. service station, rein.-con. flooring, concrete foundation, on Fordham St. About $100,000. Work will be done by day labor.

★Mass., Cambridge—Massachusetts Institute of Technology will build 1 and 2 story, 60 x 300 ft. service building to include carpenter shop, foundry, pipe shop, etc. Work will be done by day labor.

★Mass., Cambridge—Page & Shaw Co., 9 West St., Boston, let contract building 5 story, 50 x 130 ft. rein.-con. factory, rein.-con. flooring, concrete foundation, on Ames St., here, to E. A. Abbott Co., 185 Devonshire St., Boston.

★Mass., Fall River—J. U. Gagnon, 480 South Main St., let contract building 2 story, 50 x 112 ft., brick and mill construction addition to garage, concrete foundation, to A. Leclair, 1233 South Main St. About $25,000.

★Mass., Malden—Boston Dye House let contract building 3 story, 40 x 100 ft. dye house, 1 story, 30 x 60 ft. naphtha house, and 1 story, 30 x 60 ft. garage, brick and rein.-con., rein.-con. flooring, concrete and brick foundation, on Main and Eastern Sts., to C. H. Tenney & Co., Devonshire St., Boston. About $50,000. Noted Mar. 6.

★Mass., New Bedford—Butler Mills, Federal St., Boston, let contract building 2 story, rein.-con. mill, rein.-con. flooring, concrete foundation, on Ruth Ave., here, to Aberthaw Constr. Co., 27 School St., Boston. About $100,000. Noted June 12.

★Mass., New Bedford—D. Daff & Son, 634 Pleasant St., let contract building 2 story, 75 x 130 ft., brick, steel and rein.-con. garage, rein.-con. flooring, concrete foundation, on Fish Island, to J. W. Bishop Co., Purchase St. About $40,000.

★Mass., Newton (Boston P. O.)—City let contract building 2 story, 56 x 96 ft., concrete, repair service plant, rein.-con. flooring, concrete foundation, on Crafts St., to J. W. Duff Co., 146 Summer St., Boston. About $38,000.

★Mass., Springfield—Springfield Warehouse Trust Co., 385 Liberty St., will make interior and exterior alterations to brick warehouse, concrete foundation. About $30,000. Work will be done by day labor.

★R. I. Woonsocket—Woonsocket-Falls-Mills Corp., South Main St., let contract building 3 story, 60 x 197 ft. brick mill, concrete foundation, to Eastern Constr. Co., 660 Winter St. About $80,000.

★Conn., Bridgeport—Fletcher-Thompson, Inc., engrs., 1089 Broad St., let contract to Flynt Bldg. & Constr. Co., Palmer, building 2 story, 68 x 200 ft. rein.-con. factory and 26 x 26 ft. brick and concrete power house, rein.-con. flooring, concrete foundation, on Benham Ave., for Nichols Underwear Corp., 371 James St. About $100,000. Noted May 22.

★Conn., Hartford—C. F. T. Seaverns, 129 Lafayette St., let contract building 2 story, 33 x 40 ft., brick, concrete and steel garage and sales room, rein.-con. flooring, concrete foundation, on Asylum St., to Porteus-Walker Co., 13 Forest St. About $25,000.

★Conn., New Britain—Fafnir Bearing Co., Booth St., let contract building 4 story, 50 x 95 ft. and 16 x 22 ft. brick and steel addition to factory, concrete foundation, on Orange St., to J. H. Grozier Co., 721 Main St., Hartford. About $50,000.

★Conn., New Haven—Seamless Rubber Co., 534 Congress Ave., let contract building three 5 story, 60 x 240 ft., factories, and two 1 story connecting buildings; also large power house, brick, steel and rein.-con., rein.-con. flooring, concrete foundation, on Hallock Ave., to Aberthaw Constr. Co., 27 School St., Boston. About $500,000.

★Conn., Stamford—A. G. Jessup, 212 Canal St., let contract building 1 story, 43 x 142 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Main St., to K. O. Haugen, Givens Ave. About $25,000.

★N. Y., Brooklyn—M. Applebaum, 58 Sutter Ave., will build 1 story, 50 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Osborne and Liberty Sts. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—Chauncey Garage Constr. Co., 1520 President St., will build 1 story, 95 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Chauncey St. and Evergreen Ave. About $26,000. Work will be done by day labor.

★N. Y., Brooklyn—B. A. Cushman Sons Inc., 44 Manhattan St., New York City, let contract building 3 story, 140 x 200 ft. brick and steel bakery, rein.-con. flooring, brick foundation, on Atlantic and Troy Aves., here, to United States Structural Steel Co., 841 Bway., New York City. About $100,000. Noted May 29.

★N. Y., Brooklyn—Moran Realty Constr. Co., 189 Patchen Ave., will build 1 story, 75 x 200 ft. brick and steel garage, rein.-con. flooring, brick foundation, on North 12th and Berry Sts. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn—D. P. Samon, 245 Bush St., let contract building 1 story brick and steel garage, rein.-con. flooring, concrete foundation, on Center and Court Sts., to F. M. Walsh, 374 Hamilton Ave. About $25,000.

★N. Y., Buffalo—Wheat Ice Cream Co., 235 Elm St., let contract building 2 story, 92 x 150 ft. rein.-con. garage, rein.-con. flooring, concrete foundation, on Elm St., to B. I. Crooker Co., Builders Exch. About $66,500. Noted June 12.

★N. Y., Jamaica—Shore Instrument Mfg. Co., 527 West 22nd St., New York City, let contract building 3 story, 60 x 100 ft. brick and steel factory, rein.-con. flooring, concrete foundation, on Van Wyck Ave. and Caroll St., to Richmond Hill Eng. Constr. Co., 2124 Jamaica Ave. About $30,000.

Industrial Works (Continued)

★N. Y., New York—G. Keister, archt., 56 West 45th St., let contract, to Lordi Constr. Co., 260 East 201st St., building 4 story, 42 x 98 ft. brick and steel warehouse, rein.-con flooring, concrete foundation, at 233-235 West 35th St., for W. H. Hussey & Son, 150 West 35th St. About $75,000. Noted Apr. 10.

★N. Y., New York—G. Kern, 350 West 38th St., will build 5 story, 50 x 100 ft. brick and steel garage, rein.-con. flooring, concrete foundation, at 349-353 West 37th St. About $75,000. Work will be done by day labor under supervision of F. J. McCabe, archt. and engr., City Savings Bank Bldg., Bridgeport, Conn.

★N. Y., New York—Quick Service Wet Wash Laundry Co., Inc., 302 East 98th St., let contract building 3 story, 100 x 111 ft., rein.-con. and steel laundry, rein.-con. flooring, concrete foundation, on 99th St., between 1st and 2nd Aves., to Crest Constr. Co., 299 Bway. About $45,000. Noted Jan. 30, under "Rapid Laundry Co."

★N. Y., New York—Terminal Warehouse Co., 17 South William St., let contract building 9 story, brick and stone warehouse, rein.-con. flooring, concrete foundation, at 29-31 South William St., to R. Deeves & Son, 309 Bway. About $100,000. Noted June 5.

★N. J., Avenel—Steel Equipment Corp. let contract building 2 story, 80 x 160 ft., rein.-con. and brick factory, to Austin Co., Bulletin Bldg., Phila.

★N. J., Collingswood—Camden Motor Corp., c/o D. M. Davis, 20 Temple Bldg., Camden, let contract building 1 story, 75 x 300 ft., rein.con., brick and steel factory, on White Horse Pike and Pennsylvania R.R. to J. S. Rogers Co., Drexel Bldg., Phila. About $100,000. Noted Apr. 3.

★Pa., Phila.—Bailey, Banks & Biddle, 1218 Chestnut St., let contract building 12 story, 43 x 80 ft., concrete and brick factory at 1220-24 Sansom St., to Irwin & Leighton, 126 North 12th St. About $180,000.

★Pa., Phila—Keystone Pure Oil Co., Broad St., let contract building 2 story, 76 x 150 ft., rein.-con. and brick factory, to F. A. Havens, 845 North 19th St. About $40,000.

★Pa., Pittsburgh—Painter—Dunn Overland Co., 4860 Center Ave., let contract building 1 story, 100 x 150 ft., rein.-con. garage on Centre Ave., to D. T. Riffle, Keenan Bldg.; $42,429. Noted Apr. 24.

★Pa., Tamaqua—B. R. Stevens, archt., 1737 Filbert St., Phila., let contract building 2 story, 87 x 101 ft., concrete and brick factory, for M. & G. Ice and Ice Cream Co., to H. E. Baton, 1713 Sansom St., Phila. About $50,000. Noted Apr. 17.

Pa., Wissinoming (Phila. P. O.)—Quaker City Rubber Co., 629 Market St., Phila., let contract building 2 story, 140 x 160 ft., rein.-con. and brick factory, here, to J. S. Rogers, Drexel Bldg., Phila.

★Md., Baltimore—City Spring Wks., Park Ave. and Preston St., let contract building 1 story, 100 x 150 ft., brick factory, brick and rock foundation, to T. A. Merryman, 16 Hamilton Ave., Hamilton. About $25,000.

★Md., Highlandtown (Baltimore P. O.)—Jones & Lamb Co., Pennsylvania and Fulton Aves., let contract remodeling plant of Monumental Brewery Co. and constructing several rein.-con., steel and brick buildings, rein.-con. flooring, rein.-con. foundation, on Lombard St. to Consolidated Eng. Co., 243 Calvert Bldg., Baltimore. About $25,000. Noted June 12.

★Md., Sparrows Point—E. Snavely let contract building 1 and 2 story, 100 x 150 ft. garage and storage building, to Gladfelter & Chambers, 36th St. and Poland Ave., Baltimore. About $50,000.

★Va., Richmond—Spotless Co., 1017-27 East Canal St., let contract building 7 story, 130 x 140 ft., rein.-con. warehouse and office, rein.-con. flooring, concrete foundation, on 10th and Canal Sts., to J. T. Wilson & Co., Mutual Bldg. About $225,000. Noted Apr. 10.

★N. C., Hickory—Hickory Overall Co. let contract building 2 story, 50 x 180 ft. brick factory, rein.-con. flooring, to Elliott Bldg. Co., Hickory. About $28,000.

★N. C., Navassa—Morris Fertilizer Co., 3rd National Bank Bldg., Atlanta, Ga., let contract building plant, here, to Elliott Bldg. Co., Hickory. About $450,000. Plans include fertilizer and mill buildings, bag and nitre houses, office, wharf and electric railways and involves 2000 cu.yd. earth excav., 1000 cu.yd. earth fill, 500 cu.yd. rein.-con., 1300 cu.yd. mass concrete and 7200 lin.ft. wood piling, etc.

★Ga., Atlanta—Atlanta Milling Co., Butler St., let contract building rein.-con. grain elevator, with 200,000 bu. capacity, to Burrell Eng. & Contg. Co., 327 South La Salle St., Chicago. About $75,000.

★O., Akron—Central Garage Co., c/o J. A. Brittain, pres., 69 South Main St., let contract building 5 story, 200 x 400 ft., rein.-con. garage, rein.-con. flooring, concrete foundation, on Ash St., to Carmichael Constr. Co., 524 Hamilton Bldg. About $400,000.

★O., Cleveland—Cleveland Waste Paper Co., 1854 Columbus Rd., let contract building 3 story, 75 x 95 ft., rein.-con., steel and brick warehouse and factory, to M. Gold, 2321 East 100th St. About $50,000.

★O., Cleveland—East 97th-Euclid Co., 1900 Euclid Bldg., let contract building 2 story, 165 x 228 ft., rein.-con. steel and brick, car washing station, rein.-con. flooring, at 9803 Euclid Ave., to E. Paulson Co., 529 Erie Bldg. About $75,000.

★O., Cleveland—Hudson Stuyvesant Co., 1923 Prospect Ave., let contract building 1 story, 63 x 169 ft., rein.-con., steel and brick factory and office addition, to A. A. Lane Constr. Co., 1836 Euclid Ave. About $40,000.

★O., Cleveland—Jones Gear Co., Guardian Bldg., let contract building 2 story, 30 x 100 ft. and 110 x 310 ft., rein.-con., steel and brick factory and office, on Wayside Ave., to Minnick & Gibbons Co., 5309 Prospect Ave. About $150,000. Noted June 12.

★O., Clevland—Republic Motor Truck Co., Alma, Mich., let contract building rein.-con., steel and brick gas engine plant, service and office buildings, rein.-con. flooring, concrete foundation, on Babbitt Rd., here, to Westinghouse, Church, Kerr Co., 37 Wall St., New York City. Cost between $8,000,000 and $10,000,000. Cost plus percentage basis.

O., Cleveland—Sabin Machine Co., 6536 Carnegie Ave., let contract building 3 story, 45 x 80 ft., concrete, steel and brick addition to machine shop, to J. Grant & Son, 4500 Euclid Ave. About $30,000. Noted May 29.

★O., Dayton—Dayton Oxygen & Hydrogen Products Co., U. B. Annex, let contract building 2 story, 60 x 180 ft., factory on South Bway., to Blanchard Bldg Co., Dayton. About $45,000.

★O., Kent—Mason Cotton Fabrics Co. let contract building 3 and 4 story, rein.-con. and brick mill, rein.-con. flooring, concrete foundation, to have 125 sq.ft. floor space, to F. W. Mark Constr. Co., Cleveland. About $200,000. Noted May 8.

★O., Middletown—Gardner-Harvey Paper Co. let contract building 2 story, 35 x 250 ft. and 1 story, 65 x 80 ft. rein.-con. mill, rein.-con. flooring, concrete foundation, to Frank-Hill-Smith Co., Inc., West 3rd St., Dayton. About $30,000.

★O., Springfield—Amer. Seeding Machine Co., Conroe and Gallagher Sts., let contract building 2 story, 60 x 120 ft., steel and brick factory, brick foundation, to Concrete Steel Constr. Co., 415 Mitchell Bldg. About $35,000.

★Ind., Indianapolis—Home Elevator Co., 214 South Penn St., let contract building 1 story, 100 x 150 ft. brick factory, to W. P. Jungclaus, 825 Massachusetts Ave. About $40,000.

★Mich., Flint—Freeman Dairy Co. let contract building 3 story, 100 x 100 ft., fireproof milk depot, rein.-con. flooring, concrete foundation, to Dubois Constr. Co., Flint. About $100,000, time and percentage basis.

★Ill., Rockford—Eclipse Stone Co. let contract building brick and steel gray iron and stone casting foundry, rein.-con. flooring, concrete foundation, to Westinghouse, Church, Kerr, 37 Wall St., New York City. About $200,000. Cost plus percetage basis.

★Ill., Venice—Barber Asphalt Co. let contract building rein.-con. and steel refinery, to Fruin Colnon Constr. Co., Marchants-Laclede Bldg., St. Louis, Mo. About $150,000.

★Wis., Janesville—Parker Pen Co., East Milwaukee and North Bluff Sts., let contract building 3 story, rein.-con. and brick factory on Court St., to Raulfe Constr. Co., 426 Grand Ave., Milwaukee. About $100,000. Noted Mar. 6.

★Wis., Milwaukee—Amer. Hair Felt Co., 44th St. and Watertown Rd., plans to build 1 story, 50 x 100 ft. brick and concrete warehouse. Work will be done by day labor.

★Wis., North Milwaukee—Wisconsin Bridge & Iron Wks. will build 1 story, 150 x 160 ft. brick and steel factory addition, concrete foundation. About $50,000. Work will be done by day labor.

★Wis., Wausau—Marathon Shoe Co. let contract building 2 story, 50 x 100 ft. brick and mill construction factory, to Anderes & Co., Wausau. About $30,000. Noted Feb. 6.

★Minn., Duluth—Marshall-Wells Hardware Co., Lake Ave., S., let contract building 1 story, 200 x 265 ft., rein.-con. and steel warehouse, rein.-con. flooring, concrete foundation, to Jacobson Bros., 5th Ave., E., and Oneida St. About $100,000; cost plus percentage basis.

★Kan., Ellis—Colorado Milling & Elevator Co., 1441 7th St., Denver, Colo., let contract building rein.-con. elevator, rein.-con. flooring, concrete foundation, here, to Burrell Eng. & Constr. Co., Security Bldg., Kansas City, Mo. About $100,000. Cost plus percentage basis.

★Kan., Kansas City—Kaull Milling Co., Waldheim Bldg., Kansas City, Mo., let contract building 6 story, 36 x 109 ft., rein.-con. mill and warehouse, rein.-con. flooring, concrete foundation, on Mill St. and St. Louis & San Francisco R.R. tracks, to Eberhardt Constr. Co., Salina. About $400,000.

★Kan., Topeka—J. C. Holland & Son, archts., 719 Mills Bldg., let contract building 2 story, 100 x 151 ft., rein.-con. and brick garage, rein-con. flooring, to F. M. Spencer & Son, Mulvane Bldg. About $60,000. Cost plus percentage basis. Owner's name withheld.

★Kan., Wichita—Innes Dry Goods Co., Lawrence and Douglas Sts., let contract building 2 story, 125 x 255 ft., rein.-con. and brick warehouse, rein.-con. flooring, concrete foundation, to G. H. Siedhoff Constr. Co., 13th and Wabash Sts. About $100,000, cost plus percentage basis.

★Mo., St. Louis—Plant Milling Co., 105 Chouteau St., let contract building 5 story, 25x100 ft., rein.-con. and brick addition to flour mill, rein.-con. flooring, rock foundation, at 105-21 Chouteau St., to Fruin Colnon Constr. Co., Laclede Bldg. About $50,000.

★N. B., Moncton—A. Humphrey & Son Ltd., let contract building factory, to Jackson & Forest, 79 Fleet St. About $35,000.

★Ont., Leamington—Imperial Tobacco Co. let contract building 1 story, 125 x 250 ft. rein.-con. tobacco factory and 35 x 75 ft. power house, to Archibald & Holmes, Excelsior Life Bldg., Toronto. About $80,000.

Buildings

PROPOSED WORK

Mass., New Bedford—Theatre—K. Cohen, 225 Mt. Pleasant St., receives bids in July building 1 story, brick, theatre, (1500 seating capacity), concrete foundation, in North End. About $65,000. LaBrode & Ballard, Union St., archts.

Mass., Westfield—School—School Bd., Broad St., plans to build addition to Prospect Hill school. About $60,000. Architect not selected.

Mass., West Springfield—School—Town plans to build new school to replace present Tatham School. About $60,000. F. H. Sibley, clk. Architect not selected.

R. I., Providence—Museum—Rhode Island School of Design, Waterman St., plans to build 3 story museum and 3 story building to house collections of silverware and jewelry, brick and rein.-con., on Bene St. About $300,000. Bellows & Aldrich, 8 Beacon St., Boston, archts.

Conn., Bridgeport—Church—E. E. Benedict, archt., 51 Leavenworth St., Waterbury, receives bids about June 25, building 2 story, 60 x 80 ft. concrete, concrete foundation, on Colorado Ave., for Swedish Baptist congregation, Colorado Ave. About $50,000. Noted Mar. 27.

Conn., Bristol—Hotel—New Departure Mfg. Corp., 269 North Main St., having plans prepared by W. E. Hunt, archt., 182 South Main St., Torrington, for 6 story, 75 x 157 ft., brick, rein.-con. flooring, concrete foundation, on North Main St. About $200,000.

Buildings (Continued)

Conn., Hartford—Church—F. W. Parsons, archt., 1133 B'way, New York City, soon receives bids building 1 story 60 x 95 ft. brick church, rock foundation, on Albany Ave., for North Methodist congregation, Albany and Woodland St., to include auditorium, gymnasium, bowling alleys, etc. About $80,000.

Conn., New Britain—Business—G. C. Rogers, Fairview St., having plans prepared by C. C. Palmer, archt., 272 Main St., for 3 story, 65 x 110 ft., brick and steel, concrete foundation on Church St. About $50,000.

Conn., New Britain—Church—Swedish Bethany congregation, Main and Walnut Sts., plans to build brick church on Franklin Sq. About $75,000. Architect not selected.

Conn., Middleton—Hospitals—Connecticut State Hospital for Insane having plans prepared by D. K. Perry, archt., 79 Golf Maple Hill, New Britain, for brick and stone buildings on South Farms. About $175,000. Noted Feb. 6.

Conn., Middletown—Laboratory—Wesleyan University, 374 High St., plans to build chemical laboratory on college campus. About $100,000.

Conn., New Haven—Business—M. Miller, 135 Temple St., having plans prepared by Brown & Von Beren, archts., 185 Church St., for 2 story, 55 x 150 ft., brick and concrete, rein.-con. flooring, concrete foundation on Temple St., to include stores, bowling alleys, billiard parlor, etc. About $50,000.

Conn., New London—Bank—Natl. Bank of Commerce, 166 State St., purchased new site on State St. and plans to build banking house. About $100,000. B. A. Armstrong, pres. Architect not selected.

Conn., New London—Church—Methodist Episcopal congregation, 193 Hempstead St., receives bids about August building 2 story church. Estimate, $100,000. M. E. Genter, pastor. A. E. Hill 75 Westminster St., Providence, archt. Noted Apr. 24.

Conn., Stamford—Parish—First Presbyterian congregation, Broad St., having plans prepared by R. Coit, archt., 85 Water St., Boston, for altering and building 2 story, stone and granite addition to present parish house, concrete foundation. About $50,000.

Conn., Waterbury—School—St. Margaret's School, Rose Hill, plans to build brick and fireproof addition to private school on Cook and Grove Sts., here. About $60,000. I. H. Chase, chn. Architect not selected.

Conn., Wethersfield—School—Town having plans prepared by D. K. Perry, archt., 79 Golf Maple Hill, New Britain, for 1 story, brick and steel school, rein-con. flooring concrete foundation, in Griswoldville Sect. About $50,000.

N. Y., Adams—Bank—Citizens Natl. Bank plans to enlarge bank. About $60,000. H. H. Waite, pres.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York City, had plans prepared by McKenzie, Voorhees & Gmelin, archts. and engrs., 1123 Bway., New York City, for 4 story, 60 x 125 ft. brick and steel, brick foundation, on 14th Ave. and 41st St. About $200,000.

N. Y., Buffalo—Office—Liberty Bank, Main and Court Sts., purchased 9000 sq ft. frontage on Court St. and plans to erect 15 or 20 story office building. Address A. Cabana, chn. bd. dirs.

N. Y., Long Island City—Bank—Ecob & Visscher, archts., 299 Madison Ave., New York City, receive bids about June 24, building 4 story, 80 x 100 ft. brick and stone, brick foundation, on Queensboro Bridge Plaza and Hunter Ave., here, for Long Island City Savings Bank. Noted May 15.

N. Y., New York—College—New York University, University Heights, having preliminary plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., for 2 and 3 story buildings, to include 100 x 270 ft. engineering building and two 55 x 120 ft. library buildings, brick and steel, brick foundation. About $500,000.

N. Y., New York—Hotel—Parish & Shroeder, archts., 280 Madison Ave., receive bids about July 1, building 13 story, 98 x 120 ft. brick and steel, brick foundation, at 415 West 34th St., for Webster Apartments, 280 Madison Ave. About $528,000.

N. Y., New York—Post Office—N. C. Partos, c/o L. A. Sheinart, archt., 192 Bowery, having plans prepared for 3 story, 75 x 197 ft. brick and steel, brick foundation, at 122 East 23rd St. About $150,000.

N. Y., New York—Store—Shulte Cigar Stores Co., 386 Bway., having plans prepared by Rouse & Goldstone, archts., 512 5th Ave., for 1 story, 76 x 120 ft., brick and steel, brick foundation, on 96th St. and Bway. About $55,000.

N. Y., Richmond Hill—Theatre—M. Goodman, 247 Wykoff Ave., Brooklyn, having plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, for 3 story, 70 x 150 ft. brick and steel, brick foundation, on Boyd and Jamaica Aves., here. About $100,000.

N. Y., Rochester—Y. M. C. A. secured site, 120 ft. frontage on Monroe Ave., in 12th Ward, and plans to erect branch building. About $200,000. T. H. Sibley, chn.

N. Y., Watertown—Hotel—J. B. Taylor, Light & Power Bldg., purchased Woodruff Hotel and plans to make extensive alterations and improvements. Cost to exceed $75,000.

N. J., Newark—Theatre—M. Spiegel, Strand Theatre Bldg., New York City, soon receives bids building 1 story, brick and steel, brick foundation on Broad St., here. About $100,000. T. W. Lamb, 644 8th Ave., New York City, archt.

N. J., Plainfield—School—Bd. Educ. having plans prepared by Wilder & White, archts., 50 Church St., New York City, for 2½ story, 55 x 150 ft., brick, steel and stone, brick foundation, on Emerson Ave. About $140,000.

N. J., Rahway—School—Bd. Educ. plans to build school. About $125,000. J. T. Rowland, 100 Sip. Ave., Jersey City, archt.

Pa., Phila.—Stations—Dept. City Transit, 1211 Chestnut St., receives bids in 2 weeks building two 20 x 50 ft. and two 40 x 40 ft. concrete and steel stations on York and Dauphin Sts., and Girard Ave. H. H. Quimby, engr., and C. T. Biswanger, archt., c/o of above.

Pa., Windber—Store—A. G. Bentley, Graham and Park Aves., plans to build 2 story, 50 x 120 ft. fireproof store to replace one destroyed by fire. About $55,000. Architect not selected.

Md., Baltimore—Colesseum—A. L. Forrest, archt., 11 East Pleasant St., receives bids about July 1, building 1 and 2 story, 200 x 200 ft., concrete and brick, concrete and brick foundation, for Colesseum Amusement Co., 3rd Ave. and O'Donnell St. About $50,000.

Md., Baltimore—Orphan Asylum—Hebrew Orphan Asylum, Rayner and Florence Aves., and S. Dansburgh, Baltimore Bargain House, 200 West Baltimore St., have raised $350,000 by public subscription for erection of cottage plan orphan asylum on site in suburbs to be selected. Cost of buildings, including main administration building, to exceed $200,000.

Md., Baltimore—Sales—See "Industrials."

W. Va., Madison—Bank—Madison Natl. Bank had plans prepared for 2 story, 62 x 85 ft., brick and stone, on Main St. About $50,000. H. R. Warren, Charleston, archt.

W. Va., Madison—Hotel—J. C. Kaufman, Logan, W. Va., plans to build 3 story, brick hotel here on Main St. About $55,000.

N. C., Greensboro—Auditorium—Bldg. Com. of Woman's College receives bids in July, building auditorium. About $100,000. C. H. Ireland, chn. A. Ten Eyck Brown, 717 Forsyth Bldg., Atlanta, Ga., archt.

N. C., High Point—Theatre—O. E. Kearns plans to build 2 story, 45 x 100 ft., brick, on South Main St. About $60,000.

Ga., Atlanta—Mosque—Yaarab Temple purchased site on Ivy and East Baker Sts. and plans to build. About $500,000. G. R. Donovan, chn.

Ga., Moultrie—Hospital—J. R. Hall, W. S. Vereen and others, organized stock company, and plan to build 3 story, 50 x 100 ft. brick, 1½ mi. from here. About $50,000. Architect not selected.

Fla., Gainesville—Schools—City voted $150,000 bonds to build 2 new schools.

Fla., Miami—Hotel—Price & McLanahan, archts., 908 Bellevue Court, Phila., receive bids about July building Hotel Flamingo, here, 17 story, 90 x 575 ft., rein.-con., brick and stucco, for C. G. Fisher, 434 N. Capitol Ave., and J. J. Allison, both of Indianapolis.

Ala., Anniston—Schools—City plans to issue $100,000 bonds to improve and build additions to schools.

Ala., Birmingham—Auditorium—W. L. Welton, archt., Amer. Trust Bldg., receives bids about July 15 building auditorium for Walker Memorial Methodist Church. About $50,000.

Ala., Birmingham—Office—Lincoln Reserve Life Insurance Co., Jefferson Co. Bank Bldg., purchased 50 x 100 ft. site on 4th Ave. and 22nd St. and plans to build fireproof. About $100,000. Architect not selected.

Tenn., Memphis—Theatre—Loews Theatres, 1492 Bway., New York City, having plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, for 2 story, 100 x 100 ft., brick and steel, brick foundation, on Union Ave., here. About $300,000.

O., Akron—Church—Swedish Lutheran congregation having plans prepared by Fichter & Brooker, archts., 606 Metropolitan Bldg., for 1 story, 50 x 120 ft., brick and tile, concrete foundation, in eastern section of city. About $50,000.

O., Cleveland—Club House—Pilgrim Church plans to build 5 story, 100 x 200 ft., rein.-con., steel and brick, on West 14th St. and Starkweather Ave. About $100,000. D. F. Bradley, West 14th St. and Starkweather Ave., pastor. Architect not selected.

O., Columbus—Optimetry—Ohio Optical Assn. plans to build 2 story, on Ohio State University campus. About $50,000. F. A. Stengel, Marion, secy. Architect not selected.

O., East Cleveland (Cleveland P. O.)—Hospital—City plans to build 6 story, 100 x 300 ft., rein.-con., steel and brick, on Euclid and Prospect Aves. About $250,000. C. M. Osborne, city mgr. Architect not selected.

O., Dayton—Club—Miami Valley Hunt & Polo Club plans to build country club house and stables on Lamb Rd. About $75,000. Architect not selected.

O., Springfield—Salesroom—See "Industrials"

O., Steubenville—Hotel—Steubenville Hotel Co., c/o W. R. Johnson, 4th and Main Sts., having plans prepared by F. Webber, archt. and engr., Morris Bldg., Phila., for 9 story, 64 x 181 ft., rein.-con., steel and brick, on 4th and Main Sts. Noted May 1.

Mich., Detroit—Hall—Detroit Exhibition Bldg. Co., c/o Brown & Preston, archts and engrs., Empire Bldg., having preliminary plans prepared for 1 and 2 story, 400 x 600 ft., concrete, brick and steel, convention hall, concrete foundation. C. G. Armstrong, secy.

Mich., Detroit—Hotel—Detroit Hotel Assn., c/o G. S. Green, 1 McGraw Bldg., plans to build 24 story, 120 x 250 ft., rein.-con., brick and steel, on Madison, Witheral and Adams Aves. About $6,000,000.

Mich., Detroit—Theatre, Store and Office—Victory Theatre Co., 1140 Penobscot Bldg., having plans prepared by C. H. Crane and E. G. Kiehler, archts., 2325 Dime Bank Bldg., for 2 story, rein.-con., steel and terra cotta, rein.-con. flooring, concrete foundation, on Michigan Ave. and 52nd St. About $300,000.

Mich., Port Huron—Gymnasium and Auditorium—City soon receives bids building 2 story, rein.-con., brick and steel addition to Washington School, concrete foundation, White St. About $70,000. G. L. Harvey, Huron Ave., archt.

Mich., Strathmoor—School—School Board, Dist. No. 4, Greenfield Twp., plans to sell $75,000 bonds to build school. H. T. Hart, P. O. Box No. 84, dir.

Ill., Chicago—Home—A. Foster, archt., 155 North Clark St., soon receives bids building 3 story, 40 x 160 ft. rein.-con. "V" shaped maternity home, rein.-con. flooring, concrete foundation, on 47th St. and Sacramento Blvd., for Archbishop Mundelein, Chicago Ave. and State St. About $100,000.

Ill., Chicago—Hotel—Chicago Beach Hotel Co., 51st and Cornell Sts., having plans prepared by G. C. Nimmons & Co., archts., 122 South Michigan Ave., for 12 story, 223 x 233 ft. "L" shaped, rein.-con., rein.-con. flooring, concrete foundation. About $1,250,000. J. C. Hately, pres.

Ill., East St. Louis—Office—See "Industrial Works."

Buildings (Continued)

Ill., Johnson City—High School—School Bd. sold $63,000 bonds to build high school.

Wis., Eau Claire—Hotel—E. Hutchens, archt. and engr., 703 Wisconsin St., preparing plans for 6 story hotel, for Eau Clair Hotel Co.

Wis., Milwaukee—Club—B. P. O. E. Lodge No. 46, 450 Jefferson St., had sketches made by R. Messmer & Bro., archts., Majestic Bldg., for 17 story, 100 x 150 ft. brick, rein.-con. and steel, rein.-con. flooring, concrete foundation. About $1,000,000.

Wis., Milwaukee—Hotel—O. Brachman, 1st Natl. Bank Bldg., having plans prepared by M. Tullgren & Sons, archts., 1st Natl. Bank Bldg., for 8 story, 135 x 180 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on Astor St. and Juneau Ave. About $650,000. Noted Jan. 23

Wis., Neenah—Temple—Masonic Lodge, 145 West Wisconsin Ave., plans to build 3 story, 60 x 120 ft. About $60,000. Architect not selected.

Wis., Oshkosh—School—School Bd. having plans prepared by Auler & Jensen, archts., F. R. A. Bldg., for 2 story, 96 x 127 ft., on Sawyer Ave. About $115,000. Noted Feb. 27.

Ia., Council Bluffs—School—Proudfoot, Bird & Rawson, archts., Hubbell Bldg., Des Moines, receive bids about July 1, building 2 story, 100 x 325 ft., brick and stone on B'way. between 25th and 26th Sts., for Council Bluffs School Dist. About $275,000. Noted May 1.

Ia., Des Moines—High Schools—Bd. Educ. having plans prepared by Proudfoot, Bird and Rawson, archts., Hubbell Bldg., for 2 schools, to be known as Theodore Roosevelt and Abraham Lincoln Schools. Bonds for $500,000 already voted for project and additional bonds will be voted later for completion of work.

Ia., Winterset—High School—City voted $150,000 bonds to build high school.

Minn., Crookston—Dining Hall—State Bd. Control, Capitol, St. Paul, having plans prepared by C. H. Johnston, archt., 715 Capital Bank Bldg., St. Paul, for 3 story, 55 x 115 ft., with wing 40 x 40 ft., at State Experimental Farm. About $85,000.

Minn., Duluth—School—Bd. Educ. plans to build school. About $100,000. Croft & Boerner, 710 Place Bldg., Minneapolis, archts and engrs.

Minn., Hibbing—Bank—First Natl. Bank receives bids early in July, building 2 story, 100 x 100 ft., brick. About $150,000. A. Moorman & Co., 501 Minnesota St., St. Paul, archt. and engr.

Minn., Minneapolis—Business, etc.—State Bd. Control, Capitol, St. Paul, having plans prepared by C. H. Johnston, archt., 715 Capital Bank Bldg., St. Paul, for 6 story, rein.-con. business building, storehouse and shops, cost, $125,000; 2 story, 40 x 120 ft., rein.-con., brick and terra cotta addition to Shevlin Hall, $50,000; 4 story, rein.-con. and brick addition to University High School, $50,000, all at University of Minnesota.

Minn., Minneapolis—Church—First Baptist congregation plans to build church on 10th St. and Harmon Pl. About $300,000. W. B. Riley, 4025 Linden Hills Blvd., pastor. Architect not selected.

Minn., Minneapolis—School—Bd. Educ. having plans prepared for 2 story, 25 room school, on Minnehaha Ave. About $150,000. E. H. Enger, c/o Bd. Educ., Courthouse, archt.

Minn., Minneapolis—Schools—Bd. Educ. plans to build grade school on 2nd Ave. S. and East 40th St., cost, $150,000; 2 story school, to be known as Louis Agassiz School, $100,000. E. H. Enger, c/o Bd. Educ., Courthouse, engr.

Minn., Morris—Dormitory—State Bd. Control, Capitol, St. Paul, having plans prepared by C. H. Johnston, archt., 715 Capitol Bank Bldg., St. Paul, for 2 story, rein.-con. and brick, at West Central State School of Agriculture. About $75,000.

Minn., St. Paul—Store—Emporium, East 7th St., plans to remodel 6 story, 75 x 100 ft. About $250,000. A. McLeod, pres.

Kan., Eldorado—Memorial—City plans to build 2 story, 75 x 135 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation. About $100,000. G. P. Washburn & Son, Ottawa, archts. B. C. Wells, city clk.

Kan., Great Bend—School—Bd. Educ. having plans prepared by Owen & Payson, archts., 202 Reliance Bldg., Kansas City, Mo., for 1 story, 130 x 140 ft., brick, hollow tile and stucco, concrete foundation. About $50,000.

Kan., Hutchinson—Bank—State Exch. Bank, c/o F. W. Cotter, pres., plans to build 75 x 150 ft., fireproof. Cost between $250,000 and $300,000. Architect not selected.

Kan., Salina—Hotel—Planters Hotel Co. soon receives bids building 4 story, 100 x 120 ft., concrete, steel and brick, concrete foundation. About $150,000. C. W. Shaver, Salina, archt.

Neb., Falls City—Court House—Richardson Co. plans election to vote on $200,000 bonds to build fireproof courthouse. K. W. Daggett, clk. W. E. Hulse & Co., Hutchinson, Kan., archt.

N. D., Valley City—High School—Bd. Educ. soon lets contract building 3 story, brick. About $91,000. E. H. McFarland, Valley City, archt. Noted Mar. 27.

Mo., St. Louis—Hotel—Company being organized to build 100 x 170 ft. hotel on corner of Belt and Pershing Sts. Cost to exceed $100,000. Address Rosenbaum-Hauschulte Real Estate Co., 2407 North Bway.

Mo., St. Louis—Salesroom—See "Industrials."

Tex., Wichita Falls—Business and Hotel—J. F. Long plans to build 3 story, 100 x 150 ft. brick and fireproof, rein.-con. flooring, concrete foundation. About $65,000. W. V. Street, Wichita, Kan., archt.

Okla., Tulsa—Church—Protestant Episcopal congregation, 918 South Boulder St., plans to build church on 13th and South Boulder Sts. About $150,000. A. Abel, pastor. Engineer and architect not selected.

Okla., Tulsa—Office—J. M. Gillette, 202 Seaman Bldg., plans to build 10 story, 150 x 200 ft. on 5th and Boulder Sts. About $1,000,000. Engineer and architect not selected.

Idaho, Pocatello—Hotel—Hotel Bannock Co. plans to build 300 room, fireproof hotel. About $500,000. Architect not selected. W. H. Cleare and C. A. Valentine, Pocatello, incorporators.

Nev., Winnemucca—Court House—Comrs. Humboldt Co. soon receive bids building 2 story, rein.-con and stone About $120,000. Noted Feb. 27.

Ariz., Phoenix—School—School Trustees soon receive bids building 2 story, 80 x 210 ft., containing manual training department, etc. About $160,000. Marsh, Howard & Wallingford, 211 Bway. Central Bank Bldg., Los Angeles, archts. Former contract rescinded. Noted June 5.

Wash., Yakima—Church—First Methodist congregation making preliminary plans for combining $100,000 church fund with Congregational fund of $40,000 for building union church here. Architect not selected.

Ore., Hillsboro—Business—Weil Bros. plan to build 2 story, 100 x 100 ft. brick business block. Claussen & Claussen, Macleay Bldg., Portland, archts.

Ore., Portland—Hospital—City voted $350,000 bonds toward building reconstruction hospital. Total cost, $500,000. O. Laurgaard, city engr.

Cal., Bakersfield—School—City defeated $150,000 bonds to build Lincoln School. Noted May 29.

Cal., Eureka—School—State having revised plans prepared by G. B. McDougall, archt., 515 Forum Bldg., Sacramento, for Normal School, here. About $230,000.

Cal., Fresno—Office—A. Mattei having plans prepared by E. Mathewson, archt., 428 Cory Bldg., for 12 story, 50 x 150 ft., rein.-con., brick and terra cotta, rein.-con. flooring, concrete foundation, on Fresno and J Sts. About $400,000.

Cal., Hermosa Beach—School—School Trustees having plans prepared by H. C. Howard, archt., Hermosa Beach, for 2 story brick school and auditorium. $60,000 bonds voted for project.

Cal., Long Beach—Auditorium and Community Hall, etc.—City election soon to vote on $1,000,000 bonds to purchase 360 x 416 ft. site and build combined auditorium and community building; city hall; improve parks; and buy site and build rein.-con. open air theatre and band stand. E. E. Tincher, comr. pub. affairs.

Cal., Los Angeles—School—Bd. Educ., 730 Security Bldg., having plans prepared by Hunt & Burns, archts., Laughlin Bldg., for 2 story, brick, concrete foundation. About $50,000. A. M. Sheldon, clk.

Cal., Red Bluff—Court House—Tehama Co. election July 1 to vote on $200,000 bonds to build courthouse.

Cal., Redlands—Hall, Dormitory and Library—Redlands University plans to build science hall, dormitory and library. About $150,000.

Cal., Redwood City—Fire House—See "Sewers."

Cal., San Francisco—Orphanage—Pacific Hebrew Asylum and Home Society having plans prepared by A. H. Jacobs, archt., 110 Sutter St., for group of about twelve 1 and 2 story, brick and frame buildings, on Ocean Ave., near Westwood Park. About $500,000.

Cal., Whittier—Hospital—City having plans prepared by Allison & Allison, archts., 1105 Hibernian Bldg., Los Angeles, for hospital. C. O. Trueblood, clk. About $50,000.

Que., Cap de la Madeleine—Church and Presbytery—St. Famile Church plans to build brick, steel and concrete. About $120,000. J. E. Gascon, Three Rivers, archt.

Que., Limoilou—School—Protestant Bd. School Comrs. plans to build 3 story, fireproof. Architect not selected.

Ont., Hamilton—Church—Roman Catholic congregation plans to build stone and steel. About $100,000. T. J. Dowling, 354 King St., pastor. Architect not selected.

Ont., Kitchener—School—Bd. Educ. soon receives bids building addition to Victoria School. About $60,000. C. Knechtel Kitchener, archt.

Ont., Toronto—Office—Imperial Bank of Canada, 32 Wellington St., E., plans to build 28 story 60 x 90 ft., steel, on King and Yonge Sts. About $1,500,000. Architect not selected.

BIDS DESIRED

Mass., New Bedford—Theatre—Until July 15, by S. Mechaver, Acushnet Ave., building 2 story, brick, rein.-con. flooring, concrete foundation. (2500 seating capacity). About $100,000. LaBrode & Bullard, Union St., archts.

Mass., Waltham (Boston P. O.)—School—Until June 25, by Supt. Schools, High School Bldg., for 2 story, 119 x 156 ft. brick, on School St. About $225,000. C. G. Loring, 7 Water St., Boston, archt.

Conn., Hartford—Sales, etc.—Until June 25, by M. J. Unkelbach, archt., 162 Main St., New Britain, building 2 story, 65 x 300 ft., fireproof auto sales and service building, rein.-con. flooring, concrete foundation, on Washington St., for A. C. Hine Co., 314 Pearl St. About $80,000. Noted May 15.

N. Y., Greenburg—School—Until June 23, by Tooker & Marsh, archts., 101 Park Ave., New York City, building 2 story brick and steel, brick foundation, here, for Bd. Educ. About $85,000. Noted May 1.

N. Y., New York—Dormitory, etc.—Until June 23, by B. S. Coler, comr. pub. charities, Municipal Bldg., furnishing all labor and material for erection and completion of Cottage Dormitory No. 8, and No. 9, High Grade Female Dormitory No. 23, Staff House No. 37 and Infirmary No. 50, Randall's Island. Former contract abandoned.

Ga., Milledgeville—Home—Until July 1, by Bd. Trustees Georgia State Sanitorium, building 3 story brick home for nurses. About $150,000. A. T. E. Brown, Forsyth Bldg., Atlanta, archt. Noted Apr. 24.

O., Akron—Home—Until July 1, by Bldg. Comn. of Summit Co. Ohio Children's Home at office of Bd. Co. Comrs., Court House, building two 2 story, 50 x 80 ft., rein.-con. and brick, concrete foundation, on South Arlington St. About $100,000. Harpster & Bliss, 234 Central Savings & Trust Bldg., archts.

Buildings (Continued)

O., Euclid—School—Bd Educ. and Knox & Elliot, archts., 1248 Rockefeller Bldg., Cleveland, receiving bids building 2 story, 75 x 100 ft., concrete, steel and brick. About $100,000.

O., Pittsburg—School—Until June 29, by E. S. Mountstephen, archt., 803 Union Bank Bldg., Dayton, building 3 story, 80 x 140 ft., rein.-con. and brick, concrete foundation, for Bd. Educ. About $100,000. Noted Mar. 6.

O., Springfield—Theatre—Until June 24, by W. F. Miller, archt., Kelly Bldg., constructing 3 story, fireproof, rein.-con. flooring, concrete foundation, on Limestone St., for G Sun, Main and Limestone Sts. About $200,000. Noted June 12.

O., Toledo—School—Until June 30, by Bd. Educ., building 2 story, 81 x 254 ft. rein.-con., steel and brick, concrete foundation, on Navarre Ave. and Kingston St. About $250,000. E. M. Gee, Linwood St. and Southard Ave., archt. Noted Apr. 24.

Mich., Detroit—School—Until June 26, by C. A. Gadd, business mgr., 50 Bway., building 2 story, 83 x 204 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation at Hawthorne and Caniff Aves.; also building 2 story, 84 x 169 ft., rein.-con. brick and steel, rein.-con. flooring, concrete foundation on Alger Ave., to be known as Moore School. Malcolmson Higginbotham, 404 Moffat Bldg., archts.

Mich., Ecorse—School—Until June 30, by School Dist. No. 12, building 3 story, rein.-con. and brick. About $230,000. H. J. Keough, 1115-21 Union Trust Bldg., Detroit, engr.

Mich., Mt. Pleasant—School—Until June 27, by Bd. Educ., building 2 story school. C. S. Larzolere, pres. S. D. Bitterworth, 432 Tussing Bldg., Lansing, archt.

Ill., Sterling—High School—Until July 2, by D. L. Miller, clk. bd. educ. at office of C. E. Sheldon, atty., Sterling, building addition to Sterling Twp. High School. Cost between $50,000 and $60,000; advertised in this issue.

Wis., Wauwatosa—School—Until July 1, by L. G. Wheeler, chn. school bd., 204 Grand Ave., Milwaukee, building 2 story, 45 x 186 ft. brick and mill construction, rein.-con. flooring, concrete foundation, on Wauwatosa Ave. About $75,000. Herbst & Kuenzli, Caswell Blk., Milwauke, archts. Noted Feb. 20.

Minn., Blooming Prairie—High School—Until July 10, by School Bd., building 2 story, 80 x 120 ft., with wing 50 x 64 ft., rein.-con., brick and terra cotta. About $150,000. Jacobson & Jacobson, Owatonna, archts.

Minn., Duluth—School—Until June 23, by Bd. Educ., building 1 story, 64 x 250 ft., with wing, rein.-con., brick and steel, rein.-con. flooring, brick foundation, on Park Point. About $80,000. Croft & Boerner, 833 Palace Bldg., Minneapolis., engrs. Noted Apr. 24.

Minn., Duluth—Grade School—Until July 2, by Bd. Educ., building 2 story, 80 x 120 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation, on Franklin St. About $70,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts. and engrs. Noted Apr. 24.

Minn., Duluth—School—Until July 2, by Bd. Educ. building 2 story, 64 x 180 ft., rein.-con. and brick addition to Riverside School, rein.-con. flooring, concrete foundation. About $60,000. Revised plans have been prepared. Croft & Boerner, 833 Palace Bldg., Minneapolis., archts. and engrs. Noted May 1.

Minn., Minneapolis—Home—Until June 24, by State Bd. Control, Capital, St. Paul, for improvements at Soldiers' Home, here. About $75,000. C. L. Pillsbury Co., Metropolitan Life Bldg., engrs.

Minn., Minneapolis—Trading—Chamber Commerce receiving bids for 50 x 75 ft., rein.-con. and brick addition, rein.-con. flooring, brick foundation on 3rd St. and 4th Ave., S. About $52,000. Bertrand & Chamberlin, 616 Northwestern Natl. Bank Bldg., archts. and engrs.

Minn., Moorhead—School—Until June 26, by Bd. Educ., building 2 story, rein.-con. and brick, brick foundation, in Independent School Dist. No. 2. About $50,000. J. H. Hess, Moorhead Natl. Bank Bldg., archt. Noted Apr. 17.

Minn., Mountain Lake—High School—Until July 5, by J. H. Dickman, clk. bd. educ., building 1 story, 52 x 126 ft., with 2 wings. About $75,000. Jacobson & Jacobson, Owatonna, archts.

Minn., St. Hilaire—School—Until June 30, by C. Swanson, clk. bd. educ., building 2 story, 57 x 90 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation. About $50,000. Sund & Dunham, 512 Essex Bldg., Minneapolis, archts. and engrs. Noted June 5.

Minn.; Virginia—Court House—Until Aug. 1, by Bd. Comrs. St. Louis Co., building 2 story, 60 x 100 ft., rein.-con., brick and terra cotta. About $175,000. Croft & Boerner, 833 Palace Bldg., Minneapolis, archts. Noted Apr. 24.

Neb., Omaha—Hotel—Until July 1, by J. & A. McDonald, archts., 908 Omaha Natl. Bank Bldg., building 15 story, 66 x 66 ft., steel, concrete, brick and tile, on 16th and Howard Sts., for J. & L. Hill, Blackstone Hotel. About $450,000. Above bids for general contract, steel contract awarded.

Ore., Marshfield—Armory—Until June 25, by A. A. Hall, 640 Morgan Bldg., Portland, building 2 story, 105 x 120 ft. brick, concrete foundation, here. About $50,000. Clausen & Claussen, Macleay Bldg., Portland, archts. Noted June 5.

Ont., Simcoe—Schools—Until July 1, by F. E. Curtis, secy. school bd., building Simcoe North School, 2 story brick, and addition to Simcoe South School. About $80,000. A. Chapman, Harbor Bldg., Toronto, archt. Noted May 1.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—Office—Old State Co. let contract building 11 story, 72 x 73 ft., concrete and steel, rein.-con. flooring, concrete foundation, on Washington St., to F. T. Ley Co., 185 Devonshire St. About $1,500,000.

★**Conn., New Britain**—Housing—Stanley Wks., Grove Hill, let contract building twelve 1 and 2 story, concrete and timber workmen's houses, brick and concrete foundation, on Burritt St., to Aberthaw Constr. Co., 27 School St., Boston. About $50,000.

★**N. Y., Buffalo** — Hospital — Columbus Hospital, 298 Niagara St., let contract altering and building 2 story, 30 x 70 ft., non-fireproof addition, to Bellance & Sorge, Morgan Bldg. About $50,000.

★**N. Y., New York**—Hospital—L. Abramson, archt., 220 5th Ave., let contract to Magova Constr. Co., 103 Park Ave., building 4 story brick and steel addition, brick foundation, on Fulton Ave. and East 169th St., for Bronx Hospital. About $50,000. Noted Jan. 30.

★**N. Y., New York**—Hospital—New York Infirmary for Women & Children, 321 East 15th St., let contract altering 7 story brick and steel, to M. Eidlitz & Son, 20 East 42nd St. About $72,000. Noted June 12.

★**N. J., New Brunswick**—High School—Bd. Educ. let contract building junior high school, to G. T. Kelly Co., 20 John St., Yonkers, N. Y., $328,888.

★**Pa., Phila.**—Bank—South Phila. State Bank, 923 South 11th St., let contract building 2 story, 31 x 89 ft., brick and stone, on 11th and Montrose Sts., to F. Lucci, 1603 Ellsworth St. About $50,000.

★**Md., Baltimore**—Church—Seventh Bapsist congregation let contract building 50 x 100 ft., rein.-con., on North Ave. and St. Paul St., to J. E. Marshall & Son., 131 Mercer St. and W. F. Chew, 212 Clay St. About $75,000. Noted Feb. 13.

★**Md., Baltimore**—Office—Temple Bldg. Co., c/o J. Johnson, agt., 2 East Lexington St., let contract altering rein.-con. building on Charles and Clay Sts., to J. H. Miller, Inc., Miller Bldg. About $65,000.

★**Md., Baltimore**—School—St. Mary's Industrial School, Wilkens Ave., let contract building two, 3 story, 63 x 131 ft., rein.-con. and brick dormitories and class room, concrete foundation, on Wilkens Ave., to F. D. Keating, 2121 West Baltimore St. About $300,000. Noted May 29.

Va., Richmond — Office — See "Industrials."

★**W. Va., Montgomery**—High School—Bd. Educ. let contract building 2 story, [illegible] x 120 ft. brick, to Charleston Concrete Constr. Co., Charleston. About $90,000. Noted May 1.

★**La., New Orleans**—School—City let contract building 3 story, 300 x 360 ft., fireproof, to J. O. Chisholm & Co., 407 Hennen Bldg. About $638,500. Noted May 22.

★**O., Akron**—Loft and Store—I. D. Schroy Co., 69 East Mill St., let contract building 5 story, 20 x 110 ft., rein.-con., rein.-con. flooring, concrete foundation, to Clemmer & Johnson Constr. Co., 406 Metropolitan Bldg. About $50,000.

★**O., Cleveland**—Commercial—Cowell & Hubbard Co., East 6th St. and Euclid Ave., let contract building 8 story, 80 x 200 ft., rein.-con., steel and brick, on East 13th St. and Euclid Ave., to J. Gill & Sons, Citizens Bldg. About $300,000. Noted Feb. 27.

O., Cleveland—Office — See "Industrial Works."

★**O., Cleveland**—Office—Researve Square Realty Co., c/o R. L. Quisser, Schofield Bldg., let contract building 6 story, 100 x 300 ft., rein.-con., steel and brick, on East 11th St. and Chestnut Ave., to Natl. Concrete Fireproofing Co., Citizens Bldg. About $150,000.

O., Cleveland—Office—See "Industrials."

★**O., Cleveland**—Sales and Service—Forest City Motor Co., 6504 Euclid Ave., let contract building 2 story, 55 x 300 ft., rein.-con., steel and brick, at 6510 Euclid Ave., to E. A. Carson Co., 6408 Euclid Ave. About $70,000. Noted May 15.

★**O., Cleveland**—Theatre—Amer. Amusement Co. let contract building 2 story, 76 x 173 ft., concrete, steel and brick, on Fulton Rd. and Bush Ave., to A. Thomas, 2431 East 83rd St. About $75,000. Noted May 1.

★**O., Cleveland**—Theatre and Stores—Greenwald & Bernstein, 641 Society for Savings Bldg., let contract building 2 story, 66 x 156 ft., rein.-con., steel and brick, rein.-con. flooring and concrete foundation, at 1789 West 25th St., to Rohner Constr. Co., 13303 Darley Ave. About $75,000. Noted Mar. 20.

★**O., Cleveland**—Theatre and Store—Normay Theatre Co., West 50th St. and Storer Ave., let contract building 1 story, 81 x 137 ft., rein.-con., steel and brick, at 5302 Storer Ave., to H. E. Klefmann, 4319 Woodbridge Ave. About $50,000. Noted May 15.

★**Mich., Detroit**—Theatre, Stores, Hall, Offices, etc.—Oakman Blvd. Theatre Co., c/o C. H. Crane and E. G. Keihler, 2325 Dime Bank Bldg., let contract building 2 story, rein.-con., brick and steel, to F. Farrington, 201 Scherer Bldg. About $300,000. Noted May 15.

★**Ill., Chicago**—Sales—F. P. Gerhardt, archt., 64 West Randolph St., let contract, to A. Zellweger, 624 Briar Ave., building 1 and 2 story, 60 x 160 ft., mill construction auto sales room, concrete foundation, on Washington Ave. and Kilpatrick St., for L. F. Sullivan c/o archt. About $60,000. Noted May 22.

★**Ill., Woodriver**—High School—J. W. Kennedy, archt., Cahokia Bldg., East St. Louis, let contract, to J. R. Geddney Constr. Co., East St. Louis, building 2 story, 90 x 150 ft. brick and rein.-con., rein.-con. flooring, concrete foundation, between here and East Alton, for High School Bd. About $91,600. Noted Feb. 27.

★**Wis., Superior**—School—Bd. Educ. let contract building 2 story, 80 x 200 ft., with 1 story 56 x 70 ft. wing, rein.-con. and brick, rein.-con. flooring, brick foundation, to Hill & Dauplaise, Superior, $174,500. Noted June 5.

★**Wis., West Allis**—High School and Power House—Bd. Educ. let contract building 2 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, on National Ave., to Kroening Constr. Co., Majestic Bldg., Milwaukee. About $268,000. Noted Dec. 26.

★**Minn., Hibbing**—Hospital—Oliver Mining Co., Wolvin Bldg., Duluth, let contract building 3 story, 45 x 148 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on 4th Ave., to Krahl Constr. Co., 350 North Clark St., Chicago, Ill. About $275,000. Noted May 22.

Buildings (continued)

★Minn., Minneapolis—Hotel—Curtis Court Hotel Co., 10th St. and 3rd Ave. S., let contract building 12 story, 52 x 165 ft., rein.-con., brick and stone, to J. L. Robinson Co., 511 South 7th St., $750,000. Noted May 29.

★Minn., Wabasha—Hospital—St. Elizabeth Hospital let contract building 3 story, rein.-con. and brick, rein.-con. flooring, concrete foundation, to L. Neitge, Mankato. About $85,000.

★Kan., Anthony—School—Bd. Educ. let contract building 2 story, 72 x 119 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to J. Wenzel Constr. Co., Wichita. About $72,000. Noted June 5.

★Kan., Beloit—High School—Bd. Educ. let contract building 3 story, 100 x 137 ft., rein.-con. and brick, rein.-con. flooring, brick foundation, to M. E. Brady, Beloit. $109,465. Noted May 22.

★Kan., Independence—Office—Natl. Supply Co. let contract building 2 story, 50 x 100 ft., brick and fireproof, rein.-con. flooring, concrete foundation, on 8th and Myrtle Sts., to E. S. Winn Constr. Co., 105 Ry. Exch. Bldg., Kansas City, Mo. About $60,000.

★Kan., Peabody—Bank—Peabody State Bank let contract building 2 story, 33 x 90 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to Scott Bros., Burns. About $75,000.

★Kan., Wichita—School—Bd. Educ. let contract building 3 story, 91 x 185 ft., concrete and brick, rein.-con. flooring, concrete foundation, on 3rd St., to E. C. Hamler, Mulvane, $129,688. Noted May 29.

★Neb., Lincoln—Hotel—Nebraska Hotel Co. let contract building 7 story 100 x 142 ft. rein.-con. and brick, on 10th and "P" Sts., to Nebraska Bldg. & Investment Co., 130 South 13th St. About $250,000.

★Neb., Omaha—Hotel—J. and L. Hill, Blackstone Hotel, let steel contract building 15 story, 66 x 66 ft., on 16th and Howard Sts., to Omaha Structural Steel Wks., 48th and Leavenworth Sts.

★Neb., York—Hospital, etc.—Lutheran Hospital let general contract building 2 story, 37 x 90 ft. rein.-con. and brick hospital and boiler house, rein.-con. flooring, rock foundation, to A. J. Olson, 520 Reliance Bldg., Kansas City, Mo., $46,840; heating and plumbing, to W. J. Chambers, $20,750; wiring, to Pub. Serv. Co., $25,590. Noted Apr. 24.

★N. D., Cathay—Grade and High Schools—Bd. Educ. let contract building 2 story, brick, to L. W. Holder, Forman. About $50,000. Noted May 1.

★Mo., Ozark—Court House—Christian Co. let contract building 3 story, rien.-con., brick and terra cotta, to H. J. Hanson Constr. Co., Sarcoxie, Mo., $77,420. Noted May 8.

★Mo., St. Joseph—Hotel—J. Geiger, 25th St. and Frederick Ave., let contract building 5 story, 60 x 125 ft., fireproof addition, rein.-con. flooring, concrete foundation, on 6th and Francis Sts., to E. H. Lawhon Constr. Co., 905 Edmond St. About $50,000.

★Mo., St. Louis—Theatre—C. Hickman, 2407 North Bway., let contract building 2 story, 76 x 137 ft., rein.-con., steel and brick, rein.-con. flooring, rock foundation, at 2138 East Grand St., to A. D. Gates Constr. Co., Chemical Bldg. About $50,000.

★Wash., Seattle—Hospital—J. Wilkins, Cobb Bldg., let contract building 3 story, 34 x 60 x 70 ft., brick, concrete foundation, on 16th and John Sts., to P. T. Bratt, 4902 Phinney Ave. About $55,000. Noted Jan. 2.

Ore., Corvallis—Laboratory—State Agricultural College received bids June 2, building 2 story, 56 x 220 ft. brick, concrete and mill construction engineers' laboratory, on college campus, from Snook & Travers, Portland, $69,800; Hoover & McNeil, Albany, $69,987. Noted June 5.

★Ont., Guelph—Dormitory—Dept. Pub. Wks., Toronto, let contract building 3 story, brick, dormitory, for Ontario Agricultural College, College St., here, to P. H. Secord & Co., 133 Nelson St., Brantford. Noted May 8.

★Ont., Ottawa—School—School Bd. let contract building addition to school, to J. D. Sanderson, 535 McLeod St. About $120,000. Noted Apr. 10.

★Ont., Toronto—Theatre—J. and J. Allen, Richmond St., let contract building theatre, to N. McLeod, Kent Bldg. About $100,000. Noted Oct. 17.

Federal Government Work

PROPOSED WORK

N. Y., Montauk—Sewers—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install additional sewers, here; Spec. 3955. About $6000.

N. Y., New York—Garage—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3962. About $40,000.

N. Y., Rockaway—Electric Light and Power Distributing System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install at Naval Air Sta., here; Spec. 3958. About $60,000.

Pa., Bellevue—Pier and Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build and install, here; Spec. 3972. About $55,000.

Pa., Ft. Mifflin—Repairs to Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to repair roads at Navy Yard, here; Spec. 3971. About $2500.

Pa., Phila.—Paving and Resurfacing—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to pave and resurface roads and streets, here; Spec. 3953. About $23,500.

Md., Indianhead—Housing Development—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build houses here; Spec. 3967. About $100,000.

Md., Indianhead—Toilet Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3968. About $80,000.

Va., Yorktown—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build concrete roads, here; Spec. 3970 About $150,000.

Fla., Milton—Bridge—J. T. Buller, U. S. Government Engr., will soon receive bids building 5200 ft. steel bridge over Yellow River at Faulks Ferry on road connecting Milton with Camp Walton.

Ill., Monmouth—Boilers—J. A. Wetmore. superv. archt., treas. dept., Wash., D. C., received no bids installing in post office. here. Noted May 29.

Mont., Bozeman—Road Work—Bureau Pub. Rds., Missoula, Mont., soon receives bids grading and draining 7 mi. West Gallatin Rd. (1st Sect.), and 3 mi. West Gallatin-Squaw Creek Rd., 16 ft. wide, Gallatin Co. About $20,00 each. C. H. Purcell, Post Office Bldg., Portland, Ore., dist. engr. Noted Mar. 20.

Oregon—Road Work—Bureau of Forestry, Portland, plans to build 35 mi. trail from Crater Lake Park boundary line along Cascades Summit to Lake of the Woods, also 80 mi. trails through forests to water sheds and grazing lands. About $25,000. M. L. Merritt, forest examiner.

Cal., Yreka—Road Work—U. S. Dist. Engr. Dept. Good Rds., plans to build 26 mi. roads in Klamath River Dist., Siskiyou Co. Work involves grading, clearing and grubbing, earth and rock excav., corrugated iron pipe culverts, concrete and rubble masonry work, timber bridges and trestles, cribbing, etc. About $500,000. B. J. Finch, Mills Bldg., San Francisco, engr.

BIDS DESIRED

Mass., Boston.—Addition to Shipfitters' Shop—Until June 25 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., building addition to shipfitters' shop at structural shop, here; Spec. 3920. About $315,000; $10 deposit required for plans and spec. Noted June 5.

Mass., Boston—Cranes—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in additions to structural shop, here; Spec. 3946. About $65,000; $10 deposit required for plans and spec.

R. I., Coasters Harbor—Extending and Altering Fire Alarm System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending and altering fire alarm system, here; Spec. 3951; $10 deposit required for plans and spec.

R. I., Coddington Point—Extending and Altering Fire Alarm System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending and altering fire alarm system, here; Spec. 3951; $10 de- deposit required for plans and spec.

R. I., Newport—Extending and Altering Fire Alarm System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending and altering fire alarm system, here; Spec. 3951; $10 deposit required for plans and spec.

N. Y., Montauk—Power House—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building, here; Spec. 3889. About $4000; $10 deposit required for plans and spec. Noted May 22.

N. Y., New York—Crane Runaway—Until June 25 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., building crane runaway for Shipbuilding Slip No. 1 and for bulkhead handling and storage, here; Spec. 3678; $10 deposit required for plans and spec. Noted June 5.

N. Y., South Brooklyn—Storage Building—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing compass storage building on roof of Building S-2; Spec. 3948. About $25,000; $10 deposit required for plans and spec.

N. Y., Stapleton—Gas Mains—Until July 7, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., furnishing and laying gas mains at U. S. Marine Hospital, here; advertised in this issue.

N. J., Cape May—Cell House—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Wissahickon Barracks, here; Spec. 3943. About $4000; $10 deposit required for plans and spec. Noted June 5.

N. J., Cape May—Flood Lighting System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing in Wissahickon Barracks, here; Spec. 3963. About $8250; $10 deposit required for plans and spec.

Pa., Ft. Mifflin—Cleaning, Repairing and Resurfacing Roads—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., cleaning and repairing existing macadam roads and resurfacing same with bituminous dressing; Spec. 3971. About $2500; $10 deposit required for plans and spec.

Pa., Ft. Mifflin—Tank and Tower—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building elevated steel water tank and tower for Delaware River water; Spec. 3919. About $14,000; $10 deposit required for plans and spec. Noted June 5

Pa., Phila.—Fire Escape—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing fire escape for Building No. 5, here; Spec. 3932. About $2500; $10 deposit required for plans and spec. Noted June 5.

Pa., Phila.—Pipe System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing combination wet and dry pipe system of automatic sprinkler in Building No. 87, here; Spec. 3961. About $7500; $10 deposit required for plans and spec.

Pa., Phila.—Sprinkler System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3954. About $20,000; $10 deposit required for plans and spec.

Pa., Phila.—Wet Pipe System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing wet pipe system for automatic sprinkler in Building No. 7, here; Spec. 3957. About $7500; $10 deposit required for plans and spec.

Md., Annapolis—Painting—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., painting radio towers, here; Spec. 3925. About $12,000; $10 deposit required for plans and spec. Noted June 5.

Md., Baltimore—Buildings—See Wash., D. C.

Md., Indianhead—Piping and Electric System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing piping and electric system for accumulator and press house, here; Spec. 3969. About $18,000; $10 deposit required for plans and spec.

Federal Government Work (Continued)

Md., Indianhead—Power Plant — Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C. building extension to power plant; Spec. 3924. About $210,000; $30 deposit required for plans and spec. Noted June 5.

D. C., Anacostia—Buildings, Hangars, Roads and Distributing Systems—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building and installing here; Spec. 3905. About $475,000; $50 deposit required for plans and spec. Noted May 22.

D. C., Wash.—Buildings—Until June 28. by Constr. Div., War Dept., Wash., constructing steel buildings at Camp Normoyle. San Antonio, Tex.; Camp Holabird. Baltimore, Md., and Camp Jesup, Fort McPherson, Ga.; advertised in this issue.

D. C., Wash.—Pump House—Until June 20, at office of Secy. Bd. Comrs., 511 Dist. Bldg., constructing small pump house at Municipal Fish Market on Water St. between 11th and 12th St.

Va., Hampton Roads—Fire Alarm System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing, here; Spec. 3960. About $6000; $10 deposit required for plans and spec.

Va., Hampton Roads—Railroad Extension—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3947. About $25,000; $10 deposit required for plans and spec.

Va., Yorktown—Buildings — Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing 10 buildings, here; Spec. 3952; $10 deposit for plans and spec.

S. C., Paris Island—Water Supply System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building fresh water supply system, here; Spec. 3964. About $106,000; $10 deposit required for plans and spec.

Ga., Ft. McPherson—See Wash., D. C.

Fla., Key West—Oil Burning Equipment—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing oil burning equipment for boilers; Spec. 3847. About $6500; $10 deposit required for plans and spec. Noted June 12.

Fla., Key West—Power House, Electric Generator Equipment and Fire Protection System—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building power house and installing electric generator equipment and fire protection system, here; Spec. 3956. About $105,000; $10 deposit required for plans and spec.

Fla., Key West—Sewer—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building intercepting sewer at Naval Air Sta.; Spec. 3959. About $4000; $10 deposit required for plans and spec.

Fla., Pensacola—War Heads and Detonator Storehouses—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Naval Air Sta., here; Spec 3812. About $4700; $10 deposit required for plans and spec. Noted Apr. 10.

Ill., Great Lakes—Road Work—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., improving roads, here; Spec. 3950. About $35,000; $10 deposit required for plans and spec.

Wis., Milwaukee—Skeleton Steel Towers—Until June 23, by Supt. Lighthouses, 424 Federal Bldg., furnishing and erecting four 31 ft. skeleton steel towers, each with attached steel tank house; advertised in this issue.

Ia., Vinton—Post Office—Until July 10, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., furnishing material and building post office, here. Separate bids will be received on material and labor.

Tex., San Antonio — Buildings— See Wash., D. C.

Wash., Puget Sound—Grading, Excavating and Filling—Until July 2, by Bureau Yards & Docks, Navy Dept., Wash., D. C., grading, excavating and filling, here; Spec. 3256. About $380,000; $10 deposit required on plans and spec. Noted Aug. 1.

Cal., Los Angeles—Silt Diversion Works—Until July 18, by U. S. Engr. Office, 725 Central Bldg., building near Los Angeles and Long Beach Harbors; advertised in this issue.

Cal., Mare Island—Cranes—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., installing 3 electric traveling cranes in structural shop, here; Spec. 3903. About $275,000; $10 deposit required for plans and spec. Noted May 22.

Cal., San Francisco—Radio Towers—Until June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., erecting two 450 ft. steel radio towers, here; Spec. 3965. About $85,000; $10 deposit required for plans and spec.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. H., Portsmouth — Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, building at Marine Barracks, here, from Weiss Constr. Co., 40 Court St., Boston, Mass., $12,600, (60 days); King Lumber Co., Charlottesville, Va., $12,943, (60 days). Noted May 22.

★Mass., Chatham — Roads — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building roads, to Coleman Bros., 1 Marginal St., Chelsea, $7270 (45 days). Noted June 12.

Mass., Chelsea—Heating Plant and Distributing System — Bureau Yards and Docks, Navy Dept., Wash., D. C., received bids extending heating plant and distributing system, here, from Power Efficiency Corp., White Bldg., Buffalo, N. Y., (1) $54,886, (75 days); Lynch & Woodward, 287 Atlantic Ave., Boston, $57,432, (70 days); Lord Constr. Co., 112 South Water St., Boston, $59,927, (65 days).

Mass., Hingham — Dredging — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, dredging at Naval Ammunition Depot, here, (1) work complete, from Boston Dredging Co., 172 Conder St., (1) $.89, (100 days), (2) $20, (3) $40; Bay State Dredging & Contg. Co., 62 Conder St., (1) $.83, (98 days), (2) $20, (3) $38. Both contractors of East Boston. Noted May 22.

Mass., Hingham—Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, installing here, (1) work complete, from H. S Roberts & Co., 1123 Bway., New York City, (1) $116,317, (150 days), (2) $86[illegible], (3) $30,000, (4) $200, (5) $18.50; B. Pizzimento, 424 West Holly Ave., Pittman, N. J., (1) $120,150 (time as specified), (2) $92,450, (4) $100, (5) $25, (6) $1.90 to $4.00; H. F. Lodge, 1633 Ransted St., Phila., (1) $129,398 (120 days), (2) $102,398 (120 days), (3) $31,900, (4) add $1[illegible], (5) $22.50, (6) $2.09 to $4.49. Noted May 22.

★R. I., Newport — Boathouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to Darling & Slade Constr. Co., 52 Bridge St., $82,500 (150 days). Noted June 12.

★Conn., New London—Dredging—U. S. Engr. Office, New London, let contract for maintenance dredging in New Haven Harbor, to J. S. Packard Dredging Co., Turks Head Bldg., Providence, R. I., $39,435. Noted May 1.

N. Y., Brooklyn—Building, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, constructing building "F" and altering stairway in main hospital at U. S. Naval Hospital Reservation, here, (1) work complete from

Nugent Constr. Corp., 505 5th Ave., New York City. (1) $242,422 (120 days), (2) $409,904 (150 days), (3) $8000 (45 days).

White Fireproofing Constr. Co., 95 Madison Ave., New York City (1) $261,945 (120 days), (1a) deduct $2240; (2) $416,549 (150 days), (3) $8450, (3a) deduct $50 (45 days).

Warren Moore Co., Colonial Trust Bldg., Phila., (1) $283,653 (time as specified), (1a) $1090, (2) $411,439 (time as specified), (3) $9500, (3a) add $70. Noted June 5.

★N. Y., Brooklyn—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building fence at Marginal Parkway, here, to Wright Wire Co., 69 Hammond St., Worcester, Mass., $1195, (30 days). Noted June 5.

★N. Y., Brooklyn—Sprinkler System—Pub. Wks. Officer, Navy Yard, Brooklyn, let contract installing sprinkler system, to C. Meads & Co., 39 Park Row, $42,210 (time as specified). Noted Apr. 10.

MILL CREEK IMPROVEMENT—ERIE, PA.

Bids were received by City Council, May 20, (lowest 3) for completion of Mill Creek Flood Control, Sect. No. 3, from (A) Scott Bros., Arlington Blk., Rome, N. Y. (awarded contract); (B) Peckham Constr. Co., Niagara Life Bldg., Buffalo, N. Y.; (C) Foundation Co., 233 Bway., New York City; Sect. No. 4, (A) Scott Bros. (awarded contract); (B) Peckham Constr. Co.; (C) A. L. Anderson & Bros., McCance Bldg, Pittsburgh; Sect. No. 5, (A) Erie Concrete & Steel Co., Erie (awarded contract); (B) Schaaf Co., Mutual Life Bldg., Buffalo, N. Y.; (C) Lupfer & Remick, Ellicott Sq., Buffalo, N. Y. The unit bids were as follows:

SECT. 3

	A	B	C
Taking care of water (lump sum)	$10,360.00	$5,000.00	$8,000.00
30,000 cu.yd. excavation class "A" earth	1.05	1.30	1.20
2,700 cu.yd. excavation class "B" earth	1.95	2.00	3.50
33,000 cu.yd. excavation class "D" rock	2.25	3.00	2.00
2,500 cu.yd. excavation class "E" rock	3.25	5.00	6.00
550 cu.yd. excavation class "F" earth	1.95	2.25	3.25
250 cu.yd. excavation class "G" rock	3.25	6.50	6.50
850 cu.yd. excavation class "H" concrete masonry	3.90	4.50	4.00
1,050 cu.yd. excavation class "J" stone and brick masonry	2.90	2.15	4.00
1,800 sq.yd. excavation class "K" pavements	1.30	70	1.50
17,200 cu.yd. concrete class "A" tube	9.05	10.00	11.00
200 cu.yd. concrete class "B" ribs, walls, etc	19.50	12.25	13.50
300 cu.yd. concrete class "E" rough	7.15	5.85	13.50
105 cu.yd. concrete class "F" manholes, etc	32.40	11.00	18.00
306 tons reinforcing steel	86.75	86.00	87.00
7 tons structural steel	111.50	190.00	175.00
18 tons iron castings	142.50	135.00	127.00
50 tons cast iron pipe	99.75	90.00	74.00
150 ft. vitrified sewer pipe, 6 in	.78	.30	.60
110 ft. vitrified sewer pipe, 9 in	1.10	.50	1.00
110 ft. vitrified sewer pipe, 12 in	1.30	.60	1.35
130 ft. vitrified sewer pipe, 15 in	1.65	1.00	1.80
50 ft. vitrified sewer pipe, 18 in	2.05	1.40	2.50
75 ft. vitrified sewer pipe, 24 in	3.40	2.30	4.50
20 ft. vitrified sewer pipe, 36 in	6.50	5.95	10.25
30 cu.yd. brick masonry	23.30	22.00	24.00
Underpinning structure No. 1 (lump sum)	4,000.00	3,000.00	5,000.00
Underpinning structure No. 2 (lump sum)	2,600.00	1,500.00	5,000.00
Underpinning structure No. 3 (lump sum)	3,100.00	3,000.00	6,000.00
Underpinning structure No. 4 (lump sum)	5,960.00	3,000.00	10,000.00
Underpinning structure No. 5 (lump sum)	325.00	1,000.00	1,000.00
Underpinning structure No. 6 (lump sum)	5,960.00	5,000.00	22,000.00
450 ft. intercepting sewer, 36 in	7.10	4.15	7.75
4,050 ft. tile in invert, 8 in	.65	.60	70
8 flap valves, 12 in. and less	51.75	55.00	60.00
6 flap valves, 15 in. to 24 in	97.00	115.00	150.00
50 lin.ft. supporting water pipes, etc	1.95	3.25	2.50
15 tons steel for taking care of traffic	130.00	100.00	175.00
20M. timber for taking care of traffic	97.00	90.00	100.00
26,500 bbl. Portland cement	2.90	2.60	2.87
Extended totals	$451,459	$478,649	$519,313

SECT. 4	A	B	C
Taking care of water (lump sum)	$16,000.00	$5,000.00	$20,788.00
29,000 cu.yd. excavation class "A" earth	1.68	1.80	1.15
8,400 cu.yd. excavation class "B" earth	2.58	2.15	3.00
39,000 cu.yd. excavation class "D" rock	2.86	3.80	2.50
9,600 cu.yd. excavation class "E" rock	3.90	5.70	5.14
1,500 cu.yd. excavation class "F" earth	2.58	2.40	7.06
1,200 cu.yd. excavation class "G" rock	3.90	7.00	5.93
1,200 cu.yd. excavation class "H" concrete masonry	4.85	4.80	6.97
1,400 cu.yd. excavation class "J" stone and brick masonry	3.90	2.25	5.85
2,500 sq.yd. excavation class "K" pavements	1.55	.75	1.27
17,600 cu.yd. concrete "A' tube	7.75	9.70	9.00
500 cu.yd. concrete "B" ribs, walls, etc	23.00	13.00	27.00
500 cu.yd. concrete class "E" rough	7.00	6.20	8.17
150 cu.yd. concrete class "F" manholes, etc	32.00	11.70	23.90
105 tons reinforcing steel, furnishing and placing	87.00	92.00	145.34
160 tons reinforcing steel, placing only	36.00	42.00	53.24
50 tons structural steel	112.00	204.00	175.00
17 tons iron castings	142.00	144.00	326.00
60 tons cast iron pipe	100.00	97.00	164.30
50 ft. vitrified sewer pipe, 6 in	.78	.30	.38
80 ft. vitrified sewer pipe, 9 in	1.10	.50	.66
100 ft. vitrified sewer pipe, 12 in	1.30	.60	.85
400 ft. vitrified sewer pipe, 15 in	1.65	1.10	.92
160 ft. vitrified sewer pipe, 18 in	2.05	1.50	1.74
200 ft. vitrified sewer pipe, 24 in	3.40	2.50	1.82
50 ft. vitrified sewer pipe 36 in	6.50	6.00	4.20
120 cu.yd. brick masonry	23.30	23.50	29.20
Underpinning structure No. 7 (lump sum)	3,900.00	4,800.00	6,050.00
Underpinning structure No. 8 (lump sum)	13,000.00	9,300.00	13,500.00
Underpinning structure No. 9 (lump sum)	2,300.00	2,000.00	800.00
Underpinning structure No. 10 (lump sum)	5,700.00	4,000.00	4,200.00
Underpinning structure No. 10A (lump sum)	1,900.00	350.00	800.00
Underpinning structure No. 14 (lump sum)	2,600.00	2,400.00	3,900.00
Underpinning structure No. 15 (lump sum)	7,300.00	4,800.00	7,200.00
Underpinning structure No. 15A (lump sum)	400.00	350.00	550.00
Underpinning structure No. 16 (lump sum)	500.00	350.00	1,000.00
Underpinning structure No. 16A (lump sum)	2,600.00	350.00	2,700.00
Underpinning structure No. 17 (lump sum)	6,500.00	4,400.00	5,800.00
4,100 lin.ft. tile in invert, 8 in	.65	.62	.50
12 flop valves, 12 in. and less	51.75	60.00	50.00
10 flop valves, 15 in. to 24 in	97.00	120.00	93.00
200 lin.ft. supparting water pipes, etc	1.95	3.60	7.00
15 tons steel for taking care of traffic	130.00	105.00	115.00
40M. timber for taking care of traffic	97.00	96.00	140.00
28,500 bbls. Portland cement	2.90	2.50	3.47
Extended totals	$589,058	$640,100	$653,697

SECT. 5	A	B	C
Taking care of water (lump sum)	$650.00	$1,400.00	$500.00
5,000 cu.yd. excavation, class "A" earth	.55	.87	1.50
3,500 cu.yd. excavation, Class "B" rock	2.57	2.14	2.65
500 cu.yd. excavation, class "C" rock	2.83	2.70	2.65
80 cu.yd. concrete, class "A" portal	18.60	15.84	16.05
200 cu.yd. concrete, class "B" buttressed walls	18.00	12.50	17.12
1,200 cu.yd. concrete, class "C" gravity walls	9.35	11.80	8.50
600 cu.yd. concrete, class "D" footings and floor	6.70	5.80	7.50
15 tons reinforcing steel	140.00	105.00	75.00
300 lin.ft. tile drains	1.28	.09	.24
500 sq.yd. surfacing with top soil	.51	.50	.25
200 sq.yd. rubble paving	2.57	1.70	2.57
3,000 bbl. Portland cement	2.90	3.00	3.00
Extended totals	$46,091	$47,189	$48,844

Federal Government Work (Continued)

★**N. J., Cape May**—Storage Tanks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing gasoline tanks and fuel depot, here, to Mansfield & Savage, 135 William St., New York City, $82,986 (150 days). Noted June 12.

★**Pa., Ft. Mifflin**—Fence and Gates—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to Wright Wire Co., 69 Hammond St., Worcester, Mass., (1) $14,400, (90 days); also unit prices for (2) and (3). Noted June 12.

★**Pa., Ft. Mifflin** — TNT Plant — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to G. F. Pawling Co., 1432 South Penn. Sq., Philadelphia, $173,298, (210 days). Noted May 29.

★**Pa., Phila.**—Elevator Shafts — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing elevator shafts in heavy machine shops, here, to Albro Clem Elevator Co., Erie Ave. and D St., $14,648. (165 days). Noted May 22.

★**Pa., Phila.**—Heating and Humidifying Apparatus—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Aircraft Storage Building "D," here, to Enterprise Steam & Hotwater Heating Co., 600 North Howard St., Baltimore, Md., $62,529 (120 days). Noted June 12.

★**Pa., Phila.**—Pavement—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at Marine Corps Barracks, here, to E. C. Fish, 704 Real Estate Trust Bldg., $7887, (35 days). Noted May 1.

★**Md., Baltimore**—Rip Rap—Supt. Light houses, Custom House, let contract furnishing and placing rip rap stone at Craney Island Light House Sta., Elizabeth River, Va., to Raymond Concrete Pile Co., 922 Munsey Bldg., $6000. Noted May 29.

D. C., Anacostia—Earth Fill—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, building earth fill, here, from Scheer & Deckelbaum, 1359 H St., N. E., $1 per cu.yd (50 days); Vinson Constr. Co., 1709 2nd St., N. W., $1.34 (55 days); G. Hyman, 1116 Morse St., N. E., $1.69 (30 days). Contractors all of Wash., D. C. Noted June 6.

D. C., Wash.—Laboratory—U. S. Constr. Quartermaster, War College, received bids June 9, building 2 story photographic laboratory, here, from E. Diebitsch, 383 Madison Ave., New York City, $60,994, (100 days); Weller Constr. Co., 816 14th St., $65,893, (160 days); Piel Constr. Co., 2519 Edmonston Ave., Baltimore, Md. $68,750 (120 days). Noted June 5.

★**D. C., Wash.** — Partitions — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building partitions in machine shop here, to A. C. Moses & Co., 916 New York Ave., $42,500 (75 days). Noted June 12.

Va., Hampton Roads—Electric Distributing System—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, installing at Submarine Base, here, (1) work complete, from Hetzel & Buleah, 373 4th Ave., New York City, (1) $48,813, (120 days), (2) $130, (3) $2.50, (4) $.07; Carroll Electric Co., 714 12th St., Wash., D. C., (1) $54,500, (120 days), (2) $200, (3) $2.40, (5) $.12; J. Livingston & Co., Grand Central Terminal, New York City, (1) $55,000, (90 days), (2) $225, (3) $6.10, (4) $.09. Noted May 29.

★**Va., Hampton Roads**—Electric Freight Elevator—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing here, to Kaestner & Hect Co., 500 South Throop St., Chicago, Ill., $112,644 (150 days). Noted June 12.

★**Va., Hampton Roads**—Revolving Platform—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building revolving platform at Air Sta., here, to Mansfield & Savage, 135 William St., New York City, $11,131, (60 days). Noted June 12.

★**Va., Hampton Roads**—Steel Water Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract erecting one 150,000 gal. steel water tank and tower, to Pittsburgh Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $11,580, (120 days). Noted June 5.

Va., Quantico—Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 11, building 20,000 gal. elevated steel tank, at Marine Barracks, here, (1) work complete, from Mansfield & Savage, 135 William St., New York City, (2) $5539, (45 days); Pittsburgh Des Moines Steel Co., 595 Munsey Bldg., Wash., D. C., (1) $6060, (75 days), (2), $5580, (75 days). Noted June 5.

S. C., Charleston—Boilers and Superheaters—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids furnishing and installing at Navy Yard, here, from Heine Safety Boiler Co., 1120 Pennsylvania Bldg., Wash., D. C., $42,850, (140 days); Edgemoor Iron Co., Edgemoor, Del., (1) $45,217, (120 days); J. L. Skeldon Eng Co., 242 Water St., Toledo, O., $51,922.

★**S. C., Charleston**—Roof Decks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building gypsum roof decks, to Keystone Gypsum Fireproofing Corp., 47 West 34th St.; (a) $168,500, (82 days); H W. Johns-Manville Co., 296 Madison Ave., (b) $65,191, (90 days). Both contractors of New York City.

O., Cincinnati—Boiler—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received only bid June 16, installing boiler in post office and customhouse, here, from Heine Safety Boiler Co., 5319 Marcus St., St. Louis, Mo., $39,930 (195 days). Noted May 29.

Ill., Cairo—Boiler — J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 16, furnishing and installing boiler in post office, here, from La Hue Bros., Cairo, Ill., $1775 (70 days); W. Wilby, Selma, Ala., $2299 (Oct. 1); C. J. Gleason, Augusta, Ga., $2595 (Oct. 1). Noted May 29.

★**Kan., Eldorado** — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building here, to Henry & Hatfield Constr. Co., 102 South Meridian St., Indianapolis, Ind., $68,233. Noted June 5.

S. D., Deadwood—Bureau Pub. Rds., Denver, Colo., received bids grading 7.78 mi. Deadwood-Hot Springs Rd., Lawrence Co., from Parrish & Mattson, $36,365; Anderson Constr. Co., $38,592; both contractors of Rapid City.

★**Tex., Denton**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building post office, here, to Cooper & Lund, Inc., 142 Market St., Newark, N. J., $63,426. Noted June 12.

Colorado—Road Work — Bureau Pub. Rds., Denver, received bids May 26, grading 12.3 mi. Monarch Pass-East Side Rd., involving 44 acres clearing and grubbing, 61,166 cu.yd. earth and 11,826 cu.yd. rock excav., from Nelson & Co., 2240 Market St., $76,017; W. O. Morrison, $111,865. Both contractors of Denver.

Colo., Denver—Boilers—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 9, installing 2 boilers in custom house, here, from C. J. Gleason, Augusta, Ga., $5675, (90 days); W. Wilby, Selma, Ala., $6495, (Oct. 1); J. F. Pfiefer, 1140 California St., $7150 (60 days). Noted May 29.

Ariz., Sacaton—Dam and Bridge—U. S. Indian Serv., 528 Federal Bldg., Los Angeles, Cal., received bids June 2, building rein.-con. diversion dam and bridge on Gila River, (Government furnishing cement reinforcing steel, piles, gates and machinery), from Burton & Dillon, 620 Security Bldg., Los Angeles, Cal., $300,385; Ambursen Co., 61 Bway., New York City, percentage basis or lump sum, amount to be fixed later. Noted May 1.

★**Cal., Yreka**—Road Work—B. J. Finch, dist. engr., U. S. Forest Serv., Mills Bldg., San Francisco, let contract building 15 mi. road from Happy Camp to point near Crawford Creek, Siskiyou Co., to W. A. Bechtel, 625 Market St., San Francisco. About $235,000. Noted May 15.

Miscellaneous

PROPOSED WORK

Pier—Fall River, Mass.—State Comn. on Waterways, State House, Boston, plans to build pier here. About $300,000. J. N. Poole, chn.

Oil Tank—Apponaugh, R. I.—Apponaugh Co. soon lets contract building rein.-con oil tank, 150,000 gal. capacity. W. B. Lewis, Grosvenor Bldg., Providence, engr.

Miscellaneous (Continued)

Memorial Arch — Providence, R. I. — Brown University, College St., had plans prepared by Coolidge & Shattuck, archts., Ames Bldg., Boston, Mass., for memorial arch gateway with columns and bronze tablets on college campus. About $45,000.

River Terminal—Rahway, N. J.—City plans to build river terminal on Rahway River, to include cold storage warehouses, sheds, railways, tracks, etc. About $2,400,000. H. McL. Harding, 52 Vanderbilt Ave., New York City, engr.

Transmission Line—Yorkhaven, Pa.—Yorkhaven Water & Power Co. employed engineer to prepare plans for 23 mi. transmission line to run from here to point in Lebanon Co., near Lebanon. A. Delano, engr.

Pier, etc.—Gulfport, Fla.—Pinellas Co. plans to build 500 ft. pier, yacht basin and commercial dock.

Community Center and Playground—Dayton, O.—Barney Community Center, 536 Valley St., plans to build community center and playground. Project includes gymnasium, swimming pool, day nursery, etc. C. B. Spies, Dayton, mgr. Pond & Pond, 64 East Van Buren St., Chicago, archts.

Ice Breaker—Toledo, O.—City receives bids about July 15, building 340 ft. timber ice breaker, 46 ft. wide, on Fassett St. About $27,000. H. C. McClure, city engr.

Conduit—Detroit, Mich.—Pub. Lighting Comn. soon lets contract building conduit in John R. St. to new Pub. Library in Cass Ave., from Grand River Ave. to Willis Ave., in Chene St. from Grand River Ave. to Boulevard, in Kercheval Ave. from Mt. Elliott to Hurlbut Ave., in Junction Ave. from Michigan Ave. to Michigan Central R.R. viaduct, involving 5½ mi. 1-5 in. duct conduit, 17 manholes, 170 handholes and 350 lamp pole foundations. F. T. Bowler, 56 East Atwater St., secy.

Pipe, etc.—Detroit, Mich.—Dept. Purchases & Supplies, New Municipal Court Bldg., soon lets contract furnishing materials for high pressure pipe lines consisting of rough cast steel fittings, elbows, tees and crosses; also sewer gates and c. i. castings for Sewer Div. of Dept. Pub. Wks. requirements for year ending Jan. 31, 1920, delivered f.o.b. cars, Detroit.

Gate—Port Huron, Mich.—City soon receives bids building 13 x 25 ft. steel vertical lift gate to regulate flow of water into Black River canal, concrete abutments and shore wings, involving 14 tons steel. About $15,000. E. R. Whitmore, city engr.

Pipe Line—Woodriver, Ill.—See "Industrial Works."

Dock, etc.—Marshfield, Ore.—Port of Coos Bay Comn. plans to purchase 1200 ft. waterfront and build import and export docks and warehouses. Preliminary plans being prepared. J. Jolhemus, Marshfield, engr.

Cabs., etc.—Portland, Ore.—State Highway Comn., Portland, soon lets contract furnishing 25 cabs, 100 dump bodies and 100 hydraulic hoists. H. Nunn, Salem, state highway engr.

Pier, Shed, etc.—Portland, Ore.—Pub. Dock Comn. soon lets contract building pier shed superstructure with towers and conveyor galleries on one level section, Pier No. 1, St. Johns Municipal Terminal, east side Willamette River, North St. Johns Dist. G. B. Hegardt, c/o Dock Comn., engr.

Parks—Long Beach, Cal.—See "Buildings."

Engine—Palo Alto, Cal.—City election soon to vote on $72,000 bonds for installing Diesel engine for generating electricity for lighting plant. J. F. Byxbee, Jr., Palo Alto, engr.

Pier—Redondo Beach, Cal.—City voted $25,000 bonds to repair rein.-con. pleasure pier, here. Leeds & Barnard, Central Bldg., Los Angeles, engrs. Noted May 8.

Retaining Wall—Redwood City, Cal.—See "Sewers."

Breakwater—Devils Island, N. S.—Dept. Pub. Wks., Ottawa, soon lets contract repairing breakwater here. About $11,000. A. Lefleur, c/o Dept. Pub. Wks. engr. Noted Apr. 10 under "Canada."

Wires—London, Ont.—Utilities Bd., Hydro Offices, instructed E. V. Buchanan, engr., to prepare plans for putting high voltage wires underground in downtown section. About $45,000.

Pier—Ottawa, Ont.—Dept. Pub. Wks. soon lets contract rebuilding 200 ft. South Pier, Burlington Channel. About $24,000. Noted Apr. 10 under "Canada."

Breakwater—Port Colborne, Ont.—Dept. Pub. Wks., Ottawa, soon lets contract repairing 2 points on eastern and 2 points on western breakwaters here. A. Lafleur, c/o Dept. Pub. Wks., engr. Noted Apr. 10 under "Canada.";

Shelter—Calgary, Alta.—City Council appropriated $60,000 bonds to build children's shelter.

Dam—New Westminster, B. C.—Dept. Pub. Wks., Ottawa, soon lets contract building dam, embankment and 3 groynes at Nocomen Island, Fraser River, near here.

BIDS DESIRED

Park, etc.—Boston, Mass.—Until June 24, by Park Comn., 33 Beacon St., building park area, furnishing settees, excavating and laying concrete walks and drives in Winthrop Playground. Work involves 1200 sq.yd. concrete sidewalks and 1400 cu. yd. earth excav. About $12,000. C. E. Putnam, 33 Beacon St., engr.

Cast Iron Pipe—(Medford (Boston P. O.) Mass.—Until June 25, by Water and Sewer Comn., 52 Swan St., furnishing 6 in. c. i. water pipe. F. Charnock, city engr.

Auto Sprinkler and Oiler—Woonsocket, R. I.—Until June 23, by Aldermanic Comn., on Streets and Bridges, for combination auto sprinkler and oiler. A. H. Sylvestre, chn., F. H. Mills, city engr.; advertised in this issue.

Cast Iron Pipe—Brooklyn, N. Y.—Until June 24, by N. J. Hayes, comr. water supply, gas and electricity, Municipal Bldg., New York City, furnishing, delivering, unloading, stacking and storing cast iron pipe.

Boilers, Piping, etc.—Central Islip, N. Y.—Until July 1, by State Hospital Comn., Capitol, Albany, for installing one 600 hp. boiler, 4 stokers, new coal bunker and conveyor, coal larry and hoppers and 1 hoist for removal of ashes, for Central Islip State Hospital. About $200,000; advertised in this issue. Noted Jan. 30.

Freighthand Trailers, etc.—New York, N. Y.—Until July 15, by E. S. Walsh, supt. pub. wks., Capitol, Albany, furnishing, delivering and testing industrial freighthandling trailers and stevedore freight handling trucks for Barge Canal terminals here, Contr. 112; advertised in this issue.

Dam—Morris Plains, N. J.—Until June 26, by Dept. Architecture, 142 West State St., Trenton, building dam on river at State Hospital, here. About $15,000. F. H. Bent, 142 West State St., Trenton, engr.

Conduits, Water and Drainage Lines, etc.—Phila., Pa.—Until June 24, by W. S. Twining, dir. dept. city transit, 1211 Chestnut St., for following appurtenant work for Frankford Elevated Ry.; Contr. No. 567 involves installation of electric conduits for lighting system in station buildings to be built at northeast and southwest corners of Kensington and Allegheny Aves., and southeast and southwest corners of Kensington Ave. and Somerset St.; Contr. No. 568, installation of water and drainage lines in station buildings to be built at same points as above.

Brass Service Pipe Fittings, etc.—Baltimore, Md.—Until June 24, by Bd. Awards, furnishing brass service pipe fittings, including 4800 stop cocks (all sizes), 825 brass pipe plugs, 400 special couplings, 300 tail pieces, 4700 assembled services, etc., cost $25,000; lead lined pipe and couplings, including 50,000 ft. ¾ in., 1200 ft. 1 in. and 1000 ft. 1½ in. lead pipe, $10,000.

Cotton Compress—Los Angeles, Cal.—Until July 9, by Bd. Harbor Comr., furnishing and installing high density cotton compress on city dock at San Pedro Harbor. Bidders may submit proposals for any type of plant, operated by either steam or electric power, having capacity of 50 to 100 bales per hour, bales to have density of 35 to 45. About $80,000. G. Wade, secy. Noted June 5.

Wharf—St. Michel de Bellechasse, Que.—Until June 24, by Dept. Pub. Wks., Ottawa, for removal and rebuilding wharf here, 853 ft. long, 5 to 10 ft. high, cribwork with stone fill, involving 100,000 ft. B. M. of 6 in. red birch sheathing and about 60,000 ft. B. M. of 2 in. fir plank decking. E. Lafleur, c/o Dept. Pub. Wks., engr. Noted Apr. 10 under "Canada.'

Dam—Parry Sound, Ont.—See "Industrial Works."

Breakwater—Port Arthur, Ont.—Until June 25, by Dept. Pub. Wks., Ottawa, building 1600 ft. extension to rubble stone breakwater at Bare Point, 8 ft. high, 48 ft. wide, with cover of stones 8-10 ton in weight. About $125,000. E. Lafleur, c/o Dept. Pub. Wks., engr.

PRICES AND CONTRACTS AWARDED
(★Indicates award of contract)

Cast Iron Pipe—Boston, Mass.—Comr. Pub. Wks. received bids June 12 furnishing 6 in. c.i. pipe, from R. D. Wood Co., Boston, at $50 per ton, and United States Cast Iron Co., Boston, $51.20 per ton.

Paving Materials—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., received bids June 6, furnishing and delivering (a) 20,000 bags Portland cement, (b) 2000 cu.yd. mixed aggregate, (c) 5800 cu.yd. binder stone, (d) 100,000 sewer bricks, (e) 3800 tons limestone, (f) 200,000 wood paving blocks, (g) 600,000 gal. refined asphalt, from J. A. McCarthy, 551 Exterior St., (a) $15,400, (d) $1785; J. P. Kane, 103 Park Ave., (a) $16,250; C. Tompkins, (b) $5300; Manhattan Sand Co., 418 East 49th St., (b) $5500; New York Trap Rock Co., 101 Park Ave., (c) $11,029, (e) $30,000; N. H. Trap Rock Co., (c) $11,890; R. H. Soper, (e) $33,306; Amer. Creosoting Co., 17 Battery Pl., (f) $9970; Warner Quinlan Asphalt Co., 79 Wall St., (g) $32,820; Standard Oil Co., 26 Bway., (g) $34,200. Noted May 29.

★Paving Bricks—Saranac Lake, N. Y.—Village let contract furnishing 70,000 paving bricks, to C. W. Denniston, Powers Bldg., Rochester, $47.50 per 1000.

★Pipe—Hollidaysburg, Pa.—Blair Co. let contract to Altoona Pipe & Supply Co., 1925 9th Ave., Altoona, furnishing 240 lin. ft. 24 in. corrugated iron gauge pipe at $1.90 per lin.ft.; 416 ft. 18 in., $1.26 per lin.ft.; 720 ft. 12 in., $.90 per lin.ft.

★Coal Storage Bin, Coal Handling Machinery, etc.—Mont Alto, Pa.—State Dept. Health, Harrisburg, let contract building rein.-con. coal storage bin, and installing coal handling machinery capable of handling 30 tons per hour, electrically driven, at Pennsylvania State Sanitorium for Tuberculosis, near here, to Specialty Eng. Co., Allegheny and Trenton Aves., Phila., $18,363. Work involves 25 cu.yd. Class "B" concrete, 150 cu.yd. earth and 25 cu.yd. rock excav. Noted May 15 under "Buildings, Harrisburg."

★Retaining Wall—New Castle, Pa.—See "Excavation and Dredging."

★Water Pond—Westport, Md. (Baltimore P. O.)—Consolidated Gas, Electric Light and Power Co., Lexington St. Bldg., will build 105 x 135 ft. water pond, rein.-con. sides and mass concrete bottom. About $22,500. Work will be done by day labor.

★Retaining Wall—Detroit, Mich.—See "Bridges."

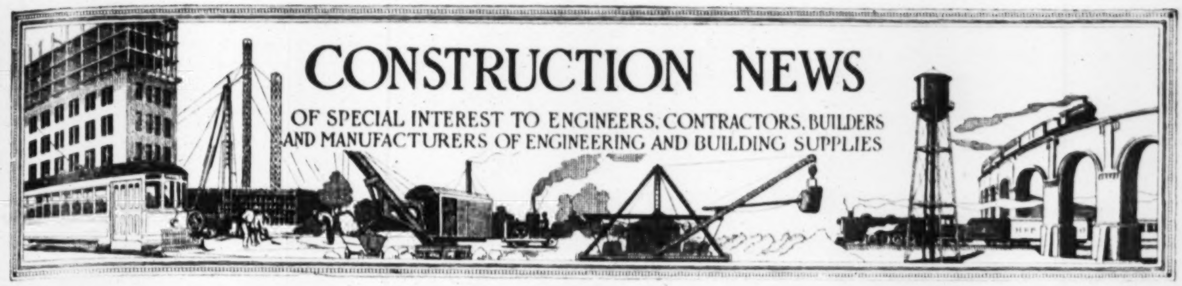
★Pipe—Minneapolis, Minn.—K. E. Alexander, city purch. agt., let contract furnishing 500 tons 6-12 in. water pipe, to Amer. Cast Iron Pipe Co., Plymouth Bldg., $55.30 per ton. Noted Apr. 24.

Asphaltic Cement—St. Paul, Minn.—City received bids June 2, furnishing 320 tons asphaltic cement, from Sun Co., 2824 10th Ave., S. Minneapolis, $25 per ton; Camden Petroleum Co., 208 South La Salle St., Chicago, $19 per ton in tank cars, $25 in drums; Standard Oil Co., 4th and Oak Sts., Minneapolis, $19 in tank cars, $24.35 in packages; Carson Petroleum Co., 280 South La Salle St., Chicago, $19.19 in tank cars, $25.49 in barrels; Sinclair Refining Co., 111 West Washington St., Chicago, $11.50 per ton f.o.b. Mareaux, La.

Hollow Tile and Brick—St. Paul, Minn.—H. W. Austin, city purch. agt., City Hall, received bids from Twin City Brick Co., Capital Bank Bldg., for face and backing tile, various qualities, $13.20 to $70 per M. 21,500 rough face brick, $31 per M; Corning-Donohue Brick Co., 613 Tynan Bldg., 21,500 ft. rought face brick, $31 per M.

Fill—Astoria, Ore—Sanitary and Recl. Comn. received bids May 29, building 1,260,000 cu.yd. fill in Recl. and Impvt. Dist. No. 3, from Puget Sound Bridge & Dredging Co., Central Bldg., Seattle, $0.22 per cu.yd.; United Dredging Co., New Jersey, Wash., $0.2244; Tacoma Dredging Co., Natl. Bank Tacoma Bldg., Tacoma, $0.235. Noted May 8.

★Pavilion—Portland, Ore.—Pacific International Livestock Assn. let contract building exposition livestock pavilion, 200 x 300 ft. amphitheatre with 100 x 200 ft. show ring, to A. Guthrie & Co., Sherlock Bldg. About $250,000. Noted Feb. 20 under "Buildings."



CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 30	Salem, N. J. Adv. June 19.	June 19
July 1	Salem, Ill. Adv. June 19.	June 19
July 7	Brainerd, Minn.	June 26
July 15	Denton, Mont.	June 19
July 16	Milwaukee, Wis.	June 26
July 16	Decorah, Ia. Adv. June 12 and 19.	June 12

SEWERS

Bids Close		See Eng. News-Record
June 28	West Montrose, Ont.	June 26
June 29	Kingston, Ont.	June 26
June 30	Sheboygan, Wis.	June 19
June 30	St. Catharines, Ont.	June 26
June 30	Muskegon, Mich. Adv. June 26.	June 26
July 1	Wakefield, Neb.	June 12
July 1	Toledo, O.	June 26
July 2	Union Grove, Wis.	June 26
July 9	Dearborn, Mich. Adv. June 26.	June 26
July 10	Milwaukee, Wis.	June 26
July 14	North Mankota, Minn. Adv. June 19.	June 19
July 16	Milaca, Minn.	June 19

BRIDGES

Bids Close		See Eng. News-Record
June 30	Mora, Minn.	June 19
July 1	Lincoln, Neb.	June 26
July 2	Pocahontas, Ia. Adv. June 19.	June 19
July 3	Mt. Clemens, Mich.	June 26
July 7	McAlester, Okla. Adv. June 12 and 19.	June 19
July 7	Monroe, Ga.	June 19
July 7	Camden, N. J. Adv. June 26.	June 26
July 7	Adna, Wash.	June 26
July 7	Walnut Cove, N. C.	June 26
July 7	Miles City, Mont.	June 26
July 7	Duluth, Minn.	June 26
July 8	Reading, Penn. Adv. June 26.	June 26
July 10	Adrian, Mich. Adv. June 26.	June 26
July 10	Riparius, N. Y. Adv. June 19.	June 19
July 14	Princeton, Minn.	June 19
July 15	Brookston, Minn.	June 26
July 15	Cedar Rapids, Mich. Adv. June 19.	June 19
July 17	Elmira, N. Y. Adv. June 19.	June 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 28	Lincoln, Neb.	June 26
June 28	North East, Pa. Adv. June 19.	June 19
June 28	Fairmont, W. Va.	June 19
June 28	Fairmont, W. Va.	June 12
June 29	Redwood Falls, Minn.	June 19
June 30	Creston, Ia.	June 19
June 30	Sheboygan, Wis.	June 26
June 30	Kearney, Neb.	June 12
June 30	Sidney, Ia.	June 19
June 30	Bismark, N. D.	June 19
June 30	Virginia	June 19
June 30	Mora, Minn.	June 19
June 30	Lawrence, Kan.	June 19
June 30	Indiana	June 19
June 30	Wheeling, W. Va.	June 26
June 30	Ft. Pierce, Fla. Adv. June 26.	June 26
June 30	Indianapolis, Ind.	June 26
June 30	Yale, Okla.	June 26
June 30	Sandwich, Ont.	June 26
July 1	Hillsboro, Ore.	June 26
July 1	Clinton, N. C.	June 26
July 1	Massachusetts	June 26
July 1	Newark, N. J.	June 26
July 1	St. Tite, Que.	June 26
July 1	Ridgefield Park, N. J. Adv. June 19.	June 19
July 1	Lewisburg, W. Va. Adv. June 12 and 19.	June 19
July 1	Tabor, Ia.	June 19
July 1	Marshall, Ark.	May 22
July 1	Benkelman, Neb.	June 12
July 1	New York Adv. June 12.	June 12
July 1	Douglas, Ga.	June 26
July 1	Macon, Ga.	June 26
July 2	Montreal, Que.	June 26
July 2	Ebensburg, Pa.	June 26
July 2	Grand Rapids, Minn.	June 12
July 2	Santa Ana, Cal.	June 19
July 2	New Jersey	June 19
July 2	Greensburg, Ga.	June 19
July 2	Bemidji, Minn.	June 19
July 2	Burlington, N. J. Adv. June 12.	June 12
July 2	Hayes Center, Neb.	June 12
July 2	Albuquerque, N. M. Adv. June 19.	June 19
July 2	Columbus, O.	June 26
July 2	Portland, Me.	June 26
July 3	Magnolia, Miss.	June 26
July 3	Pocatello, Idaho	June 26
July 3	Greenwood, S. C.	June 26
July 3	Beaver, Pa.	June 19
July 3	Pittsburgh, Pa.	June 19
July 3	Stockville, Neb.	June 12
July 5	Omaha, Neb.	June 12
July 5	Brunswick, Ga. Adv. June 5 and 12.	June 12
July 5	Ford, Mich.	June 26
July 6	Montreal, Que.	June 26
July 7	Port Angeles, Wash.	June 26
July 7	Alexandria, Pa.	June 26
July 7	Indianapolis, Ind.	June 5
July 7	Leeburg, Fla.	June 19
July 7	Sanford, Fla.	June 19
July 7	Albert Lea, Minn.	June 19
July 7	Woodstown, N. J. Adv. June 19.	June 19
July 7	Riverside, Cal.	June 19
July 7	Oakland, Cal.	June 26
July 7	Coffeeville, Miss.	June 26
July 7	Ortonville, Minn.	June 26
July 7	Poteau, Okla.	June 26
July 7	Ellsworth, Kan.	June 26
July 7	Washington	June 26
July 8	Bronson, Fla.	June 26
July 8	Nashville, N. C. Adv. June 26.	June 26
July 8	Jersey City, N. J.	June 26
July 8	Fayetteville, Ark.	June 26
July 8	Omaha, Neb.	June 26
July 8	St. Louis, Mo.	June 26
July 8	Pipestone, Minn.	June 19
July 8	Harrisonville, W. Va.	June 19
July 8	Kingston, N. C.	June 19
July 8	Elkins, Va. Adv. June 12 and 19.	June 12
July 9	Delaware	June 19
July 9	New Jersey	June 26
July 9	Springfield, Ill.	June 26
July 9	Palmerton, Pa. Adv. June 26.	June 26
July 9	Illinois	June 26
July 10	Tennessee Adv. June 26.	June 26
July 11	New Jersey	June 26
July 11	Appleton, Minn.	June 26
July 12	Racine, Wis.	June 26
July 14	Grand Rapids, Minn.	June 26
July 14	Fayetteville, W. Va.	June 26
July 14	Ivanhoe, Minn.	June 26
July 14	Cambridge, Minn.	June 26
July 14	Worthington, Minn.	June 26
July 15	St. Louis, Mo.	June 26
July 16	Springfield, O.	June 19
July 25	St. Louis, Mo.	June 26
July 30	California	June 19

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
July 1	Edwardsville, Ill.	May 15
July 15	Wapello, Ia. Adv. June 26.	June 26
July 15	Marshalltown, Ia. Adv. June 26.	June 26

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
June 30	Port Arthur, Ont.	June 12
June 30	Columbia, Ill.	June 26
June 30	New York, N. Y.	June 26
June 30	Philadelphia, Pa.	June 26
July 1	Shawenegan Falls, Que.	June 12
July 1	Matawan, N. J.	June 26
July 1	Hastings, Minn.	June 19
July 9	Los Angeles, Cal.	June 19
July 15	Flushing, N. Y.	June 19
Aug. 1	Duluth, Minn.	June 26
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
June 29	Pittsburg, O.	June 19
June 30	Ecorse, Mich.	June 19
June 30	St. Hilarie, Minn.	June 19
June 30	Glassboro, N. J.	June 26
June 30	Philadelphia, Pa.	June 26
June 30	Coatesville, Pa.	June 26
July 1	Winona, Minn.	June 26
July 1	Austin, Minn.	May 22
July 1	Akron, O.	June 19
July 1	Wauwatosa, Wis.	June 19
July 1	Bimidji, Minn.	June 12
July 1	Middletown N. Y.	June 12
July 1	Youngstown, Alta.	June 12
July 1	Raymond, Alta.	June 12
July 1	Omaha, Neb.	June 19
July 1	Milledge, Ga.	June 19
July 1	Hartsville, S. C.	June 26
July 1	Lakewood, N. J.	June 26
July 1	Wilson, N. C.	June 26
July 2	Minneapolis, Minn.	June 26
July 2	George West, Tex.	June 26
July 2	Farrell, Pa.	June 26
July 2	Kingston, Ont.	June 26
July 2	Duluth, Minn.	June 19
July 2	Sterling, Wis. Adv. June 19.	June 19
July 2	Huntington, W. Va. Adv. May 29, June 5 and 12.	May 29
July 2	Fargo, N. D. Adv. June 5 and 12.	June 12
July 4	West Bethlehem, Pa.	June 12
July 5	Mountain Lake, Minn.	June 19
July 7	Brooklyn, N. Y.	June 26
July 7	Sanitorium, N. C.	June 26
July 8	Palatka, Fla.	June 26
July 8	Wellington, Kan.	June 26
July 9	Duluth, Minn.	June 26
July 9	Three Rivers, Que.	June 26
July 10	Port Jervis, N. Y.	June 26
July 10	Blooming Prairie, Minn.	June 19
July 11	Merced, Cal.	June 26
July 15	Fraserville, Que.	June 12
July 15	Greybull, Wyo.	June 26
July 15	Brainerd, Minn.	June 26
July 17	Malone, N. Y.	June 26
July 23	Lorain, O.	June 26
July 30	Austin, Minn.	June 36
Aug. 1	Gastonia, N. J.	June 26
Aug. 1	Kenosha, Wis.	May 15
Aug. 1	Virginia, Minn.	June 19

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La. Adv. May 29, June 5, 12 and 19.	May 29
June 28	Buildings — Spec. 3952 — Yorktown, Va.	June 26
June 28	Quarters for Guards—Spec. 3977—Charleston, S. C.	June 26
June 28	Boat Shed and Dredging—Spec. 3974 — Hampton Roads, Va.	June 26
June 28	Machine Shop—Spec. 3978—Yorktown, Va.	June 26
June 28	Crane and Fire Protection System—Spec. 3972—Bellevue, D. C.	June 26
June 28	Repairs to Flying Field, Road and Floor—Spec. 3980—Quantico, Va.	June 26
June 28	Officers Quarters — Spec. 3904—Hingham, Mass.	June 26
June 28	Extension to Steam Heating System—Spec. 3976—Rockaway, N. Y.	June 26
June 28	Latrine and Washroom—Spec. 3975 — Rockaway, N. Y.	June 26

Bids Close		See Eng. News-Record
June 30	Building Wing — West Point, N. Y. Adv. June 5 to 19.	June 12
June 30	Revetment Repairs — Milwaukee, Wis.	June 12
July 1	Post Office—Towah, Wis.	June 5
July 1	Fuel Oil — Washington, D. C.	June 12
July 1	Warehouse—San Antonio, Tex.	June 26
July 2	Dredging—New York, N. Y. Adv. May 29, June 5, 12 and 19.	June 5
July 2	Grading, Excavating and Filling—Spec. 3256—Puget Sound, Wash.	June 19
July 2	Cranes—Spec. 3903—Mare Island, Cal.	June 26
July 2	Cranes—Spec. 3946—Boston, Mass.	June 26
July 2	Cranes—Spec. 3933—Brooklyn, N. Y.	June 26
July 7	Steel—Philadelphia, Pa. Adv. June 5, 12 and 19.	June 5
July 7	Paving Material—Galveston, Tex.	June 26
July 7	Locks and Dam—Pittsburgh, Pa. Adv. June 12 and 19.	June 12
July 7	Gas Mains — Stapleton, N. Y. Adv. June 19.	June 19
July 8	Gate—Operating Machinery —Cincinnati, O. Adv. June 12 and 19.	June 12
July 8	Post Office — Pittsburg, Tex.	June 12
July 9	Post Office — Montevideo, Minn. Adv. June 5, 12 and 19.	June 12
July 10	Post Office—Vinton, Ia.	June 19
July 15	Officers Quarters—Washington, D. C.	June 26
July 15	Officers Quarters—Wilmington, N. C.	June 26
July 16	School—Rapid City, S. D.	June 26
July 18	Silt Diversion Works—Los Angeles, Cal. Adv. June 19.	June 19
July 21	Dredging—New York, N. Y. Adv. June 26.	June 26
July 21	Dredging—Savannah, Ga. Adv. June 26.	June 26
July 21	Dredging—Baltimore, Md. Adv. June 26.	June 26
July 22	Dredging—Sault Ste Marie, Mich. Adv. June 26.	June 26
July 22	Post Office — Andalusia, Ala.	June 26
July 23	Cottage—Sorrento, Idaho	June 26
July 23	Bridges—Leupp, Ariz.	June 26
July 23	Removing Wreck — New York, N. Y. Adv. June 26.	June 26
July 24	Jetty—Jacksonville, Fla. Adv. June 26.	June 26
July 24	Coal—Jacksonville, Fla. Adv. June 26.	June 26
July 25	Dredging — Philadelphia, Pa. Adv. June 26.	June 26
Aug. 26	Dredging—Honolulu, H. T. Adv. June 26.	June 26

MISCELLANEOUS

June 30	Levee, Bridge — Junction, Ark.	June 12
June 30	Flood Prevention Project —Lebanon, Pa. Adv. June 12.	June 12
July 1	Boilers, Piping, etc.—Central Islip, N. Y. Adv. June 19.	June 19
July 2	Water Tube Boilers and Stokers and Radial Brick Chimney—Lorain, O.	June 12
July 7	Lighthouse Tower—Ottawa, Ont.	June 26
July 7	Incinerator—Sedalia, Mo.	June 26
July 8	Cast Iron Pipe—Jersey City, N. J.	June 26
July 8	Masons Materials—Jersey City, N. J.	June 26
July 9	Wharf—Naramata, B. C.	June 26
July 11	Lift Gates—Los Angeles, Cal.	June 26
July 11	Wharf—Thessalon, Ont.	June 26
July 14	Road Gravel—Cambridge, Mass. Adv. June 12 and 19.	June 26
July 15	Freight and Trailers, etc.—New York, N. Y.	June 19
July 15	Wharf—Ottawa, Ont.	June 26
July 16	Milwaukee, Wis.	June 26
July 23	Wharf-Half Moon, B. C.	June 26

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Chicopee—City approriated $66,000 for stand pipe on Keating Hill, 130 ft. high, and 1,900,000 gal. capacity. D. P. Coakley, mayor.

N. J., Gloucester City—City receives bids in August rebuilding waterworks pumping station About $35,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

S. C., Williston—City plans to build waterworks system, including laying mains, erecting tower, tank and deep well pumping station. About $30,000. L. S. Mellichamp, clk. of comrs. of pub. wks. Engineer not selected.

O., St. Clairsville—City voted $65,000 bonds to build water works system.

Ind., Hammond—City having plans prepared building filtration plant in connection with waterworks system. About $400,000. P. J. Lyons, city engr.

Mich., Lansing—City election July 26 to vote on $300,000 bonds for extensions to waterworks.

Kan., Dodge City—City having plans prepared improving waterworks system, including standpipe and extension to present mains. About $35,000. C. H. Hathaway, clk. Black & Veatch, 507 Inter-State Bldg., Kansas City, Mo., engrs.

Kan., Lewis—City soon receives bids building waterworks system. Bonds for $40,000 voted for project. W. B. Rollins & Co., 209 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Kan., Oxford—City soon receives bids building waterworks system. About $7000. W. B. Rollins & Co., 209 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Kan., St. John—City having plans prepared building and extending waterworks and electric light plant. Bonds for $50,000 voted for project. Burns & McDonald, Interstate Bldg., Kansas City, Mo., engrs. Noted May 22.

Kan., Sharon Springs—City voted $50,000 bonds to improve distributing system involving 75,000 gal. tower and tank; also build power house, including one 100 and one 150 h.p. engines. Architect not selected.

S. D., Newell—City soon lets contract building 2,500,000 gal. storage reservoir, water softening plant, power plant, 50,000 gal. steel water storage tank on 100 ft. steel tower, water distributing system, etc. W. C. Buck, 1245 West Minnehaha Parkway, Minneapolis, consult. engr.

Mont., Scobey—City election June 30 to vote on $85,000 bonds to build complete waterworks system. W. B. Saunders, Helena, engr.

Mo., Caruthersville—City retained Black & Veatch, engrs., Interstate Bldg., Kansas City, to prepare plans for complete reconstruction and extension of water and electric light systems.

Ark., Conway—City plans to build reservoir and water mains. About $50,000.

Tex., El Paso—See "Streets and Roads."

Tex., Houston—City plans to improve waterworks. About $100,000 available.

Okla., Guthrie—City soon lets contract building complete waterworks system, involving 19,700 ft. c.i. pipe. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 20.

Colo., Grover—Town voted $34,000 bonds to build waterworks system and electric light plant.

Cal., Avalon—See "Industrial Works."

Cal., Fullerton—City plans to improve water distributing system involving 10,000 ft. 2-4 in. metal pipe. About $45,000.

Cal., Los Angeles—Municipal Impvt. Dist. No. 10 (Westgate annexed section) election July 19, to vote on $90,000 bonds to build metal pipe lines to distribute water from Los Angeles aqueduct. W. Mulholland, 645 South Olive St., ch. engr.

Cal., Tracy—City election soon to vote on $15,000 bonds to extend waterworks and sewers.

Que., Montreal—City plans to build compensation well at pumping station to increase water supply to 25,000,000 gal.-daily capacity. About $39,000. A. E. Doucet, engr.

Ont., Kincardie—Town Council approved $20,000 by-law to construct water mains. R. Ross, secy.

Ont., North Bay—Town Council passed by-law authorizing expenditure of $21,000 to extend water mains.

Ont., Scarborough—Town had preliminary estimates prepared by James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, for 2000 ft. 18 in. steel intake, pumphouse, elevated steel tank and watermains. About $150,000.

BIDS DESIRED

Wis., Milwaukee—Until July 16, by Central Bd. Purchases, furnishing and building 20,000,000 gal. pumping engine for North Point Pumping Sta. on Lake Michigan shore, near North Ave., in 1st Ward; advertised in this issue.

Ia., Wapello—Until July 15, (change of date) by Muscatine-Louisa D. D. No. 13, at office of aud. Lewis Co., building steam driven pumping plant, containing one 36-in. and one 24-in. double suction centrifugal pumps. Bids will also be received for building to house this plant. Elliott & Harman Eng. Co., Peoria, Ill., engrs., advertised in this issue. Noted May 22.

Minn., Brainerd—Until July 7, by city for improvements to water system to include 14 mi. new mains, 6-8 tubular wells, 1 open well, pumping station with electrical pumping equipment and 300,000 gal rein.-con. water tank on 90 ft. tower. About $250,000. L. P. Wolff, 1001 Guardian Life Bldg., St. Paul, engr. Noted Apr. 24.

PRICES AND CONTRASTS AWARDED

(★Indicates award of contract)

★N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, let contract building dam here, same being part of Schoharie watershed development for New York City water supply, to H. Nawn Constr. Co., 82 Savin St., Roxbury, Mass., $6,819,910. Noted June 5.

N. J., Bayonne—City received bids furnishing 2 high powered centrifugal pumps to increase water pressure throughout city from Buffalo Steam Pump Co., 39 Cortlandt St., New York City (no definite figure, but asked to submit estimate later); Dugan Forest Eng. Co., motor driven pump on concrete foundation provided by city, $9520; Worthington Pump Co., 115 Bway., New York City, $8700; J. R. Proctor, Inc., 721 Bway., Bayonne, 7 styles ranging in price from $7191 to $10,093.

★Pa., Tamaqua—Comrs. Water Wks let contract building reservoir on Owl Creek, Rahn Twp., Schuylkill Co., to Wertley & Houser, Pottsville. About $137,000. Noted April 24.

★Mich., Dearborn—Village let contract building watermains, to Monie-Dunbar Contg. Co., 901 Chemical Bldg., St. Louis, Mo., $76,265. Noted June 19.

★Okla., Garber—City let contract building water tank, 50,000 gal. capacity, and 100 ft. tower, to Chicago Bridge & Iron Co., 105th St. and Throop Ave., Chicago. About $7490. Noted June 19.

Cal., Santa Monica—City received bids furnishing (a) 7350 ft. 8-in. c.i. pipe, (b) 7350 ft. 8-in. standard w.i. screw pipe, (c) fittings and valves, from Pacific Pipe & Supply Co., 1002 Santa Fe Ave., Los Angeles, (a) $12,019, (b) $11,770, (c) $348; Water Works Supply Co., 215 West 7th St., Los Angeles, (a) $12,019, (c) $468; Amer. Cast Iron Pipe Co., Citizens Natl. Bank Bldg., Los Angeles, (a) $12,185, (c) $491; Crane Co., 321 East 3rd St., Los Angeles, (b) $11,381, (c) $469; N. Nelson Co., 439 East 3rd St., Los Angeles, (b) $11,076.

Sewers

PROPOSED WORK

N. Y., Syracuse—City plans to build sewers in Crosset St. from Robinson Rd. to South Geddes St., Euclid Ave. from Fellows to Westmoreland Aves., Fellows Ave. from Clark St. to Euclid Ave., Westmoreland Ave. from Euclid Ave. to point 750 ft. north, Kensington Rd. from Lancaster Ave. to point 140 ft. west. About $36,000. H. C. Allen, city engr.

N. J., Palmyra—City receives bids in August or September, building sanitary sewerage system involving 12 mi. 8-15 in. T. C. pipe, combined sewage pumping station and disposal works to treat sewage of Palmyra and Riverton municipalities. About $125,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

Sewers (Continued)

N. J., Westmont—City soon receives bids building sanitary sewerage system involving 10 mi. 8-12 in. T. C. pipe, sewage, ejector station and sewage treatment works. About $110,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

Pa., Mt. Union—Boro. soon lets contract furnishing labor for laying 1700 ft. storm sewers in South Division, East Market and East Water Sts. About $11,000. Boro. will furnish vitr. pipe, brick, castings and material. D. W. Dillman, 81 Altoona Trust Bldg., Altoona, engr.

Pa., Pittsburgh—City passed ordinance to lay sewers in Dido Way, Flowers Ave., Prescott and Kilbourne Sts. About $10,000. T. Reed, City County Bldg., engr.

Md., Baltimore—G. F. Weighardt, city highway engr., submitted report to Municipal Bd. Estimates stating that it will cost about $15,000,000 to build sewers in new annex and complete sanitary sewerage system in old city; also outlined plan for building sewers in Herring Run Dist. of new annex, estimated cost, $1,000,000.

S. C., Ft. Mill—City plans election to vote on $25,000 bonds to build sewers in various streets.

Fla., Century—A. Sullivan Lumber Co. soon receives bids installing sewerage system in principal streets. About $12,000. State Bd. Health, Tallahassee, making plans and surveys.

Fla., Kissimmee—City Comn. soon receives bids building sewerage system in south and east sections of city. About $15,000.

O., Cincinnati—See "Streets and Roads."

O., Piqua—See "Streets and Roads."

O., Springfield—City soon lets contract trenching and laying 16,000 ft. 6-24 in. vitr. pipe sewers in North Limestone St. from North to Columbia Sts., Clay St. from Catherine to Rose Sts., Warder Park Addition, involving 3000 cu.yd. earth and rock trenching. About $30,000. O. E. Carr, city mgr. Noted May 1.

Ind., Indianapolis—Bd. Pub. Wks. soon lets contract excavating, placing and backfilling 555 ft. sewer in 1st alley north of Elmira St. 12 in. vitr. pipe, cost, $1800; 226 ft. sewer from main sewer in Blackford St. to point 226 ft. west, 15 in. pipe, $1600; 1970 ft. sewer in 1st alley east of School St., involving 190 ft. 2 ft. 6 in. brick sewer, 390 ft. 18 in. and 1390 ft. 12 in. vitr. sewer, $7800. F. C. Lingenfelter, 3025 Park Ave., engr.

Mich., Birmingham—City soon lets contract furnishing labor and materials for building and completing sewers in Brown St., involving 600 ft. 8-in. and 236 ft. 6-in. vitr. pipe, etc.; Southfield Ave., 1985 ft. 8-in. and 982 ft. 6-in. vitr. pipe, etc.; Prine St., 1470 ft. 8-in. and 644 ft. 6-in. vitr. pipe, etc.; Purdy St., 800 ft. 8-in. and 360 ft. 6-in. vitr. pipe, etc.; Maple Ave., 2130 ft. 8-in. and 406 ft. 6-in. vitr. pipe and 40 ft. 8-in. c.i. pipe, etc. Coleman & Harding, 702 Kresge Bldg., Detroit, engrs.

Mich., Detroit—Dept. Pub. Wks. soon lets contract furnishing all labor and material (except iron manhole rings and covers), building and finishing complete, together with backfilling, 1280 ft. sewer in Charlevoix Ave. from Connors Ave. to Connors Creek. Alternate bids will be received on brick, vitr. segment block, rein.-con. pipe, plain concrete and concrete segment block, 30, 36 and 42 in. cylinder. C. W. Hubbell, city engr.

Wis., Sheboygan—City plans to excavate and lay 1.7 mi. sewer in Michigan Ave. to North 10th St., involving 5000 ft. 10-in. vitr. pipe. About $20,000. C. U. Boley, city engr.

Kan., Cedar Vale—City having survey made building complete sanitary sewerage system. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Kan., Smith Centre—City retained Black & Veatch, engrs., Interstate Bldg., Kansas City, Mo., to prepare plans for complete sanitary sewerage system.

Wyo., Cheyenne—City election July 29 to vote on $300,000 bonds to build sanitary and storm sewers. E. W. Glafke, city engr.

Mo., Holden—City retained Archer & Stevens, engrs., New England Bldg., Kansas City, Mo., to prepare plans for sanitary and storm sewers. About $54,000.

Tex., El Paso—See "Streets and Roads."

Tex., Houston—City voted $50,000 bonds to build sewers in various streets.

Colo., Ft. Collins—City had plans prepared for sewerage system. About $143,000. W. B. Check, city engr.

Cal., Tracy—See "Waterworks."

BIDS DESIRED

O., Toledo—Until July 1, by Dir. Pub. Serv., building local sanitary sewer No. 1358 in Main Sewer Dist. No. 37, involving 10,790 ft. 8 and 10-in. vitr. sewer pipe, 43 manholes, etc. About $25,900. H. C. McClure, city engr.

Ind., Indianapolis—Until July 11, by Bd. Sanitary Comrs., City Hall Bldg., constructing Div. No. 1, of sewage disposal plant for Sanitary Dist., work involves 960 lin.ft. 84-in. rein.-con. intercepting connecting conduit, 300 ft. 75-in. rein.-con. sewer extension; rein.-con. grit chambers and overflow, 1 small pump house, superstructure of brick, one 4-in. electric driven drain pump, piping and valves, 7 sluice gates, roughing and guard racks with complete equipment; 1000 lin.ft. 60-in. Class "A" c.i. inverted siphon under the river and 7600 lin.ft. 78-in. rein.-con. sanitary conduit; advertised in this issue.

Mich., Dearborn—Until July 9, by F. C. Reamer, village clk., furnishing materials and labor building sewers involving 29,078 ft. 12-36 in. sewer pipe and 85 manholes; advertised in this issue.

Mich., Muskegon—Until June 30, by B. H. Tellman, city recdr., furnishing material and labor for building main and lateral sewers in Dist. No. 28, to be laid in sandy oil, ground water encountered at depth 10-14 ft.; work involves 5461 lin.ft. 24-in. D.S. sewer tile, maximum cut 16 ft., average cut 10-14 ft., 2242 lin.ft. 20-in., average cut 12 ft., 1106 ft. 18-in., average cut 12 ft., 38,513 ft. 8-15 in., 13 "Y" branches on 24-in. pipe, etc.; advertised in this issue. Noted June 19.

Wis., Milwaukee—Until July 10, by Sewerage Comn., building extensions to intercepting sewer system, involving 6200 lin. ft. 72 in. concrete in tunnel, 430 vertical ft. of standard manholes, 60 vertical ft. of drop manholes and 8 manhole frames and covers, etc.; advertised in this issue.

Wis., Union Grove—Until July 2, by M. J. Tappins, secy. bd. control, for main drain at Southern Wisconsin Home for Feeble Minded. Work involves 2550 ft. 18 in. and 5825 ft. 20 in. vitr. pipe, 24 2 x 6 in. and 9 6 x 18 in. tees, 21 manholes, 1 bulkhead and 1 12-in. flap valve.

S. D., Aberdeen—Until July 28, by F. B. Raymond, city aud., building 8 mi. vitr., segmental block or concrete storm sewer, 10-96 in. diameter, 100 manholes, 212 catch basins; advertised in this issue.

N. M., Albuquerque—Until July 2, by A. R. Hebenstreit, city mgr., building storm sewers and paving various streets. Noted May 29.

N. M., Raton—Until June 30, by P. Turner, city clk., building storm sewer in Sewer Dist. No. 3. Work involves 1062 ft. 10-in. vitr. sewer pipe, 9505 ft. 12-48 in. concrete conduit, 10 catch basins and 25 manholes; advertised in this issue.

Ont., Kingstow— Until June 29, by Dept. Pub. Wks., Ottawa, installing sewerage system and disposal plant at Sydenham Hospital, here. About $100,000.

Ont., St. Catharines—Until June 30, by Chn. Bd. Wks., City Hall, building sewerage system in Facer St. Dist., involving 14,207 lin.ft. 8-15 in. tile; in Western Dist., involving 7210 lin.ft. 10-42 in. tile; in Eastern Dist., involving 2070 lin.ft. 10-15 in. tile. W. P. Near, city engr.

Ont., West Montrose—Until June 28, by C. D. Bowman, engr., West Montrose, building drainage system, involving 14,500 cu. yd. excav., for P. A. Snyder R. R. No. 1, Breslau. About $20,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., Hartford—City received bids rebuilding 500 ft. 48 in. concrete or block sewers in Nook Farm, from N. C. Cassiano & Co., West Hartford, $11,624; F. A. Barone & Co., Hartford, $13,882; O'Neil Bros., Hartford, $14,979.

N. J., Bellville—City received bids building 23,415 ft. sewer in Mill, Quarry, Terrace, Schuyler, Cleveland, Van Rensselaer, Dow, Factory and Clark Sts. and Howard Pl., from Amer. Utility & Constr. Co., Belleville; Jersey Bldg. & Constr. Co., Plum Point Lane, Newark; Jammouneau Co., 17 Academy St., Newark.

★N. J., Camden—Dept. Highways let contract laying 5300 ft. concrete sewers in Mechanic and Cooper Sts., to W. P. Corson, 1141 Sycamore St., $91,372. Noted June 19.

★W. Va., Weston—State let contract building sewage disposal plant, at State Hospital here, to C. E. Collins, Drexel Bldg., Phila. About $45,000.

★N. C., Durham—City let contract laying 1 mi. 8-in. terra cotta sewer pipe in Shepherd, Vickers, Yancey and Parkers Sts., to J. J. Quinn Co., 61 Reily Ave., Miami, Fla. About $20,000.

★O., Cleveland—City let contract laying 815 ft. Nos. 2 and 3 C brick sewers in St. Clair Ave. from Woodworth Ave. to East 138th St., involving 865 ft. 12-24 in. vitr. pipe, to River Constr. Co., 12,109 Mayfield Rd., $18,658.

Mich., Detroit—Dept. Pub. Wks. received bids building lateral sewers Nos. (a) 3134, (b) 3152, (c) 3154, (d) 3155, (e) 3157, from Western Constr. Co., 1208 Ford Bldg., (a) $4178, (b) $7789, (c) $8991, (d) $7116, (e) $7539; Walker & Teetaert Co., 442 St. Clair Ave., (a) $5705; Detroit Contg. Co., Penobscot Bldg., (b) $8230, (c) $9000, (d) $7702, (e) $7799; R. D. Baker, 1415 Penobscot Bldg., (b) $9785, (c) $10,935, (d) $9590, (e) $10,265. Noted June 12.

★Wis., Milwaukee—Bd. Pub. Wks. let contract furnishing materials and laying 5134 lin.ft. sewers in Montana St., Quincy, Taylor and Teutonia Aves., to M. Synovitz, 944 2nd Ave. and H. Hohensee, Wauwatosa. About $17,500. Work involves 1622 ft. 8-in., 2957 ft. 12-in., 555 ft. 15-in. and 405 ft. 18-in. concrete pipe.

★Kan., Wichita—City will build 7 mi. 8-in. lateral sewers. About $42,000. Work will be done by day labor.

★Ark., Paragould—City let contract building sewers in Dist. No. 6, to P. F. Connelly, 814 Rector Ave., Little Rock. About $17,000.

★Tex., Dallas—City let contract laying 13,457 ft. concrete and tile storm sewers in Wall St. Dist., to Standard Eng. & Constr. Co., Interurban Bldg., $75,292.

★Ore., North Bend—City Council let contract building sewer in Porter Hill, to Moon & Co., Marshfield. About $23,188.

Cal., Oakland—See "Streets and Roads."

Bridges

PROPOSED WORK

Mass., Amherst—Hampshire Co. plans to build cement bridge over Mill River. About $18,000. Address E. E. Hodgkins, Northampton, and N. Seelye Hitchcock, Easthampton, co. comrs.

N. J., Elizabeth—Bd. Freeholders Union Co. soon lets contract building concrete and steel bridge over Rahway River on Monroe St., 60 ft. wide with 3 spans, 31.4 ft. each. J. L. Bauer, 120 Broad St., engr. Noted April 3.

Pa., Phila.—Dept. Pub. Wks. rejected bids repairing and repainting bridge over Cobbs Creek on Baltimore Ave. Noted June 12.

Fla., Jacksonville—City soon receives bids building rein.-con. viaduct from Lee to Park St., Riverside-Brooklyn-Lackawanna Sect. of city. About $1,000,000, cost to be borne equally by city, Jacksonville Traction Co. and Jacksonville Terminal Co. F. M. Edwards, Jacksonville, engr. Address J. T. Alsop, Bisbee Bldg.

Mont., Hamilton—Ravilli Co. plans to build 280 ft. bridge over Bitterroot River, 16 ft. wide, two 140 ft. spans. About $20,000. Federal aid asked. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mo., Jefferson City—Cole Co. soon receives bids building rein.-con. and steel bridge over Osage River, south of Hubers Ferry, for Cole and Osage Counties. About $100,000. Waddell & Son, Inc., 800 Graphic Arts Bldg., Kansas City, Mo., engrs.

Cal., Dismores—Comrs. Humboldt Co. (Eureka) having plans prepared by H. J. Brunnier, engr., Sharon Bldg., San Francisco, for concrete arch bridge over Little Van Dusen Creek, here. About $25,000. A. J. Logan, Eureka, co. surveyor.

Cal., Red Bluff—Tehama Co. election July 1 to vote on $521,000 bonds to build bridges.

Ont., Arkona—Town Council plans to build concrete and steel bridge. About $25,000. R. Crawford, clk.

Ont., Mono Centre—Town Council plans to build steel and concrete bridge. About $12,000. W. A. Henry, clk.

Bridges (continued)

BIDS DESIRED

N. J., Camden—Until July 7, by Comrs. Camden Co. building rein.-con. arch bridge over Newton Creek, on Nicholson Rd. involving 1400 cu.yd. concrete, 292 piles, 12 x 25 ft., 6000 cu.yd. earth fill and 712 sq. yd. amiesite road with concrete base. F. W. Gercks, chn. bridge com.; advertised in this issue.

Pa., Reading—Until July 8, by C. P. Rhode, controller, Berks Co., building rein.-con. girder bridge over West Branch Creek in Washington Twp., about 2 mi. from Barto Sta.; advertised in this issue.

N. C., Walnut Cove—Until July 7, by Comrs. Stokes Co. (Danbury) building 600 ft. steel bridge and trestles, 20 ft. wide, here. About $20,000. R. R. King Danbury, engr.

Mich., Adrian—Until July 10 (change of date), by city, building rein.-con. bridge over Raisin River, on West Maumee St. N. B. Washburn, comr. G. P. Love, city clk.; advertised in this issue. Noted May 1.

Mich., Mt. Clemens—Until July 3, by F. F. Rogers, state highway comr., Lansing, building 230 ft. rein.-con. bridge over Clinton River on Gratiot Ave., consisting of two 79 ft. and one 75 ft. span, to be known as Bridge No. 256. Work involves 3660 cu.yd. rein.-con. Cost will be borne by State, Macomb Co. Rd. Comn. and Detroit United Ry: Noted May 29.

Minn., Brookston—Until July 15, by R. W. Aeton, engr., St. Louis Co., building 300 ft. steel bridge, 24 ft. wide, cement foundation and piers, over St. Louis River. About $15,000.

Minn., Duluth—Until July 7, by Comrs. St. Louis Co., building 12-ft. concrete span bridge over Winchell Creek on Wakely Rd., 120-ft. concrete span bridge over Brown's Creek on Brown Rd. and 30-ft. concrete span bridge over Clint Creek on State Highway No. 1. About $10,000.

Minn., Ortonville—See "Streets & Roads."

Neb., Lincoln—Until July 1, by W. L. Minor, clk. Lancaster Co., building 100 ft. rein.-con. bridge over Oak Creek, on 14th St., involving 455 cu.yd. rein.-con., 15.5 tons steel, 1300 lin.ft. wooden piling and 500 cu.yd. earth approach and fill. About $16,000; city to bear part of cost. A. H. Edgren, co. engr.

Mont., Miles City—Until July 7, by Comrs. Custer Co., building concrete and steel bridge across Cottonwood Creek, ½ mi. south of Northern Pacific R.R. tracks. Cost to be borne by county and Northern Pacific R.R. H. E. Fearnald, co. engr.

Wash., Adna—Until July 7, by State Highway Comn., Olympia, building 220 ft. steel span bridge and approaches over Chehalis River on Ocean Beach Highway, Lewis Co.

Cal., Oakland—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Providence—Bd. Contr. & Supply let contract widening Hawkins St. bridge to W. V. Polloys & Co., 1405 Turks Head Bldg. About $15,000.

★Pa., Phila.—Dept. Pub. Wks. let contract to M. and J. McHugh, 892 Market St., building bridge over Schuylkill River, cost $41,569 and on Erie Ave. over Pennsylvania and Reading R. R., $5410; to W. A. Mundy, 228-30 Arch St., bridge on Penrose Ferry Rd., over Eagle Creek, $3465; to G. B. Clopp, 3717 Filbert St., for repairs to railing at Broad and Callowhill Sts., $3000; to Belmont Iron Wks., 22nd and Washington Ave. for repairs to railing at Broad and Noble Sts., $815. Noted June 12.

★Va., South Hill—W. Hunter, secy., South Hill-Henderson Bridge Corp., let contract building 720 ft., steel and cement bridge, here, to Roanoke Iron & Bridge Co., Roanoke. About $47,000. Noted June 19.

★W. Va., Pineville—Wyoming Co. let contract building 2 rein.-con. bridges over Barkers Creek, to Corns-Thomas Co., Charleston, $9,184. Noted June 5.

★N. C., Dunn—Comrs. Harnett Co. Lillington, let contract building 2 steel bridges, here, to J. W. Turnage, Lillington. About $17,500.

★Ala., Montgomery—Bd. Revenue Montgomery Co. let contract building rein.-con. bridge over Catoma Creek, on Norman Bridge Rd., 5 mi. south of here, to J. R. Peterson, West Point, Ind. About $75,968. Noted May 9.

★O., Akron—Comrs. Summit Co. let contract building 48 ft. rein.-con., slab and girder bridge over old Ohio Canal on Ash St., 42 ft. wide, to Hovey & Humphrey, c/o E. C. Hovey, 143 Merriman Rd. About $13,700. Noted May 29.

★Wis., Alma—Buffalo Co. let contract building Beef River Bridge to La Crosse Bridge Co., La Crosse, $12,187.

★Mo., Millersburg—Comrs. Millersburg Special Rd. Dist., Callaway Co., let contract building 83 ft. rein.-con. bridge over Cedar Creek, involving 320 cu.yd. rein.-con. and 50 cu.yd. concrete, to Kansas City Bridge Co., 1012 Baltimore Ave., Kansas City, $10,846. Noted May 29 under "Streets and Roads."

★Mo., St. Louis—City let contract building rein.-con. bridge over Missouri Pacific Ry. tracks at Southwest Ave., to Woermann Constr. Co., Century Bldg., $28,984. Noted April 24.

★Ore., Portland—State Highway Comn. let contract building 8 rein.-con. bridges between McMinnville and Bellevue, on Yamhill-Nestucca Highway, Yamhill Co., to Yamhill Co. Court, McMinnville, $14,760; bridge over Rogue River at Rock Point near Gold Hill, Jackson Co., to Parker & Banfield, Columbia Bldg., $46,725. Noted June 5.

Cal., San Luis Obispo—Bd. Supervs. San Luis Obispo Co. received bids building rein.-con. bridge over Cayucos River, from W. Ledbetter Co., Pacific Electric Bldg., Los Angeles, $14,945, ($14,680 if concrete cylinders are used); F. Maino, San Luis Obispo, $15,000; Moore & Co., Santa Barbara, $15,799.

★N. B., Hampton—Dept. Pub. Wks., Fredericton, let contract building steel and concrete bridge here, to Smith & Merrithers, Fredericton. About $25,000.

★Que., North Temiskaming—Dept. Pub. Wks., Ottawa, let contract building superstructure of bridge over Quinze River here, to Hamilton Bridge Wks. Co., Ltd., Bay St., N. Hamilton, Ont. About $82,000. Noted May 1.

★Ont., Grand Valley—Town Council let contract building rein.-con. bridge, to Ritchie Co., Beamsville. About $20,000. Noted June 5.

★Ont., Guelph—Wellington Co. let contracts building three 20 ft. concrete span bridges, to C. Mattaine, Fergus, $6000; one 18 ft. concrete arch, to G. A. Gilson, Fordwick, $2000, and two 40 ft. concrete bridges, to E. Simmons, Drayton, $6000.

★Ont., Sarnia—Lambton Co. let contract building 2 steel and concrete bridges, to A. J. Kirkpatrick, Petrolea. About $35,000.

Structural Steel

BIDS DESIRED

N. C., Walnut Cove—See "Bridges."

Wash., Adna—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., South Hill—See "Bridges."

N. C., Dunn—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. Y., Buffalo—See "Industrial Works."

Mo., Jefferson City—See "Bridges."

Cal., San Francisco—See "Buildings."

Ont., Listowel—See "Industrial Works."

BIDS DESIRED

Pa., Reading—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., North Tonowanda—See "Industrial Works."

★Ala., Montgomery—See "Bridges."

O., Akron—See "Bridges."

★Mo., Millersburg—See "Bridges."

Mo., St. Louis—See "Bridges."

Mo., St. Louis—See "Miscellaneous."

Cal., San Luis Obispo—See "Bridges."

★Ont., Grand Valley—See "Bridges."

★Ont., Sarnia—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Chicopee—City appropriated $15,500 to pave East St., $37,825 for West Main St., granite block, and $52,269 for Front St., vitr. brick. D. P. Coakley, mayor.

R. I., Providence—City appropriated $20,000 bonds to pave Waterman St., granite block. W. F. Slade, comr. pub. wks.

N. J., Collingswood—City receives bids in August or September for paving, resurfacing and building concrete curbs and gutters. About $200,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

N. J., Elizabeth—City soon lets contract building 5000 ft. bituminous concrete roadway on old and new macadam base, 22 ft. wide, on Springfield Ave. County Rd., New Providence Boro.

N. J., Jersey City—Bd. Freeholders Hudson and Essex Counties plan to repave Lincoln Highway between here and Newark, wood block. About $10,000.

N. J., Jersey City—City plans to improve West Side Ave., granite block. Cost will exceed $50,000. C. A. Van Keuren, city engr.

N. J., Jersey City—Hudson Co. Blvd. Comn. plans to improve Hudson Co. Blvd. from Communipaw Ave. to New York & New Jersey R.R. tracks, cost, $57,000; also between Paterson Plank Rd. and Hackensack Plank Rd., $150,000, both bituminous surface on concrete foundation.

N. J., Kearney—Town plans to pave Elm St., from Erie R.R. to Belleville Turnpike, granite block. About $10,000. H. P. Preimer, city engr.

N. J., Morristown—City soon receives bids improving Water St. from Spring St. to railroad. About $17,000. Plans include widening, draining and surfacing with Amiesite on 4 in. concrete base.

Pa., Canonsburg—Boro. soon lets contract grading, paving and curbing with concrete, Hawthorne St. from Belmont to Hutchinson Aves., Chartiers St. from West Pike to Boro. line, Hutchinson Ave. from West College to Hawthorne Sts., Van Eman St. from South Central Ave. to South Jefferson St. Work involves 4510 sq.yd. concrete, 850 lin.ft. concrete curbing and 1015 cu.yd. earth excav. H. M. Day, engr.

Pa., Phila.—Dept. Pub. Wks. rejected bids grading sections of Claridge, Northumberland, St. Vincent and Tabor Sts. New bids will be taken soon. Noted June 12.

Pa., Pittsburgh—City passed ordinance to grade, pave and curb McCandless Ave. from 53rd to 56th St., 38 ft. wide, $41,000, Bricelyn St. from Tokio St. to Wilkinsburg Ave., $33,000, Swope St. and Way from Ravenna St. to Alder St., $14,000, Stadium St. from Stafford to Radcliffe Sts., $9000, Sydney St. from South 24th to South 25th Sts., $13,000; also widen and change lines of Pioneer Ave. between Templeton St. and West Liberty Ave. T. Reed, City County Bldg., engr.

Pa., Scranton—City had plans prepared by W. A. Schunk, city engr., paving West Market St. from Brick to Hollow Aves., asphalt and stone block, 28 to 30 ft. wide. About $63,513.

W. Va., Clay—Comrs. Clay Co. having plans prepared for 4 mi. Clay Court House-Wallback Rd., 20 ft. wide, involving 50,000 cu.yd. excav., also drainage structures. About $47,000. E. Carr, co. engr.

W. Va., Fairmont—Comrs. Marion Co. plan to build 1.4 mi. Fairmont-Grafton Pike, grading 26 ft. wide, surfacing 16 ft. wide, involving 5500 cu.yd. excav., 9000 sq.yd. concrete, 4155 sq.yd. concrete header and base course, 3635 sq.yd. brick pavement and drainage structures. About $59,000. S. B. Miller, Fairmont, engr.

W. Va., Fayetteville—Fayette Co. voted $125,000 bonds to improve roads in Mt. Cove Dist. J. McGrath, Fayetteville, engr. Noted May 8.

W. Va., Glenville—Comrs. Gilmer Co. soon let contract grading and draining 2 mi. Gilmer-Ripley & Ohio Turnpike. About $26,000. W. M. Moss, Glenville, engr.

W. Va., Hinton—Comrs. Summers Co., Pipestem Dist., voted $22,700 to build roads. J. D. French, Hinton, engr. Noted May 29.

W. Va., Moundsville—Comrs. Marshall Co. having surveys made for roads in Washington and Clay Dists. Election will be held in each district about Sept. 1 to vote on $200,000 bonds for work. S. H. Bonar, Moundsville, engr.

Streets and Roads (Continued)

W. Va., Wayne—Comrs. Wayne Co. soon receive bids grading 3.2 mi. Armilda-Echo Rd. About $60,000. H. A. Levering, co. engr.

W. Va., Williams—Mingo Co. plans to build 4 mi. Marrowbone-Naugatuck Rd., 22 ft. wide, involving 60,000 cu.yd. excav.; also drainage structures. About $61,000. L. C. Linkus, Williamson, engr.

North Carolina—State Highway Comn. Raleigh, soon receives bids hard surfacing 11 mi. road, Alexander Co., 9 ft. wide, cost $66,000; 18 mi. Central Highway, 9 ft. wide, Carteret Co., $250,000, and 16 mi. Atlanta and Asheville Highway, Graham Co. W. S. Fallis, Raleigh, engr.

N. C., Monroe—Comrs. Union Co. soon receive bids top soiling and graveling county roads, 16-20 ft. wide. About $500,000. Engineer not selected.

N. C., Nashville—Nash Co. election July 12, to vote on $200,000 bonds to build road from Rocky Mount to here, also other roads.

S. C., Ft. Mill—City plans election to vote on $40,000 bonds to pave 2 mi. Main St., 30 ft. wide.

S. C., Greenwood — Comrs. Greenwood Co. plan to relocate, grade, drain and surface 7.29 mi. Dixie Highway from here to Hodges, 30 ft. wide. About $19,978. Application made for Federal aid. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Spartanburg—Comrs. Spartanburg Co. soon let contract grading, draining and surfacing with top soil 6.7 mi. Natl. Highway from here to Duncan, 30 ft. wide. Work involves 31,720 cu.yd. earth excav., 500 cu.yd. rock excav., and 28,628 cu.yd. top soil, etc. About $40,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Union—Comrs. Union Co. plan to build roads in various sections of Bogansville Twp., about $70,000; also various roads in Jonesville Twp., about $65,000. Engineer not selected.

Ga., Decatur—DeKalb Co. election about Aug. 1 to vote on $500,000 bonds to build roads.

Ga., Griffin—Spaulding Co. voted $350,000 bonds to build roads. Federal Government will appropriate like amount. Noted May 1.

Ga., Jefferson—Jackson Co. voted $100,000 bonds to build roads. Federal Government will appropriate like amount. Noted Apr. 24.

Ga., La Grange—Troup Co. voted $500,000 bonds to build roads. Noted May 1.

Ga., Washington—City soon lets contract paving, draining and curbing 18,000 sq.yd. Main St. About $75,000. H. S. Jandon Eng. Co., Elberton, engrs.

Fla., Haines City—City having plans prepared by McElroy Eng. Co., engrs., Giddens Bldg., Tampa, paving Main St. About $120,000.

Fla., Kissimmee—City Comn. soon receives bids paving roads in south and east sections of city. About $30,000.

Ala., Albany—City Council employed Lund & Hill, engrs., 527 Southern Trust Bldg., Little Rock, Ark., to supervise laying pavements on principal streets. About $300,000.

Ala., Enterprise—City soon receives bids for 5000 sq.yd. vitr. brick paving. A. Pew, 501 Forsyth Bldg., Atlanta, Ga., engr.

Louisiana—F. M. Kerr, ch. engr. state highway dept., New Orleans, soon lets contract ditching and surfacing with gravel, 9.96 mi. New Orleans-Baton Rouge Highway, 30 ft. wide, Jefferson Parish. D. Buie, 736 Maison Blanche Bldg., New Orleans, engr.

Tenn., Maryville—Blount Co. having surveys made metaling 75 mi. and grading 66 mi. road. Bonds for $400,000 voted June 7, which with Federal and state aid to the amount of $400,000, will make $800,000 to be spent within next 3 years. D. W. Harmon, co. engr.

Ky., Cynthiana—City soon lets contract laying 3800 sq.yd. 1 course rein.-con. pavement. About $10,000. A. Gilley, city engr.

O., Cincinnati—City plans to grade, pave, set granite curbs, build retaining walls, cement sidewalks, drains, etc., on Moorman Ave. and McMillan St., asphalt, estimated cost, $15,130; grade, pave and build combined sanitary sewers in 700 ft. Haight Ave., from Bruce Ave. to first angle north, 50 ft. wide, rein.-con.; improve 4000 ft. Freeman Ave., from Kener St. to Central Ave., 50 ft. wide, granite (using old granite block where possible); also build 12-in. sewer from Liberty St. to point 185 ft. north and from Livingston St. to point 155 ft. north, and make necessary alterations to water distributing system; widen roadway 2 ft. on each side, set new and reset existing granite curb, pave with wood block, and make necessary alterations to water distributing system on McMillan St. from Gilbert Ave. to Alms Pl., $49,478. F. King, city engr.

O., Columbus — Comrs. Franklin Co. adopted resolution to sell $155,000 bonds for grading, building bridges and culverts and paving 2 mi. Harbor Rd. from Linden Heights to Granville Rd., 34 ft. wide, brick.

O., Dayton—City soon receives bids paving 1200 ft. Mt. Vernon Ave. from Fountain to Niagara Aves., 30 ft. wide, involving 4000 sq.yd. concrete, 2400 ft. concrete curbing and guttering and 12,000 sq.ft. 4-in. cement sidewalks. About $11,045. F. O. Eichelberger, city engr.

O., Piqua—City plans to issue $300,000 bonds to improve streets and sewers. E. Schroeder, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on concrete foundation, Amherst or Medina curbstone, Harper Ave., Sect. 2, from Montclair to Connors Aves., 30 ft. wide, cost, $27,214; Fairview Ave., from Charlevoix to Mack Aves., $26,813; Chapin Ave. from Seneca to Burns Aves., $4488; Fulton Ave. from Springwells Ave. to 150 ft. west of Wilkie Ave., 18,810; Homer Ave. from Springwells to Lawndale Aves., $22,176; Fenkell Ave., from 12th St. to Livernois Ave., $17,926, all 26 ft. wide; paving with 1 course concrete, East and West alley between La Salle Blvd., 14th St., La Mothe Ave. and La Salle Gardens, $4000; alley between Wilson, Byron, Atkinson and Edison Aves., both 20 ft. wide, $4920. C. W. Hubbell, city engr.

Mich., Detroit—City soon lets contract paving Harper Ave., Sect. 1, involving 3584 cu.yd. excav., 3003 lin.ft. curbstone, 4167 sq.yd. asphaltic concrete on 6 in. concrete base, etc.; also Alleys Nos. 1025, 1026, 1027, 1028, 1030, 1031, 1032, 1033, 1034, 1035, 1036, involving 5496 cu.yd. excav., 15,992 sq.yd. concrete, etc. Noted May 8 and June 12.

Mich., Hamtramck—Village receives bids about July 2, paving 2300 ft. Yemens Ave., 1300 ft. Mitchell Ave., 1100 ft. Norwalk Ave., 900 ft. Evaline Ave., and 1000 ft. Oliver Ave., rein.-con. with armor plate expansion joints; 1900 ft. Joseph Campau Ave., creosote block, brick, asphalt or asphaltic concrete. Noted May 29.

Illinois—State Highway Comn., Springfield, received no bids June 18, improving roads in Bond, Ford, Bureau, Lake, La-Salle, Livingston, Macoupin, Mason, Menard, Morgan and Shelby Counties. Noted June 5.

Ill., Silvis—City plans to pave 2nd Ave. from 8 th to 15th Sts., 9th St. from 1st to 4th Aves., both 24 ft. wide; 10th, 11th, 12th and 13th Sts., all from 1st to 2nd Aves., 14th St., from 1st to 3rd Aves., 15th St. from 1st to 4th Aves., all 22 ft. wide, also 5th, 6th and 7th Sts. W. Treichler, Rock Island, engr.

Wisconsin—State Highway Comn., Eau Claire, rejected bids received May 28, grading and paving Alma-Durand Rd., Federal Aid Project No. 16, A. R. Hirst, state highway engr. Noted May 15.

Wis., Black Earth—Village plans to pave, grade, build sewers, etc., in various streets, involving 13,360 sq.yd. concrete and 3670 cu.yd. earth excav. About $25,000. Parsons & Orbert, 627 M. and M. Bank Bldg., Milwaukee, engrs.

Wis., Milwaukee—Bd. Pub. Wks. soon lets contract paving 8th, 56th, 57th, 58th and Clinton Sts., Howell and Kinnickkinnic Aves., etc., involving 6435 sq.yd. hard sandstone block, 19,450 sq.yd. asphalt, 21,732 sq.yd. concrete, 1204 lin.ft. limestone, 1136 lin.ft. concrete curb, 1077 lin. ft. brick gutter, 6044 lin.ft. cement sidewalks and 10,176 cu.yd. earth excav. About $75,000. Noted June 12.

Wis., Plymouth—City plans to grade, pave and build concrete culverts on 2¼ mi. Sheboygan-Fond du Lac Rd., 16 ft. wide, involving 9500 sq.yd. 2 course concrete. About $15,000. E. G. Phelps, City Hall, engr.

Wis., Racine—Racine Co. soon lets contract grading, paving and building concrete culverts on Main and Jefferson Sts. and Milwaukee Rd., 18 ft. wide, involving 16,941 sq.yd. concrete, 1830 lin. ft. curb and gutter and 4200 cu.yd. earth excav.

Wis., Sheboygan—City plans to grade and pave 3.9 mi. Center Ave. and 13th St., 18-20 ft. wide, involving 20,000-25,000 sq. yd. vitr. brick and 10,000 lin.ft. concrete curb and gutter. About $40,000. C. U. Boley, city engr.

Ia., Ottumwa—City soon lets contract for 47,300 sq.yd. pavement; rein.-con. or brick. H. A. Brown, city engr.

Minn., Bemidji—Comrs. Beltrami Co. postponed date for receiving bids for grading and graveling 16 mi. Federal Aid Project No. 76, 24 ft. wide. No definite date set. About $80,000. S. D. Snyder, Bemidji, engr. Noted May 22.

Minn., Elbow Lake—Comrs. Grant Co. rejected bids received June 17 grading and graveling 6 mi. Federal Aid Project No. 28, 24 ft. wide. About $30,000. Work will be readvertised. W. E. Burges, Elbow Lake, engr. Noted May 22.

Minn., Walker—Comrs. Cass Co. voted $250,000 bonds to build roads. C. D. Bacon, co. aud.

Kan., Burlington—City soon lets contract paving Neosho, Yuba, Juniatta, 2nd, 3rd, 4th, 6th and 7th Sts. Work involves 57,475 sq.yd. vitr. brick, 35,650 lin.ft. concrete curbing and guttering, 18,315 cu.yd. earth excav., 100 ft. 12 in. sewer pipe and 15 inlets. About $100,000. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Kan., Caldwell—City soon receives bids for 60,000 yd. brick or asphalt pavement. Ruckel Eng. Co., Garden City, engrs.

Kan., Great Bend—City soon receives bids paving 10 blocks and repairing 5 blocks, brick or asphalt. Ruckel Eng. Co., Garden City, engrs.

Kan., Marysville—City soon receives bids for 25,000 sq.yd. vertical fibre paving and concrete curbing and guttering. C. McCrae, Republic Bldg., Kansas City, Mo., engr.

Kan., Seneca—City receives bids about July 10, paving various streets. About $200,000. Archer & Stevens, New England Bldg., Kansas City, Mo., engrs.

Mont., Billings—Yellowstone Co. election Sept. 2 to vote $250,000 bonds to build highways.

Mont., Boulder—Jefferson Co. election Sept. 2, to vote on $100,000 bonds to build roads. Federal aid will be asked if election carries. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Butte—Silver Bow Co. election Nov. 2, to vote on $500,000 bonds to build roads.

Mont., Deer Lodge—Powell Co. election Sept. 2 to vote on $100,000 bonds to build roads.

Mont., Great Falls—Cascade Co. election Sept. 2, to vote on $500,000 bonds to build Park-Park Highway and other roads. Federal aid will be asked if election carries. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Hamilton—Ravalli Co. election Sept. 2 to vote on $100,000 bonds to build roads. L. Oertli, Hamilton, engr.

Mont., Hardin—Big Horn Co. election Sept. 2 to vote on $75,000 bonds to build roads. J. E. Graham, Hardin, engr.

Mont., Kalispell—Flathead Co. election Sept. 2 to vote on $75,000 bonds to build 5 mi. road. F. P. Scott, Kalispell, engr.

Mo., Bethany—Harrison Co. receives bids in July building 9.6 mi. road from north, east and west line of Bethany Twp., 9 ft. wide, concrete. M. G. Hall, Centerville, Ia., engr. Noted Feb. 13.

Mo., Boonville—Cooper Co. has retained Shockley Eng. Co., engrs., 740 Reserve Bank Bldg, Kansas City, to cooperate with county engineer in making surveys and plans for 20 mi. Federal aid roads extending about 7 mi. east, west and south from here. About $225,000 now available for project.

Mo., Carthage—Comrs. Joplin Special Rd. Dist., Joplin, receive bids about July building 6.1 mi. road from Joplin to Carl Junction, 18 ft. wide, concrete, Jasper Co. H. Shannon, Cunningham Bank Bldg., Joplin, engr. Noted Feb. 13 under "Joplin, Mo."

Streets and Roads (Continued)

Mo., Independence—Jackson Co. soon lets contract grading and paving 1225 ft. Prospect Ave., involving 2640 sq.yd. waterbound macadam; 613 ft. Brooklyn Ave., 18 ft. wide, 1300 sq.yd. waterbound macadam, 3000 cu.yd. earth and 100 cu.yd. rock excav.; 613 ft. Woodland Ave., 18 ft. wide, 1300 sq.yd. waterbound macadam and 800 cu.yd. earth excav. O. C. Sheeley Co., Independence, engrs.

Mo., Independence—Jackson Co. plans to build 3.1 mi. road from Lone Jack to Johnson Co. line, 16 ft. wide, bituminous macadam. O. C. Sheeley Co., Independence, engrs.

Mo., Kansas City—Bd. Pub. Wks. had plans prepared grading McGee St. from Admiral Blvd. to 9th St., and 8th St. from Grand to Oak Sts. About $66,000. R. W. Waddell, city engr.

Mo., Kansas City—City having plans prepared extending Linwood Blvd. from Robert Gillham Rd. west to Main St., also widening Gillham Rd. from 31st St. to Linwood Blvd., and Paseo St. south from Linwood to 37th Sts., 5 ft. on each side. R. W. Waddell, city engr.

Mo., Marshall—Comrs. Marshall Special Rd. Dist., Saline Co., receive bids in August building 8 mi. road from east to west side of district, 16 ft. wide, asphaltic macadam. W. B. Cauthorn, Columbia, engr.

Mo., New Madrid—New Madrid Co. receives bids in August building 19.5 mi. gravel road from Sikeston to New Madrid, 16 ft. wide. C. V. Hansen, New Madrid, engr.

Mo., Pleasant Hill—City having plans prepared paving 5400 ft. 1st St., 18 ft. wide, involving 9000 cu. yd. waterbound macadam and 1900 cu.yd. excav. About $11,000. Shockley Eng. Co., 740 Reserve Bank Bldg., Kansas City, engrs.

Mo., St. Charles—St. Charles Co. plans election soon to vote on $1,000,000 bonds to build roads. P. W. Loonam, St. Charles, engr.

Mo., St. Joseph—Buchanan Co. receives bids in July building 2.2 mi. road from St. Joseph to One Hundred and Two River, 18 ft. wide, asphaltic concrete. H. L. Meyer, co. highway engr.

Mo., St. Joseph—Buchanan Co. plans to build 11.2 mi. road from St. Joseph to Faucett, 16 ft. wide, brick on concrete base. H. L. Meyers, St. Joseph, engr.

Tex., Athens—Henderson Co. plans to surface with gravel and native rock pavement and build concrete drainage structures on 23.576 mi. State Highway No. 19, 15 ft. wide. Wilder & O'Neal, Chronicle Bldg., Houston, engrs.

Tex., Baird—Callahan Co. plans to rock or gravel surface, 34.85 mi. Highway No. 1 from Eastland Co. line to Taylor Co. line, 16 ft. wide, involving 69,625 lin. ft. machine grading, rein.-con. drainage structures, etc. About $6000 per mile.

Tex., El Paso—City election soon to vote on $525,000 bonds to pave and build sewers in various streets and improve waterworks.

Tex., Fairfield—Comrs. Freestone Co. plan to clear, grub, grade, drain, build macadam road with bituminous surface treatment on 10.04 mi. State Highway No. 7 from city limits of Teague to Limestone Co. line, 15 ft. wide. About $150,000. T. E. Huffman, c/o Bryant & Huffman, Austin, engrs.

Tex., Georgetown—Williamson Co. voted $1,500,000 bonds to build permanent highways. F. D. Love, co. judge. Noted April 3.

Tex., Houston—City voted $150,000 bonds to pave and improve streets.

Tex., Laredo—Webb Co. voted $300,000 bonds to build permanent highways. G. R. Page, co. judge. Noted May 29.

Tex., Orange—Comrs. Orange Co. plan to build roads and bridge over Sabine River. About $1,200,000.

Tex., Quitman—Comrs. Wood Co. plan to surface with iron ore gravel and build concrete drainage structures on 9.5 mi. State Highway No. 15, 14 ft. wide. About $50,000. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs.

Tex., San Antonio—Bexar Co. voted $1,500,000 bonds to build roads. Federal Government will appropriate toward cost.

Ariz., Kingman—Mohave Co. election soon to vote on $250,000 bonds to build roads.

Wash., Kelso—City plans to pave 2 mi. streets, 16 ft. wide, and build concrete sidewalks.

Wash., Olympia—Thurston Co. soon lets contract clearing, grading and draining 8048 ft. Permanent Highway No. 8, 28 ft. wide, involving 15,680 cu.yd. earth excav. and 373 ft. concrete bridge. About $128,000. Former bids rejected. C. O. Mannes, co. engr.

Wash., Stanwood—City soon lets contract for 18,064 sq.yd. concrete pavement. F. G. Tegtmeier, Everett, engr.

Oregon—State Highway Comn., Portland, rejected bids received June 10 grading 2.7 mi. and macadamizing 7.7 mi. Yoncalla Rd., Douglas Co., involving 10,000 cu.yd. mixed excav., 16,000 cu.yd. rock surfacing, estimated cost, iron pipe, $79,575; also grading 13 mi. Unit No. 1, Service-Creek-Valdes Ranch Sect., John Day Highway, Wheeler Co., involving 91,000 cu.yd. excav., 12 mi. No. 3, 91,000 cu.yd. excav. No bids were received for 12.5 mi. Unit No. 2, 74,000 cu.yd. excav., and 11.5 mi. No. 4, 103,000 cu.yd. excav., estimated cost $500,000. Noted June 12.

Oregon—State Highway Comn., Portland, received no bids grading 6.7 mi. Forest Grove-Gaston Rd., Washington Co., involving 16,000 cu.yd. mixed excav. H. Nunn, Salem, state highway engr. Noted June 12.

Oregon—State Highway Comn., Salem, having surveys made by S. Clark & Libby, engr., c/o State Highway Comn., paving Junction City-Eugene Sect. Pacific Highway, Junction City Twp.

Ore., Klamath Falls—City plans to pave sidewalks and curbs on High St., bitulithic cement. About $60,000. J. Cleghorn, city engr.

Ore., Portland—City Council received no bids paving 77th St., S. E., from 65th Ave., S. E., to 55th Ave., S. E. G. E. Funk, city aud. O. Laurgaard, city engr. Noted June 12.

Ore., Portland—City voted to annex and plat 60 acre tract occupied by Peninsula Lumber Co., foot of McKenna St. O. Laurgaard, city engr.

Cal., Chula Vista—City receives bids in 2 or 3 months paving 4½ mi. 2nd and 3rd Aves., 2nd, E and F Sts. About $100,000. Former contract rescinded. E. M. Lynch, Central Bldg., Los Angeles, engr. Noted May 15.

Cal., Oakland—City soon lets contract improving Hopkins, East 37th, Kingsley and Emerson Sts., involving 6360 lin. ft. concrete curbing, 18,441 sq.ft. concrete gutter, 1196 sq.ft. cement sidewalk, 8964 sq.ft. grading, 5530 sq.ft. oil macadam, etc., $12,500; 85th Ave., 3954 lin.ft. redwood curbing, 11,409 sq.ft. concrete gutter, 3198 cu.yd. earth excav., 57,697 sq.ft. oil macadam, etc., $15,400.

Cal., Oakland—City plans to improve 87th Ave., involving 3703 lin.ft. redwood curbing, 10,596 sq.ft. concrete gutter, 73,736 sq.ft. grading, 50,154 sq.ft. oil macadam, etc. About $14,600.

Cal., Santa Cruz—Santa Cruz Co. voted $924,000 bonds to pave 40 mi. highway from Chittenden via Watsonville and Santa Cruz to Boulder Creek, concrete. Noted June 5.

Cal., Taft—City having plans prepared by E. M. Lynch, engr., Central Bldg., Los Angeles, improving streets, including grading, oiling and cement curbs and walks, cost, $197,000, or $144,000 if sidewalks are omitted.

Cal., Tracy—City election soon to vote on $15,000 bonds for paving street intersections.

Que., St. Victoire—Municipal Council plans to build 10 mi. waterbound macadam roads. About $33,000. E. Labitiere, Warwick, clk.

Ont., Alexandria—Town Council passed by law authorizing expenditure of $20,000 to build roads.

Ont., Hawkesbury—Town Council voted in favor of by-law for $75,000 to build asphalt and concrete pavements. V. A. Belanger, engr.

Ont., Lancaster—Town appropriated $100,000 bonds to build roads.

Ont., Ottawa—Ottawa Co. soon lets contract building 5 mi. Montreal and Ottawa Rd., east of Ottawa, 19 ft. wide, bituminous bound macadam. About $18,000. V. E. Belanger, L'Original, engr.

Ont., Williamstown—Twp. Council of Charlottenburgh appropriated $150,000 to build roads.

Ont., York—F. Barber, engr., 40 Jarvis St., Toronto, soon lets contract paving Oakwood and Lauder Aves., sheet asphalt on concrete base; Glenholme Ave. and Northcliffe Blvd., tarvia on concrete base, for town. About $50,000.

BIDS DESIRED

Me., Portland—Until July 2, by E. M. Hunt, comr. pub. wks., for 5375 sq.yd. split, redressed granite block pavement on Congress St., from Myrtle to India Sts.

Massachusetts—Until July 1, by State Highway Comn., Boston, building 4800 ft. bituminous gravel road, 18 ft. wide, in Dudley Twp., and 10,000 ft. macadam road, 18 ft. wide, in Quincy Twp. A. W. Dean, state highway engr.

New Jersey—Until July 9, by State Highway Comn., Broad St. Bank Bldg., Trenton, building State Highway Route No. 8, Sect. No. 1, Riverdale to Pompton River, Morris Co., involving 45,692 sq.yd. concrete surface, also State Highway Route No. 9, Sect. No. 3 Westfield Cutoff, Union Co., involving 1772 cu.yd. grading. A. L. Grover, ch. clk.

New Jersey—Until July 11, by State Highway Comn., Broad St. Bank Bldg., Trenton, building State Highway Route No. 13, Sect. No. 3, Three Mile Run to New Brunswick, Middlesex and Somerset Counties, involving 41,000 sq.yd. concrete surface. A. L. Grover, ch. clk.

N. J., Camden—See "Bridges."

N. J., Jersey City—Until July 8, by city, improving 10th St. between Erie and Grove Sts., old blocks on concrete base. About $10,000.

N. J., Newark—Until July 1, by city, improving Schuyler Ave. from Hawthorne Ave. to Nye St., involving 2250 sq.yd. pavement; Tremont Ave. from North Miem to Chelsea Ave., 820 sq.yd. pavement; Ridge St. from Beckley Ave., E., to Elwood Ave., 5600 sq.yd. pavement, all bitulithic on 6 in. concrete base; Elizabeth Ave., 3600 sq. yd. asphalt on old block pavement. M. P. Sherrard, city engr.

Pa., Carrolltown—Until July 2, by Town Council, furnishing labor and materials and building road from here to station, northeastern to western point of Main St. 18 ft. wide. F. A. Kline, Bank Bldg., Carrolltown, engr.

Pa., Gallitzin—Until July 2, by H. F. Conrad, boro. secy., 708 Hemlock St., furnishing labor and materials and paving 5000 lin.ft. Church St., 20 ft. wide, involving 6000 sq.yd. vitr. brick, 175 lin.ft. stone curb and 3000 cu.yd. earth excav. About $35,000. D. W. Dillman, Altoona Trust Bldg., Altoona, engr.

Pa., Palmerton—Until July 9, by A. C. Schaefer, boro. secy., improving streets. Work involves 12,830 cu.yd. excav. for roadway and curbing, 30,260 sq.yd. broken stone sub-base for all types of pavement, 30,260 sq.yd. cement concrete base course for brick and Amiesite pavement, 30,260 sq.yd. concrete brick and Amiesite pavement, 740 lin.ft. removal and renewal of old curbing, and 2890 lin.ft. concrete curbing; advertised in this issue.

W. Va., Fayetteville—Until July 14, by R. J. Stegall, clk. Fayette Co., grading 3 mi. highway from Fayette to Lansing, involving 45,000 cu.yd. excav. J. K. McGrath, engr.; advertised in this issue.

W. Va., Wheeling—Until June 30, by Ohio Co. Court, building 1 mi. National Pike, surfacing 20 ft. wide, grading 32 ft. wide, involvng 2300 cu.yd. excav., 11,730 sq.yd. pavement, etc. About $38,000. W. O. McClusky, Wheeling, engr. Noted June 5.

N. C., Clinton—Until July 1, by mayor, paving, draining and curbing 30,000 sq.yd. Main St. W. W. Pratt, Durham, engr.

N. C., Nashville—Until July 8, by L. T. Vaughan, town clk., building 1¼ mi. streets, sidewalks and curbs on Washington and Depot Sts.; advertised in this issue.

S. C., Greenwood—Until July 3, by Greenwood Co. Highway Comn., relocating, grading, draining and surfacing with top soil, 7.20 mi. Dixie Highway, from here to Hodges Sect., 30 ft. wide; cost $19,977. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

Streets and Roads (Continued)

Ga., Douglas—Until July 1, by G. A. Tanner, mayor, paving, curbing and building drainage structures on main streets, involving 22,000 sq.yd. pavement. About $75,000. O. H. Lang, Moultrie, engr.

Ga., Macon—Until July 1, by J. R. Bowdre, clk. Bibb Co., paving, building drainage system, headwalls and culverts, on 2 mi. Houston Rd., and 8.7 mi. Forsyth Rd., 18 ft. wide. About $250,000. S. R. Shi, Macon, engr.

Fla., Bronson—Until July 8, by Comrs. Levy Co., grading, paving and grubbing highway between Lukens and Sumner, involving 46,000 sq.yd. limestone surfacing, 13,000 cu.yd. grading and 18 acres clearing and grubbing. About $200,000. D. F. Thomas, Gainsville, engr. Noted Apr. 3.

Miss., Coffeeville—Until July 7, by Bd. Supervs. Yalobusha Co., improving following roads: 7½ mi. Banner Rd.; 2 mi. Pittsboro Rd., from Banner Rd. to Calhoun Co. line; 6 mi. Pine Valley Rd.; 4 mi. Cottner Rd.; 5½ mi. Water Valley and Shoales Rd., Beat 2; 7 mi. Coffeeville and Pontotoc Rd., Beat 2; 2 mi. Johnsey Rd. L. T. Wisdom, clk. Noted Feb. 27.

Miss., Mendenhall—Until July 3, by Highway Comn., Central Rd. Dist., Simpson Co., Magee, improving and building 8.0 mi. Federal and State Aid Rd. Work involves 9 acres clearing and grubbing, 44,000 cu.yd. grading, 6200 cu.yd. gravel, 75 cu.yd. concrete, 800 lin.ft. culvert pipe, 7.8 mi. sodding. X. A. Kramer, c/o State Highway Dept., Magnolia, engr.

La., Alexandria—Until July 7, by V. M. Ake, city secy., paving lower 3rd St. and others.

Tennessee—Until July 10, by State Highway Dept., 327 7th Ave., Nashville, building 10.66 mi. State Highway No. 7, between Cowan Sta. and Franklin-Marion Co. line, Franklin Co., involving 16,812 cu.yd. common and 1500 cu.yd. solid rock excav., 101,750 sq.yd. 8 in. waterbound macadam, 16 ft. wide, 8533 sq.yd. scarifying and reshaping, 520 lin. ft. 15-24 in. concrete or corrugated metal pipe, 61 cu.yd. Class "A" and 53 cu.yd. Class "B" concrete, 8600 lb. reinforcing steel and 120 cu.yd. stone masonry, also an additional 8500 cu.yd. excav., between Sta. 0-00 and Sta. 300; 12.7 mi. State Highway No. 7, between Shelbyville and Moore-Coffee Co. line, Bedford and Moore Counties, involving 29,716 cu.yd. common and 5935 cu.yd. solid rock excav., 1.76 mi. grader work, 12,000 sq.yd. 8½ in. waterbound macadam, 16 ft. wide, 102,500 sq.yd. 8 in. gravel surfacing, 16 ft. wide, 17,865 sq.yd. scarifying and reshaping, 1671 lin. ft. 15 and 25 in. concrete or corrugated metal pipe, 300 cu.yd. riprap, 28 cu.yd. 'Special," 335 cu.yd. Class "A" and 110 cu.yd. Class "B" concrete, 36,000 lb steel and 2 rein.-con. bridges, involving 160 cu. yd. excav., 15 cu.yd. "Special," 97 cu.yd. Class "A" and 173 cu.yd. Class "B" concrete, and 15,000 lb steel. Alternate bids will be considered on 8½ in. waterbound macadam for the total 104,500 sq.yd. surfacing. W. P. Moore, ch. engr., advertised in this issue.

O., Columbus—Until July 2, by G. A. Borden, dir. pub. serv., grading, draining, curbing, repaving with asphalt and building brick gutters on 2241 ft. Atchison St. from 20th to Graham Sts., 24 ft. wide, grading, draining, curbing, paving with asphalt or brick and laying water mains in 2776 ft. Kelso Rd. from High St. to Indianola Ave., 32 ft. wide, H. A. Maetzel, city engr.

Ind., Indianapolis—Until June 30, by Bd. Pub. Wks., grading, paving and placing 4030 lin.ft. limestone curbing on 2037 ft. Corwell Ave., 24 ft. wide, cost, $29,437; resurfacing with wooden blocks, asphalt, bituminous concrete or brick 420 ft. Henry St., 24 ft. wide, $12,320; 2423 ft. New Jersey St., 40 ft. wide, $37,932; 840 ft. Alabama St., 60 ft. wide (except 18.08 car-tracks), $13,274; 510 ft. South Alabama St., 60 ft. wide, $11,723; 1800 ft. Ohio St., 60 ft. wide (except 18.8 for car-tracks), $31,293; 3291 ft. 13th St., 22 ft. wide, $15,428. F. C. Lingenfelter, 3025 Park Ave., engr. Noted June 19.

Mich., Ford—(Wyandotte P. O.)—Until July 5, by village, paving 3000 ft. Goddard Rd., 30 ft. wide, and 1400 ft. Hudson St., 24 ft. wide. Work involves 13,500 sq.yd. rein.-con. pavement and concrete curbs.

Illinois—Until July 9, by State Highway Comn., Springfield, improving Natl. Highway in following counties (Federal Aid): Fayette Co., 19,995 ft. Sect. G-15d, 16 ft. wide, involving 35,431 sq.yd. pavement, 14,466 cu.yd. excav., 170 cu.yd. concrete in culverts; 7800 ft. Sect. H-15d, 16 ft. wide, 13,867 sq.yd. pavement, 7157 cu.yd. excav., 48.6 cu.yd. concrete; 12,500 ft. Sect. 31, 16 ft. wide, 22,222 sq.yd. pavement, 8451 cu.yd. excav., 154 cu.yd. concrete; 27,800 ft. Sect. V, 16 ft. wide, 49,319 sq.yd. pavement, 18,189 cu.yd. excav., 137 cu.yd. concrete; 28,066 ft. Sect. O, 16 and 18 ft. wide, 54,069 sq.yd. pavement, 26,850 cu.yd. excav., 196 cu.yd. concrete; 14,237 ft. Sect. P, 16 ft. wide, 24,884 sq.yd. pavement, 27,863 cu.yd. excav., 100 cu.yd. concrete; Bond Co., 16,189 ft. Sect. F-15d, 16 ft. wide, 28,780 sq.yd. monolithic brick, 10,013 cu.yd. excav., 153 cu.yd. concrete; 11,998 ft. Sect. X, 16 ft. wide, 21,292 sq.yd. pavement, 9240 cu.yd. excav., 140 cu.yd. concrete; 18,825 ft. Sect. Q, 18 ft. wide, 31,810 sq.yd. and 2578 sq.yd. pavement, 17,517 cu.yd. excav., 189 cu.yd. concrete, 2900 lin.ft. of section consists of widening the present 10 ft. brick pavement with a strip of similar pavement 8 ft. wide. Alternate bids will be received for Portland cement concrete, 3 and 4 in. monolithic brick, bituminous concrete with or without binder course, (Spec. C1, C2, C3 or CT). C. Older, ch. highway engr.

Illinois—Until July 9, by State Highway Comn., Springfield, improving State Aid roads in following counties: Lee Co., 24,297 ft. Sect. F, Route 5, 16 ft. wide, involving 4319 sq.yd. concrete, 1140 cu.yd. excav., cost, $9184; 2675 ft. Sect. G, Route 5-A, 10 ft. wide, 2972 sq.yd. concrete, 1847 cu.yd. excav., $10,072;

Madison Co., 2700 ft. Sect. K, Route 1, 15 ft. wide, 4500 sq.yd. concrete, 2060 cu. yd. excav., $7557; 3250 ft. Sect. L, Route 8, 16 ft. wide, 5778 sq.yd. concrete, 2600 cu.yd. excav., $9632;

Morgan Co., 3259 ft. Sect. D, Route 1, 16 and 18 ft. wide, 5972 sq.yd. concrete, 1493 cu.yd. excav., $12,878;

Stephenson Co., 5144 ft. Sect. F, Route 1, 10 ft. wide, 5715 sq.yd. concrete, 3931 cu.yd. excav., $19,218;

Ford Co., 3100 ft. Sect. D, Route 1, 10 ft. wide, 3444 sq.yd. brick, 1161 cu.yd. excav., $14,971;

Jo Daviess Co., 7675 ft. Sect. G, Route 2, 26 ft. wide, 5881 cu.yd. excav., $6562; 4911 ft. Sect. H, Route 1, 26 ft. wide, 7078 cu.yd. excav., $6468;

Mercer Co., 8209 ft. Sect. L, Route 3, 26 ft. wide, 5173 cu.yd. excav., $7716; 5419 ft. Sect. M, Route 7, 26 ft. wide, all earth pavement, 7463 cu.yd. excav., $7646;

Kane Co., 3390 ft. Sect. N, Route 1, gravel, $1768;

Sangamon Co., 2371 ft. Sect. O, Route 1, 30 ft. wide, 16,802 cu.yd. excav., $8710;

Union Co., 8200 ft. Sect. F, Route 2, 22 ft. wide, 12,488 cu.yd. excav., $6740;

Tazewell Co., 39,042 ft. Sect. K, Route 1, 24 ft. wide, all earth pavement, 28,802 cu.yd. excav., $23,724;

Effingham Co., 4 bridges, Sect. H, Routes 3, 4, 10 and 13, $8440. C. Older, ch. highway engr.

Ill., Springfield—Until July 9, by C. W. Byers, clk. Sangamon Co., improving 23,561 ft. Sect. S-15d, Route 9, 16 ft. wide and 22,434 ft. Sect. R-15d, Route 5, 18 ft. wide. Cement will be furnished by county and alternate bids will be received for Portland cement concrete and monolithic brick pavement, 4 in. thick. F. Tarrant, 506½ East Monroe St., dist. engr.

Wis., Racine—Until July 12, by Bd. Pub. Wks., paving 17th St. from Wisconsin to Holborn Sts., involving 15,300 sq.yd. vitr. brick and 5770 lin ft. cement concrete curb and gutter. About $50,000.

Wis., Sheboygan—Until June 30, by C. U. Boley, city engr., building concrete sidewalks and combined curb and gutter on Oakland Ave. to Georgia Ave., involving 3500 lin.ft. concrete curb and gutter and sidewalk.

Minn., Appleton—Until July 11 (change of date), by H. W. Steele, village clk., for 30,000 yd. pavement. About $100,000. J. W. Shaffer & Co., 403 New York Life Bldg., Minneapolis, engrs. Noted May 29.

Minn., Grand Rapids—Until July 14 (change of date), by Comrs. Itasca Co., grading and graveling 10 mi. Federal Aid Project No. 52, State Rd. No. 6, 18 ft. wide, involving 54 acres clearing, 54 acres grubbing, 36,390 cu.yd. excav., 8600 cu.yd. overhaul, culverts, surfacing, etc. About $50,000. Noted May 22.

Minn., Ivanhoe—Until July 14, by A. L. Swenson, aud. Lincoln Co., building 3 mi. Job No. 1902, State Rd. No. 5, 24 ft. wide, involving 4485 cu.yd. gravel, cost, $20,000; 16 mi. Job No. 1903, State Rd. No. 3, 3 mi. east of Hendricks, 24 ft. wide, 4700 cu.yd. gravel, $96,000. E. Haugan, Ivanhoe, engr.

Minn., Ortonville—Until July 6, by A. V. Randall, aud. Big Stone Co., grading and graveling 3 mi. Job No. 1807 State Rd. No. 6; also building bridges and culverts on Jobs Nos. 1908 and 1910, State Rd. No. 6; Job No. 1902, State Rd. No. 1; Job No. 1912, State Rd. No. 5, Job No. 1913, State Rd. No. 1; 24 ft. wide. About $30,000. L. P. Zimmerman, Ortonville, engr.

Minn., Worthington—Until July 14, by Comrs. Nobles Co., paving 5½ mi. and grading and graveling 24 mi. Federal Aid Project No. 58, 18-24 ft. wide. About $250,000. Former bids rejected. J. R. Boomer, Worthington, engrs. Noted June 19.

Kan., Ellsworth—Until July 7, by city, paving Douglas St. from H. L. Bridge to Smokey Hill River, involving 13,885 sq.yd. brick or asphaltic concrete. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Neb., Lincoln—Until June 28, by City Clk., paving 4000 ft., 24th, Park and S Sts., 25 ft. wide, involving 9900 sq.yd. asphaltic concrete on 5-in. concrete base, 7200 lin.ft. concrete curbing and guttering, and 1300 cu.yd. earth excav. About $30,200. G. M. Bates, city engr.

Neb., Omaha—Until July 8, by City Council, paving and curbing Center St. from 10th to 20th Sts., 24-30 ft. wide, involving 9639 yd. paving if ordinary curb is used, 8845 yd. if combination curb and gutter is used and 6776 ft. curb, cost, $35,000; ½ mi. 18th St. from William to Castelar Sts., 24 ft. wide, 8190 yd. paving, (ordinary curb) 7372 yd. (combination curb and gutter), $30,000; ½ mi. 59th St. from Military Ave. to Pratt St., 24 ft. wide, 7024 yd. paving (ordinary curb) 6284 yd. (combination curb and gutter) 5185 ft. curb and 3000 yd. grading, $25,000; Dorcas St. from 10th to 16th Sts., 24 ft. wide, 5331 yd. paving (ordinary curb) 4844 yd. (combination curb and gutter) and 4022 ft. curb, $20,000; Curtis Ave. from 30th to 34th Sts., 24 ft. wide, 5602 yd. paving (ordinary curb) 5137 yd. (combination curb and gutter) and 3910 ft. curb, $20,000; 58th St. from Military Ave. to Bensonhurst, 23 ft. wide, 5371 yd. paving (ordinary curb) 4780 yd. combination curb and gutter and 4037 ft. curb, $20,000; ½ mi. 17th St. from William to Center Sts., 24 ft. wide, 4467 yd. paving(ordinary curb) 4048 yd. (combination curb and gutter) and 3147 ft. curb, $15,000; 27th St. from Cuming to Caldwell Sts., 20 ft. wide, 2586 yd. paving (ordinary curb) 2282 yd. (combination curb and gutter) and 2249 ft. curb, $10,000; ½ mi. 60th St. from Military Ave. to Pratt St., 24 ft. wide, 7696 yd. paving (ordinary curb) 7020 yd. (combination curb and gutter) and 5477 ft. curb, $30,000. J. A. Bruce, city engr.

N. D., Wahpeton—Until July 7, by city, paving, curbing and guttering Ohio and Montana Aves., 3rd, Wisconsin, Pembina, Ohio and Michigan Sts., Paving Dist. No. 1.

Mo., St. Louis—Until July 25, by Bd. Pub. Serv., paving and building granite curbing on 1038 ft. Itaska St. from Kingshighway to Brannon St., 30 ft. wide, bitulithic. About $15,000. W. W. Horner, city engr.

Mo., St. Louis—Until July 15, by Bd Pub. Serv., paving and building granite curbing on 1500 ft. Neosho St., 26 ft. wide, bitulithic, estimated cost, $22,000; paving and granite curbing on 653 ft. Lombard St., 24 ft. wide, wood block, $11,000; paving and concrete curbing on 1250 ft. Brannon Ave., 30 ft. wide, bitulithic, $23,000. W. W. Horner, city engr.

Mo., St. Louis—Until July 8, by Bd. Pub. Serv., paving and building concrete curbing on 1650 ft. Prather Ave., vitr. brick, estimated cost, $29,000; paving and concrete curbing on 980 ft. Rosa and Hancock Aves., bituminous macadam, $11,000; paving and granite curbing on 620 ft. Elizabeth St., vitr. brick, $10,000; paving and concrete curbing on 1610 ft. Milentz Ave., vitr. brick; also 1150 ft. Milentz and Christy Sts., $15,000. W. W. Horner, city engr.

Streets and Roads (Continued)

Ark., Fayetteville—Until July 8, by W. J. Reynolds, secy. bd. rd. dist. No. 2, building 52 mi. gravel and limestone road. Work involves 11.5 acres clearing and grubbing, 155,282 cu.yd. unclassified and 5000 cu.yd. solid rock excav., 20 mi. grading machine work, 735 lin.ft. heavy steel and 760 lin.ft. light steel bridges, 33,752 cu.yd. field stone base, 16,138 cu.yd. limestone top course, 26,660 cu.yd. native gravel, 943 cu.yd. rein.-con. and 297 cu.yd. plain concrete, 1968 lin.ft. 15-30 in. concrete pipe, 20,000 sq.yd. scarifying and reshaping old macadam and 24,794 sq.yd. 2 in. bituminous macadam. Separate bids may be submitted for any or all of following items: concrete pipe, f.o.b. cars, Fayetteville; steel trusses and short spans, erected, bituminous top. Hamilton & Shreve, Fayetteville, engrs.; advertised in this issue.

Okla., Poteau—Until July 7, by O. S. Peorix, city clk., paving various streets and alleys, involving 23,000 cu.yd. grading, 30,000 sq.yd. oil macadam pavement, 65 catch basins, 7000 ft. vitr. pipe, 26,000 ft. concrete curb, 27,000 concrete gutter and 1100 ft. concrete header. J. E. Davis, Poteau, engr.

Okla., Yale—Until June 30, by city for 20,000 sq.yd. sheet asphalt pavement, 5000 lin.ft. concrete curbing, storm sewers, etc. C. F. Ford, clk. Noted June 5.

N. M., Raton—Until June 30, by P. Turner, city clk., paving and improving Cook and Park Aves., from 1st to 3rd Sts.; 1st and 2nd Sts., from Rio Grande to Savage Aves., involving 26,887 sq.yd. Topeka or bitulithic pavement, 6661 lin.ft. concrete curb and gutter, 546 lin.ft. concrete alley returns, and 4000 sq.yd. concrete alley pavement; advertised in this issue.

Idaho, Pocatello—Until July 3, by P. J. Phelan, city clk., for 37,000 sq.yd. pavement in Impvt. Dist. No. 23.

Washington—Until July 7, by State Highway Bd., Olympia, improving by grading, clearing, draining and paving 6.4 mi. Sunset Highway from Renton to May Valley, Permanent Highway No. 21, concrete, King Co.; 3.2 mi. Sunset Highway from Waterville west, crushed rock, Douglas Co.; 7.8 mi. Central Washington Highway from Cheney west, crushed rock, Spokane Co.; to Bear Rivers, Pacific Co.; 2.6 mi. Ocean Beach Highway from Nasel to Bear Rivers, Pacific Co.; 12 mi. Navy Yard Highway from Union City to Holyoke Creek, gravel, Mason Co.; 3.6 mi. Pacific Highway from Bellingham south, concrete, Whatcom Co.; 4.6 mi. Navy Yard Highway from Holyoke Creek to Clifton, gravel, Mason Co. J. Allen, state highway engr.

Wash., Port Angeles—Until July 7, by Comr. Clallam Co., grading and graveling 7.3 mi. Permanent Highway No. 7 near Pysht. J. W. Blackwood, Port Angeles, engr.

Ore., Hillsboro—Until July 1, by E. L. McCormick, city recdr., for 6000 lin.ft. concrete curbing, 25,000 sq.yd. concrete pavement and 5000 cu.yd. excav. R. W. Jones, city engr. Former bids rejected. Noted June 5.

Cal., Oakland—Until July 7, by Bd. Supervs. Alameda Co., grading, paving with 5 in. concrete and building culverts and bridges on 1¼ mi. county road, 18 ft. wide. About $160,000. P. A. Haviland, Courthouse, engr.

N. S., Lunenburg—City receiving bids for 4000 yds. bituminous top paving with concrete base and 1500 yd. concrete sidewalks. G. H. Love, engr.

Que., Montreal—Until July 6, by city, paving 3800 ft. Cote des Neyes Rd. from Sherbrooke to St. May St., 50 ft. wide, involving 21,420 sq.yd. granite block. About $153,987. A. E. Doucet, city engr.

Que., Montreal—Until July 2, by Bd. Pub. Wks., paving 3 mi. lanes, 16 ft. wide. About $18,475. A. E. Doucet, city engr.

Que., St. Tite—Until July 1, by J. Clouthier, secy. municipal council, building 3 mi. waterbound macadam road. About $12,000.

Ont., Sandwich—Until June 30, by R. W. Code, engr., Bd. Trade Bldg., Windsor, building 15 mi. macadam roads for town. About $123,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Maine—State Highway Comn., Augusta, let contract grading, draining and bituminous macadam surfacing, state aid highways, beginning at Mill St. and extending along Pleasant St. 3011 ft., to Main St., Brunswick Twp., to Small & Ingalls Co., Bar Harbor. About $20,891. Noted June 12.

Massachusetts—State Highway Comn., Boston, received bids June 18, building 15,400 ft. bituminous macadam road, 18 ft. wide, Tewksbury Twp., involving 70,000 gal. butuminous macadam and 12,200 cu.yd. earth excav., from G. Grenough, South Acton, $66,375; W. B. MacIntosh, Wilmington, $67,834; Cenedella & Sons, Milford, $71,140. Noted June 12.

Massachusetts—State Highway Comn., Boston, received bids June 18, building 23,500 ft. road, Hancock Twp., involving 9500 cu.yd. concrete, 10,000 cu.yd. excav., from C. B. Lindholm, Pittsfield, $169,450; Davis & Brock, Boston, $170,010; Cordar & Montague, Pittsfield, $170,175; 12,800 ft. road, Braintree Twp., 4600 cu.yd. concrete, 9000 cu.yd. earth excav., from Cenedella & Son, Milford, $72,316; W. F. Loud & Sons, Quincy, $73,564; D. M. Biggs, Boston, $75,837. Noted June 5.

Mass., Brighton (Boston P. O.)—Comr. Pub. Wks. received bids June 16, paving Cambridge St., involving 20,550 sq.yd. asphalt on 6 in. concrete base, from Warren Bros., Berkeley St., Boston, $62,563; Central Constr. Co., School St., Boston, $66,265; Bermudez Co., Cambridge, $66,742.

★Conn., Waterbury—City let contract paving 18,797 sq. yd. various streets, Warrenite asphalt, to Warren Bros. Co., 173 Berkeley St., Boston, cost $61,754; 1235 sq. yd., to Barbara & D'Aurio, 63 Bank St., $7225; block pavement, concrete, 3873 sq. yd., to Connecticut Hassam Paving Co., 902 Chapel St., New Haven, $10,805.

New York—State Highway Comn., Capitol, Albany, received bids June 17, improving highways in following counties: (a1) Chenango Co., Greene-Oxford, Part 1, Rd. No. 8001; (a2) Greene-Oxford, Part 2, Rd. No. 8002;

(b) Erie Co., Marilla-Wales Center, Rd. No. 5633;

(c) Essex Co., Westport-Elizabethtown, Rd. No. 1496;

(d1) Fulton Co., Bull Run-Bleecker, Rd. No. 1376; (d2) Oppenheim-Dolgeville, Rd. No. 5626; (d3) Akin-Johnstown, Part 2, Rd. No. 8006;

(e1) Onondaga Co., Baldwinsville-Plainville, Rd. No. 1507; (e2) Scott-Borodino, Part 1, Rd. No. 1519;

(f1) Rensselaer Co., Riders Mills-Brainard, Rd. No. 1521; (f2) Stone Schoolhouse-North Petersburg-Vermont State Line, Rd. No. 1424;

(g) Cattaraugus Co., Machias-Delevan, Part 1, Rd. No. 5608;

(h) Nassau Co., Little Neck-Old Westbury, Part 2, Rd. No. 5280; also repairing roads in following counties: (i) Fulton Co., Rd. Nos. 110 and 247, Repair No. 1226;

(j) Herkimer Co., Rd. No. 456, Repair No. 1226;

(k1) Monroe Co., Rd. No. 010, Repair No. 1229; (k2) Rd. Nos. 5, 94, 538, 573, 674 and 1337, Repair No. 1230;

(l) Montgomery Co., Rd. No. 303, Repair No. 1227;

(m) Oneida Co., Rd. No. 1159, Repair No. 1228;

(n) Westchester Co., Rd. No. 20, Repair No. 1219, from Morrison & Quinn, Inc., Cutler Bldg., Rochester, (a1) $218,672, (a2) $231,357, (e1) $248,911;

McArthur Bros., 120 Bway., New York City, (a1) $239,206, (a2) $254,424;

Cold Spring Constr. Co., Buffalo, (b) $193,409;

F. I. Foote, Nunda, (b) $198,682;

J. S. Stabell, Inc., 1127 Niagara St., Buffalo, (b) $202,450;

Kennedy Contg. Co., Inc., Albany, (c) $195,965;

Dale Eng. Co., Mann Bldg., Utica, (c) $108,749, (d2) $99,849;

J. B. Dower, Ballston Spa, (c) $208,606;

T. Grady, Rochester, (d1) $62,859; (e2) $89,924;

Rosoff Eng. Co., 15 Park Row, New York City, (d1) $63,203, (d2) $103,336;

Bleecker Twp. Bd., Bleecker, (d1) $63,323;

F. V. Brotsch Co., E. & B. Bldg., Rochester, (d2) $101,824;

Harradine Bros. Co., Inc., Spencerport, (d3) $31,568, (e2) $89,052;

J. A. Jova, Inc., Roseton, (d3) $31,733;

J. P. Dugan Co., Inc., 32 James St., Amsterdam, (d3) $32,018, (1) $33,627;

Pathfinder Constr. Co., Fulton, (e1) $225,984;

J. H. Corbett & Sons Co., Union Arcade, Pittsburgh, Pa., (e1) $240,003;

J. H. Gordon, 42 North Pearl St., Albany, (e2) $86,724;

Gifford Constr. Co., Jamaica, (f1) $36,401;

Troy Contg. Co., Troy, (f1) $39,004, (f2) $121,279;

M. Fitzgerald, Hoosick Falls, (f2) $122,148;

Rossney Contg. Co., Buffalo, (g) $38,967;

I. M. Luddington Sons, Inc., Powers Bldg., Rochester, (g) $43,494;

E. T. Eggleston, Yonkers, (h) $44,541, (n) $18,801;

H. T. Bell, Bayside, (h) $45,328

N. W. Ryan, 15 Broad St., New York City, (h) $45,460;

Oltarsh Eng. Co., New York City, (i) $25,261;

G. N. McGinney, Gloversville, (i) $23,505;

T. F. Murray, Leroy, (j) $25,010;

A. F. McConville, Ogdensburg, (j) $25,817;

L. D. Sullivan, Inc., Utica, (j) $25,923, (m) $5617;

Ribstein-Holter Co., Inc., 16 State St., Rochester, (k1) $36,536;

H. W. Roberts Co., Inc., 610 Lansing St., Utica, (k1) $39,825;

Whitmore-Rauber & Vicinius, 279 South Ave., Rochester, (k1) $44,472, (k2) $14,074;

Good Roads Eng. & Contg. Co., Portchester, (n) $20,297;

Greenwich Contg. Co., Inc., New York City, (n) $20,427. Noted May 29.

★N. Y., Brooklyn—E. Riegelmann, boro pres., let contract regulating, grading, curbing and laying sidewalks on East 38th St., to J. Massio, $4315; 51st St., to Grimm Constr. Co., 460 Herold Ave., Richmond Hill, $4435; 47th and 51st Sts., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $42,426 and $10,681, respectively. Noted June 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., received bids June 18, resurfacing with asphalt by heater system roadways of (a) Calyer St. from Manhattan Ave. to Leonard St., regulating and repaving with asphalt on 6-in. concrete base; (b) Cortland St. from Neptune Ave. to Sheepshead Bay Rd., with granite on 6-in. concrete base; (c) 1st St. from 52nd to 53d Sts., from Cranford Co., 52 9th St., (a) $99,163, (b) $12,985; Borough Asphalt Paving Co., 1301 Metropolitan Ave., (a) $107,719, (b) $13,362; Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $111,085, (b) $13,394; Sicilian Asphalt Paving Co., 41 Park Row, New York City, (b) $12,279; M. J. O'Hara, 1228 Park Ave., New York City, (c) $5037; J. D. Norton, (c) $5458.

★N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, let contract clearing, grading, draining, building culverts and guard rails on 7.75 mi. road around Schoharie reservoir in Gilboa and Conesville Twps., Schoharie Co., Prattsville Twp., Greene Co., and Roxbury Twp., Delaware Co., Contr. 202, to Schunnemunk Constr. Co., Highland Mills, $176,700. Noted June 19.

★N. Y., Ithaca—Common Council let contract paving Neaga Ave., Dryden Rd. and portions of East Seneca and Cascadilla Sts., bitulithic, to Warren Bros., 142 Berkeley St., Boston, $34,489; Stewart Ave., Prospect, Clinton and Westport Sts., to P. D. Conley, Ithaca, $67,446.

★N. Y., New York—Armory Bd., at office of J. F. Hylan, mayor, City Hall, let contract removing curb, extending concrete sidewalks and laying concrete foundations for floor in drill hall of 8th Coast Artillery Corps. Armory, Jerome Ave. and Kingsbridge Rd., Bronx Boro., Contr. No. 1, to F. Roeber, 507 5th Ave. About $13,150. Noted June 12.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contract regulating and repaving with granite block on concrete foundation, roadway of Moore St., West Bway., William and Center Sts., to M. J. O'Hara, 1228 Park Ave., $6616, $80,342, $5429, and $19,329, respectively; Theatre St., to Asphalt Constr. Co., 2197 Madison Ave., $4250; Walker St., to W. J. Fitzgerald, 547 West 45th St., New York City, $494; Madison St., to Davney Asphalt Paving Co., foot Quinby Ave., $57,608. Noted June 12.

★N. Y., New York—F. L. Dowling, pres. Manhattan boro., let contract regulating and repaving with granite block on concrete foundation, roadway of James Slip and Leroy St., to W. J. Fitzgerald, 547 West 45th St., $18,977 and $25,300 respectively; with sheet asphalt, Wall St., to Sicilian Asphalt Paving Co., 41 Park Row, $21,564; 79th St., to J. L. Brusstar, Harlem River and 150th St., $43,922; Bway., to Asphalt Constr. Co., 2197 Madison Ave., $47,669. Noted June 19.

Streets and Roads (Continued)

★N. Y., New York—L. Nixon, supt. pub. wks., Capitol, Albany, let contract paving barge canal terminals, Pier 6, East River, Contr. 52-P, to Sicilian Asphalt Paving Co., 41 Park Row. About $11,225. Noted June 12.

N. Y., New York—Park Bd., Municipal Bldg., received bids June 19, for labor and material for paving and repaving with asphaltic mastic, walks of Central and other parks in Manhattan Boro., from Sicilian Asphalt Paving Co., 41 Park Row, $12,265; F. Roeber, 507 5th Ave., $12,690; D. J. Skelton, $13,000. Noted June 12.

★N. Y., S. I., St. George—C. D. Van Name, pres. Richmond Boro., let contract repairing with wood block, roadways of Richmond and Castleton Aves., to J. A. Johnson & Sons, West New Brighton. About $14,900. Noted June 5.

★N. J., East Orange—Bd. Freeholders Essex Co., (Newark), let contract paving Grove St. from Central Ave. here to Newark-Irvington line, bitulithic on 6 in. concrete base, to Northern Constr. Co., 665 Broad St., Newark, $60,761.

★N. J., Irvington—Village let contract improving 11,800 sq.yd. Union Ave., from Springfield to Mt. Vernon Aves., 2 x 5 x 12 in. "Hastings" asphalt blocks, to J. Dorer, Irvington, $56,669. Noted June 12.

N. J., Jersey City—City received lowest bid improving Hutton St. from Liberty Ave. to Hudson Blvd. from W. T. S. Crichfield, Washington St., Hoboken, 120% of standard price. Noted June 12.

★N. J., South Orange—Village let contract improving with "Hastings" asphalt blocks 2.5 x 5 x 12 in., 9300 sq.yd. Valley St. from South Orange Ave. to South Village line, to L. Batt, South Orange, $48,024; 4470 sq.yd. Irving Ave. from Centre St. to Grove Rd., 2 x 5 x 12 in., to J. Selitto, South Orange, $24,246. Noted June 12.

Pennsylvania—State Highway Dept., Harrisburg, received bids building roads in counties as follows:

Blair Co., 23,075 ft. repair work (13,075 ft. to be repaired with bituminous surface course 8-14 ft. wide), Logan Twp., from Eastern Paving Co., Colonial Trust Bldg., Phila., $27,200, Warren Bros. Co., 142 Berkeley St., Boston, $29,410; 890 ft. rein.-con., Gaysport Boro., from Standard Contg. Co., Altoona Trust Bldg., Altoona, $5672.

Bradford Co., 6640 ft. concrete, Athens Twp., from Valley Constr. Co., Athens, $38,541, T. M. Gill Co., Binghamton, N. Y., $38,891, W. J. Gephart, Pittsburgh, $39,743.

Cambria Co., 32,185 ft. rein.-con. and Hillside vitr. brick, Jackson Twp., from Nicola Bldg. Co., Penn and Denniston Aves., Pittsburgh, $259,954, Claiborne, Johnston Co., 910 Garrett Bldg., Baltimore, $378,174.

Centre Co., 27,940 ft. bituminous surface course on concrete foundation or rein.-con., Boggs Twp., from Vipond Constr. Co., 2222 Beale Ave., Altoona, $215,711, Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $219,951, Winston & Co., 240 Fair St., Kingston, N. Y., $232,220.

Chester Co., 2932 ft. bituminous surface course on concrete foundation or rein.-con., Oxford Boro., from Juniata Co., Empire Bldg., Phila., $21,602, Sutton Contg. Co., Phila., $22,231, D. E. O'Connell & Son, Norwood, $23,972.

Cumberland Co., 24,275 ft. rein.-con. and Hillside vitr. brick, Upper Allen Twp., from Langthorne Co., Inc., New York City, $181,605, Hamilton-Kapncke Co., Phila., $181,642, Bennett & Randall, Lebanon, $192,758.

Crawford Co., 9067 ft. rein.-con., Woodcock and Hayfield Twps., from Keystone Constr. Co., Meadville, $62,626, Highway Constr. Co., Erie, $63,953, Mason, Hilton Co., 120 Liberty St., New York City, $85,813.

Erie Co., 27,049 ft. bituminous surface course on concrete foundation and Hillside vitr. brick or rein.-con., Mill Creek and Fairview Twps., from Gaylord International Eng. & Contg. Co., Mears Bldg., Scranton, $255,513, H. Schenk Co., 12th and Sassafras Sts., Erie, $281,537, Foundation Co., 233 Bway., New York City, $283,362; 4854 ft. bituminous surface course on concrete foundation and vitr. brick, Gerard Boro. and Twp., from Mayer Bros. Constr. Co., Commerce Bldg., Erie, $86,634, Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $97,227, Warren Bros. Co., 142 Berkeley St., Boston, $101,949; 20,200 ft. rein.-con., Wayne Twp., from Highway Constr. Co., Erie, $136,532, Keystone Constr. Co., Meadville, $141,388, Campbell Bros. Co., Stambaugh Bldg., Youngstown, O., $153,306.

Lancaster Co., 37,684 ft. bituminous surface course on concrete foundation or rein.-con., East and West Hempfield Twps., from Freeland Constr. Co., Freeland, $247,273, W. H. Gawl, (J. Gawl & Co), Phila., $247,804, Ambler-Davis Co., Harrison Bldg., Phila., $252,154.

Lycoming Co., 39,319 ft. rein.-con., Platt and Woodward Twps., from W. J. Gephart, Pittsburgh, $322,531, Langthorne Co., Inc., New York City, $329,919, Bullock Constr. Co., Hazelton, $355,135.

Mercer Co., 3678 ft. bituminous surface course on concrete foundation or rein.-con., from Brackenridge Sand & Gravel Co., Brackenridge, $44,168.

Potter Co., 26,400 ft. bituminous surface course on concrete foundation or rein.-con. Eulalia and Potter Twps., from L. H. Gipp, Buffalo, N. Y., $218,918, Horn & Devling, Main St., Galeton, $222,743, Lesher & Roess, 700 West Front St., Oil City, $232,267.

Warren Co., 6544 ft. rein.-con., Youngsville Boro., from J. McCormick & Bro., Erie, $39,907, M. Dolan, Jamestown, N. Y., $47,659, Ridelsperger & Savage, Warren, $48,716.

York Co., 40,712 ft. bituminous surface course on concrete foundation and Hillside vitr. brick or rein.-con. and Hillside vitr. brick, Carroll and Franklin Twps., from Langthorne Co., Inc., New York City, $297,908, Mason & Hanger Co., Chambersburg, $319,702, Caliborne, Johnston Co., Inc., 910 Garrett Bldg., Baltimore, $333,746. Noted May 29.

★Pa., Phila.—Dept. Pub. Wks. let contracts improving streets as follows: (Schedule A) grading (1) 1670 cu.yd. streets, (2) Romana Ave. from N. E. Blvd. to Adams Ave., (3) Windsor Ave., (4) 74th Ave. from Alsop St. to Washington Lane; (Schedule C) asphalt paving assessment work, (1) Lindle Ave., (2) Spring St., (3) Vaux St., (4) 6th St., (5) 68th St.; (Schedule D) asphalt repaving, (1) Clementine St., (2) Fairmount Ave., (3) Lippincott St., from Kensington to Jasper Sts., (4) Lippincott St., from Amber St. to Pennsylvania R. R.; (Schedule E) wood block repaving, (1) Carpenter St. from 6th to 7th Sts., (2) Carpenter St. from 8th to 10th Sts., (3) Marlborough St., (4) Richmond St.; (Schedule J) furnishing and delivering fuel oil, to M. J. McCrudden, 805 Franklin Trust Bldg., (a1) $14,293; T. L. Flanagan, 1204 East Montgomery St., (a2) $744; E. A. Mullen, 5512 Vine St., (a3) $363; F. Mack Constr. Co., 2820 North 21st St., (a4) $6963; Barber Asphalt Paving Co., 239 North 30th St., (c1) $20,632, (c2) $2325, (c3) $3766, (c4) $7940, (c5) $3970, (d1) $3831, (d3) $3878, (d4) $1915; Eastern Paving Co., 401 Colonial Trust Bldg., (d2) $23,460; J. Meehan & Son, 915 West Dauphin St., (e1) $7352, (e2) $7628; J. J. McHugh, 1430 South Penn Sq., (e3) $2938, (e4) $2938, Atlantic Refining Co., 3144 Passyunk Ave., (j) $1520. Noted June 12.

Pa., Pittsburgh—Allegheny Co. received lowest 3 bids improving 5280 ft. McCoy Rd., 16 ft. wide, involving 9650 sq.yd. vitr. brick 650 cu.yd. concrete base, 9000 sq.yd. scarified surface, 6000 ft. 6-in. underdrain and 2000 cu.yd. earth excav., from J. H. McQuaide & Sons, Bakewell Bldg., $46,040, M. Ott & Co., 414 Warrington Ave., $48,224, J. B. Reed and F. Bryan, McKee's Rocks, $49,310; also rebuilding 3 mi. Bull Creek Rd., Fawn Twp., 18 ft. wide, 900 sq.yd. vitr. brick, 31,100 sq.yd. rein.-con. paving, 4500 cu.yd. earth excav., 1100 sq.yd. concrete foundation, 26,200 ft. 4 and 6-in. underdrains, 25,000 sq.yd. scarified surface, from Booth & Flynn, 1942 Forbes St., $91,834 (Telford base), $104,254 (concrete base); T. Cronin Co., South 17th and Muriel Sts., $94,377 (Telford base), $106,977 (concrete base); M. O'Herron Co., South 1st and McKean Sts., $96,844 (Telford base), $106,744 (concrete base). Noted May 22.

★W. Va., Hinton—Summers Co. let contract grading and draining 5 mi. Jumping Branee Rd., 20 ft. wide, to J. H. Henning, Charleston, $43,815. Noted June 19.

W. Va., West Union—Comrs. Doddridge Co. received only bid building 7 mi. Northwest Turnpike, Federal Aid Project No. 20, 14 ft. wide, concrete, involving 4500 cu.yd. excav., from Cisler & Morse, Marietta, O. About $25,200.

★W. Va., West Union—Comrs. Doddridge Co. let contract building 3 mi. Northwestern Turnpike, grading 26 ft. wide, surfacing 16 ft. wide, concrete, to Cisler & Morse, Marietta, O. About $86,000. Noted June 12.

★Ga., Griffin—City let contract paving 3 mi. streets with vitr. brick, to Pittman Constr. Co., Rhodes Bldg., Atlanta, $18,922.

★Fla., Jacksonville—Comrs. Duval Co. let contract paving here Turner Rd., Riverside, McDuff, and Myrtle Aves., to Wilson Constr. Co., Clark Bldg., South Jacksonville, $1.69 per yard. Noted May 29.

★Ohio—State Highway Comn., Columbus, let contracts building roads in following counties:

Delaware Co., Sect. "A-2," Delaware-Marysville Rd., 2.85 mi. grading, constructing bridges and culverts and paving with bituminous macadam, A. W. Burns, 55 East State St., Columbus, $57,202.

Sect. "B," Delaware-Marysville Rd., 5.02 mi. grading, constructing bridges and culverts and paving with bituminous macadam, A. B. Shaw, Delaware, $100,887.

Geuaga Co., Sect. "A," Cleveland-Kent Rd., .94 mi., resurfacing with 3 in. bituminous macadam, J. C. Devine Co., Alliance, $10,599.

Huron Co., Sect. "O," Oberlin-Norwalk Rd., 1.28 mi., grading and paving with monolithic brick, A. J. Baltes, Norwalk, $48,672.

Lorain Co., Sect. "C-2," Ashland-Oberlin Rd., 3.29 mi., grading, widening pavement and resurfacing with bituminous macadam, Hart & Kemp, Elyria, $39,095.

Montgomery Co., Sect. "D," Dayton-Chillicothe Rd., 2.63 mi., grading berms and ditches, constructing drainage structures reshaping present road and paving with plain concrete, Williams & Little Co., 11,810 Saywell Ave., Cleveland, $57,665.

Ottawa Co., Sect. "J" and "K-3," Toledo-Elmore Rd., 7.15 mi., grading and paving with concrete, Williams & Little Co., $223,428.

Sect. "F," Oak Harbor-Genoa Rd., 1.99 mi., grading and paving with concrete, Barnes & Tobbirt, Rocky Ridge, $54,236.

Sect. "D," Oak Harbor-Genoa Rd., 3.56 mi., grading and resurfacing with bituminous macadam, Wise Bros. & Berman, Elmore, O., $32,802.

Sandusky Co., Sect. "J," Fremont-Bellevue Rd., 5.76 mi., grading, constructing drainage structures and paving with brick, Modern Constr. Co., Fremont, $333,000.

Trumbull Co., Sect. "M," "E-1," "E-2," "C" and "D," Youngstown-Warren Rd., tar surface treatment, Amer. Tar Products Co., 1359 Logan Ave., Youngstown, $10,456.

Union Co., Sect. "B-1," Marysville-Kenton Rd., 2.88 mi., grading, constructing bridges and culverts and paving with waterbound macadam, C. O. Hurd, Marysville, $41,109. Noted June 19.

★O., Cleveland—City let contracts, to Cleveland Trinidad Paving Co., The Arcade, paving East 137th St., from Livingston to Abell Aves., cost $13,262; Southington Rd. from Livingston Rd. to city limits, $11,669. Noted June 5.

O., Dayton—City received bids paving 2000 ft. 3rd St. from Perry to St. Clair Sts., 60 ft. wide, involving 13,400 sq.yd. (a) oil A, (b) oil B wood block, 4200 lin.ft. granite curbing and 2000 sq.ft. cement sidewalks, from E. D. Murray, 18 Cambridge Ave., (a) $93,304, (b) $91,964; E. Ryan, Cincinnati, (a) $97,031, (b) $95,021; Finke Eng. Co., 15 South St. Clair St., $95,124. Noted June 19.

★O., Dayton—Montgomery Co. let contract building 2.64 mi. Xenia Pike, concrete, to Williams & Little, 11810 Saywell St., Cleveland, $57,665.

O., Toledo—City received bids grading, draining, curbing and paving with (1) rein.-con., (2) 3-in. vitr. brick, (3) 2-in. asphaltic concrete, (4) Mexican sheet asphalt, (5) 2-in. asphaltic block, (a) 1176 ft. Fremont St., 24 ft. wide, (b) 1259 ft., Booth Ave., 24 ft. wide, (c) 1259 ft. Bricker Ave., 24 ft. wide, (d) $1248 ft. Martha St., 24 ft. wide, (e) 4190 ft. Hudson St., 24 ft. wide, (f) 2581 ft. Oakdale Ave., 26 ft. wide, from M. F. O'Sullivan, 145 Oak St., (a1) $13,445, (a2) $16,689, (f2) $41,703; H. P. Streicher Co., 319 Terminal Bldg., (a3) $16,854, (b4) $18,268, (e3) $59,596, (f4) $41,104; Russell & Jennison, 2463 Bway., (b1) $15,003, (e1) $47,852, (e2) $61,925, (f1) $32,718; P. H. Watters, 531 Lincoln St., (b2) $18,650, (c1) $13,442, (c2) $16,996; Asphalt Block Paving Co., 839 Ohio Bldg., (c5) $18,841, (d5) $20,620; Peters Bros., 237 Marion St., (d1) $16,132, (d2) $19,359. Noted June 5.

Streets and Roads (Continued)

★Michigan—State Highway Dept., Lansing, let contracts, to W. J. Schneider, Ann Arbor, improving 3.752 mi. Assessment Dist. Rd. No. 31, Wright Twp., Hillsdale Co., Class B, 16 ft. gravel, cost, $53,658; to J. W. Ederer & Co., Saginaw, 3.985 mi Assessment Dist. Rd. No. 102, McKinley Twp., Huron Co., Class E, 12 ft. gravel, $46,767, 3.462 mi. Assessment Dist. Rd. No. 183, Huron Co., Class E, 12 ft. gravel, $39,287, to Shultz & Liken, Sebewaing, 4.493 mi. Assessment Dist. Rd. No. 111, McKinley Twp., Huron Co., Class E, 12 ft. gravel, $52,608, 1.993 mi. Assessment Dist. Rd. No. 208, Huron Co., Class E., 12 ft. gravel, $24,031; to Wolverine Constr. Co., Kalamazoo, 7.095 mi. Federal Aid Project No. 30, concrete, 16 ft. wide. $172,751. Noted June 5.

★Michigan—State Highway Comn. Lansing, let contract grading and building drainage structures on 6 mi. road in Oakland and Livingston Counties, to N. Werkley, Lansing, $16,089. Work involves 13,652 cu.yd. excav.

Mich., Detroit—City received bids paving with 1 course concrete Alleys Nos. (a) 1015, (b) 1016, (c) 1017, (d) 1018, (e) 1019, (f) 1020, (g) 1021, (h) 1022, (i) 1023, (j) 1024, from T. E. Currie, McGraw Bldg., (a) $5816, (d) $3456; Otis Cement Constr. Co., 806 Hammond Bldg., (a) $5856, (b) $5144, (c) $4702, (d) $3511, (e) $3641, (f) $3141, (g) $2847, (h) $3019, (i) $2790, (j) $982; R. J. Powelson Co., 1577 Iroquois Ave., (a) $6160, (b) $5395, (c) $4853, (d) $3667, (e) $3759, (f) $3240, (g) $2865, (h) $3098, (i) $2863, (j) $965; E. Meredith & Co., 145 Harper Ave., (b) $5230, (c) $4784; Talbot Co., 400 Penobscot Bldg., (e) $3724, (f) $3205, (h) $2985, (i) $2757, (j) $975; Lennane & McIlvenna, 1205 Book Bldg., (g) $2795. Noted June 19.

★Mich., Detroit—Dept. Parks & Blvds., 822 Farwell Bldg., let contract paving and improving approaches to Michigan Central Depot, in Roosevelt Park as follows: 9103 sq.yd. asphaltic wearing surface, to Dept. Pub. Wks., City Hall, $13,155; concrete foundation, curb, headers, etc., to J. Porath, 34 McGraw Bldg., $32,516. Noted June 19.

★Illinois—State Highway Comn., Springfield let contracts improving 4200 ft. Sect. S, Route 4, Fulton Co., to Sutton & Rhodes, Canton, $15,800; 2121 ft. Sect. K, Route 15 and 2336 ft. Sect. L, Route 17, McHenry Co., to Cole & Fauber, Shermerville, $8179 and $7624 respectively; 7254 ft. Sect. F, Routes 10 and 11, Ogle Co., to Gund Graham Co., Freeport, $19,983; 1550 ft. Sect. D, Route 2, Edwards Co., to Schernekar & Sons, West Salem, $3427; 5200 ft. Sect. I, Route 12, Macoupin Co., to Miller & Husband, Springfield, $2199; 12,750 ft. Sect. G, Route 1 and 12,000 ft. Sect. J, Route 11, Woodford Co., to White & Braley, Litchfield, $5903 and $7078 respectively Noted June 5.

★Illinois—State Highway Comn., Springfield, let contract improving Sects. B, C and D, Chicago-Joliet Highway, to R. F. Conway Co., 133 West Washington St., Chicago, cost $364,000; Sect. 3, Dixie Highway, Iroquois Co., to Warner Constr. Co., 189 West Madison St., Chicago, $151,435; Sects. I, J, K and G-15d, Natl. Highway, Effingham Co., to C. J. Moritz Inc., West Allis, Wis., $280,000. Noted June 5.

Illinois—State Highway Comn., Springfield received bids improving 22,459 ft. Sect. L, Natl. Highway, Effingham Co., from A. M. Hoolan, 607 Wainwright Bldg., St. Louis, Mo., cost $132,408; 17,994 ft. Sect. M, and 27,887 ft. Sect. N. from J. Black Masonry & Constr. Co., Telephone Bldg., Chicago, $93,819 and $134,092 respectively, W. C. Meneely, Frankfort, Ind., 135,915 and $176,874 respectively. W. F. Smith & Co., Renssalaer, Ind., $117,447 and $150,588 respectively, combined bid, $250,534. Noted June 5.

Illinois—State Highway Comn., Springfield, received bids June 18, paving 4678 ft. Peoria-Springfield Highway, 16 ft. wide, Sect. M, Mason Co., from Bates & Rogers, 37 West Van Buren St., Chicago, $19,926, H. K. Rhodes, Lincoln, $20,239. Noted June 5.

★Ill., Edwardsville—Comrs. Madison Co. let contract paving 5 mi. Alton-St. Louis Rd., monolithic brick, to M. Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. About $169,307. Noted June 12.

★Wis., Ladysmith—Rusk Co. let contract grading Ladysmith Rd., Federal Aid Project No. 91, to J. F. Mitchell, Ladysmith, 25,385 cu.yd. grading at $.50 per cu.yd., 322 cu.yd. concrete culverts, $18.50, 218 cu. yd. concrete bridge, $18.50, and 243 cu.yd. borrow excav., $.50. Total cost $22,813.

Wis., Sheboygan—City received bids grading and paving (a) 2.5 mi. North 10th St., from Superior to Jule Aves., 20 ft. wide, involving 10,715 sq.yd. concrete and 5210 lin. ft. concrete curb and gutter, (b) 1.8 mi. East Water St. to Center Ave. and North 6th to East Water Sts., 20 ft. wide, involving 1500 sq.yd. concrete, etc., from J. Braun Co., Pennsylvania Ave., (a) $28,292, (b) $11,991; Pestien & Naumann, 15th St., (a) $27,973, (b) $12,590. Noted June 12.

★Wis., Waukesha—Waukesha Co. let contract grading and surfacing Mokwonago Rd., to Milwaukee Gen. Constr. Co., 857 8th Ave., Milwaukee, 2842 cu.yd. grading, $2,358, 71 cu.yd. concrete culverts, $18, 260 lin.ft. guard rail at $.40, and 9956 sq.yd. concrete surfacing, $2.28. Total cost, $26,457.

★Minn., Elk River—Comrs. Sherburne Co. let contract paving and grading 6½ mi. Federal Aid Project No. 69, State Rd. No. 1, to Widell Co., Mankato, $168,045. Noted May 22.

★Minn., Hastings—Comrs. Dakota Co. let contract paving 6 mi. Federal Aid Project No. 23, State Rd. No. 1, 18 ft. wide, bitulithic, to Warren Bros., 142 Berkeley St., Boston, Mass. About $178,000. Noted May 22.

★Minn., Little Falls—Comrs. Morrison Co. rejected bid received June 18, building 11.9 mi. Federal Aid Project No. 24, State Rd. No. 3, 24 ft. wide. Work will be done by day labor. A. J. Fenn, Little Falls, engr. Noted June 19.

★Minn., Montevideo—Comrs. Chippewa Co. let contract grading and graveling 15 mi. Federal Aid Project No. 49, State Rds. Nos. 1 and 4, 24 ft. wide, to Studor & Manion, Excelsior, $57,000. Noted May 29.

★Kan., Harper—City let contract for 52,653 sq.yd. vitr. brick paving and 14,185 lin.ft. combination curbing and guttering, to A. L. Cook, Ottawa, $103,038. Noted June 5.

★Kan., Strong City—City let contract for 21,297 sq.yd. bituminous paving and 8566 lin.ft. curbing and guttering, to Moley & Kelley Constr. Co., Kansas City, Mo. About $42,700. Noted May 29.

★Neb., Lincoln—Comrs. Lancaster Co. let contract grading South 14th St. from here to Beatrice, to Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, Mo., $0.345 per yd. Noted May 15.

N. D., Grand Forks—City soon lets contract paving, curbing, grading, and draining 47,358 sq.yd. in Paving Dists. No. 10 and 16, Portland cement concrete, 20-30 ft. wide. About $155,400. C. S. Giles, city engr.

★Mont., Billings—City let contract paving Custer and Terry Aves., to Warren Constr. Co., Journal Bldg., Portland, Ore. About $105,000. Noted Mar. 27.

★Mo., Excelsior Springs—City let contracts, to P. P. Young, R. F. D. No. 6, St. Joseph, Mo., paving 1200 ft. Kansas City Ave., 30 ft. wide, involving 4710 sq.yd. vitr. brick on old base, asphalt filler, cost $12,075; resurfacing 680 ft. Elms Blvd., 36 ft. wide, 3407 sq.yd. bituminous macadam, penetration method, $4259. Noted June 5.

★New Mexico—State Highway Comn., Santa Fe, let contract grading, surfacing and building culvert and bridge on 9.7 mi. road from Raton to Colorado state line, Federal aid project No. 1-A, Colfax Co., to Odell Bros., Colmor. About $130,000.

★Wash., Olympia—City let contracts to Allred, James, Hendrickson, Allers & Son, Centralia, grading and paving Grant, Harrison and Rodgers Sts., 30 ft. wide, involving 11,083 sq.yd. asphalt on concrete base, 18,062 sq.yd. 1 course concrete, 8441 lin. ft. concrete curbing, 2716 lin. ft. concrete sidewalks and 16,644 cu.yd. excav., cost, $118,726; ¾ mi. Puget St., from 3rd to San Francisco Sts., 3 ft. wide, involving 8795 sq.yd. concrete, 1147 lin. ft. concrete curbing, 4108 lin. ft. concrete sidewalks, 5000 cu.yd. earth excav. and 4300 ft. 8 in. sewers, $38,243.

★Wash., Seattle—Comrs. King Co. let contract building 1.87 mi. J. B. McDougall Rd., 16 ft. wide, involving 18,000 sq.yd. concrete and 3000 cu.yd. earth excav., to Seaboard Constr. Co., Seattle, $47,904. Noted June 12.

★Oregon—State Highway Comn., Portland, let contract grading 1.9 mi. Cedar Point-Coquille Rd., Coos Co., and 6.94 mi. Hubbard Creek-Brush Creek Rd., Curry Co., to Moon & Co., Marshfield, concrete pipe, $10,640 and $157,590, respectively; 10.9 mi. Green Springs-Mt. Summit Sect. Pacific Highway, Jackson Co., to A. Giebisch, Rothchild Bldg., Portland, Class "C" concrete and iron pipe, $127,398; 3.8 mi. Aurora-Canby Rd., Clackamas Co., to W. B. Tull, Portland, iron pipe, $34,401; 21.4 mi. Echo-Pendleton Rd., Umatilla Co., to Johnson Constr. Co., iron pipe, $192,014; 26.8 mi. Cabbage Hill-Kamela Rd., Umatilla Co., to Dalrymple Co., Pendleton, concrete pipe, $117,875; 8.15 mi. Green Springs-Mt. Jenny Creek Rd., Jackson Co., to Jackson Co. Court, Jacksonville, $63,440; paving 2.43 mi. road from Bertha to Washington Co. line, Multnomah Co., to Warren Constr. Co., Journal Bldg., Portland, bitulithic E, $67,291; grading and paving 9 mi. road from Monroe north, Benton Co., to Pacific Bridge Co., foot of Salmon St., Portland, broken stone concrete pipe, $214,369; grading and graveling, 4.65 mi. Sag Sect. Baker-Cornucopia Highway, Baker Co., to Morrison & Knutson, Boise, Idaho, iron pipe, $42,924; grading and macadamizing, 4.5 mi. Roseburg-Wilbur Rd., Douglas Co., to H. J. Hildeburn, Roseburg, concrete pipe, $21,721. Noted June 12.

Oregon—State Highway Comn., Portland, received only bid June 10, grading and paving 2 mi. Grande Ronde-Butler Store Rd., Yamhill Co., macadam, from W. N. Trent, McMinnville, $16,170; 3.25 mi. Leona-Drain Rd., Douglas Co., (a) concrete pipe broken stone, (b) iron pipe broken stone, (c) concrete pipe screened gravel, (d) concrete pipe run of bank gravel, from A. Giebisch, Rothchild Bldg., (a) $73,406, (b) $73,386; A. Anderson, Portland, (c) $62,210, (a) $59,490, (d) $54,390. Noted June 12.

Ore., Portland—City Council received bids paving (a) Roosevelt St., (b) Bway., portions of East 9th and Webster Sts., from Cochran Bros., (a) concrete No. 1, $2.05 per yd., total cost, $5175; Warren Constr. Co., Journal Bldg., (a) asphaltic concrete No. 1, $1.94, $5336, (b) asphaltic concrete No. 1, $1.98, $4458. Noted June 12.

★Cal., Ferndale—City let contract paving 4500 ft. Main St., concrete, to Engelhart Co., Eureka, $22,500.

★Cal., Los Angeles—Wilshire Blvd., Hotel Co., Maryland Hotel, Pasadena, let contract grading 10-acre site at Wilshire Blvd. and Catalina St., to J. A. Hill, 232 South Figueroa St., Los Angeles, $13,180.

★Cal., Merced—Comrs. Merced Co. will pave 5 sections of county highways, consisting of 42.84 mi., 16 ft. wide. About $540,000. Work will be done by day labor. Former bids rejected. A. E. Cowell, co. engr.

★Cal., Oakland—Comrs. Alameda Co. let contract improving East 14th St. and 55th Ave., to Ruegg Constr. Co., Pacific Bldg., San Francisco, grading $0.03 per sq.ft., vitr. sewer, 8 in. $1.05 per sq.ft., 5 in. $0.75 per sq.ft., 4 in. $0.60 per sq.ft., manholes, $75 each, lampholes, $25 each, wire branches, $1.50 each, concrete curbing, $0.65 per sq.ft., guttering, $0.25 per sq.ft., sidewalk, $0.17 per sq.ft., asphalt pavement, $0.14 per sq.ft. Total cost about $110,000.

★Cal., San Andreas—City let contract grading and graveling Melones Grade Highway, to A. J. Reeder, 110 Jessie St., San Francisco, $17,204.

★Que., St. Constant—Municipal Council let contract building bituminous road, to Canadian Highways Co., 13 Place Guay, Montreal. About $35,000.

★Ont., Ottawa—City let contracts paving Elgin St. from Slater to Argyle Aves. with asphalt and wood block, to Ottawa Constr. Co., Elgin St., $153,055; Carling Ave., asphalt, to O'Leary's, Ltd., Rideau St., $14,165. Noted Jan. 30.

★Ont., Toronto—Bd. Control let contract paving with asphalt on concrete base, concrete curbs and gutters on Arundale and Danforth Aves., to Godson Contg. Co., Manning Chambers, $16,153. Noted May 15.

★Ont., Toronto—City Council will pave, curb and gutter Alvin, Oakville and Maclean Aves., Elm, Pendruth and Sackville Sts., and Weston and Waverly Rds., involving 40,000 sq.yd. asphaltic pavement on concrete base, concrete curb and gutter. About $147,300. Work will be done by day labor.

★Ont., Walkerton—Town let contract building 7.7 mi. bituminous macadam road, 18 ft. wide, to W. Hunter, Walkerton. About $60,000.

★Ont., Windsor—City let contract building asphaltic concrete roads, concrete curbs and gutters, to Merlo, Merlo & Ray, 4 Victoria Rd., Walkerville. About $87,000.

Streets and Roads (Continued)

★Ont., Woodstock—City let contract curbing, draining and paving with concrete Wilson, Cedar, Finkle, Ingersoll Aves., also building catch basins and 1 culvert, to J. Carroll and R. Sheeky, Peterboro, $44,010. Noted May 29.

Railways

PROPOSED WORK

Maryland—Manufacturers on eastern shore of Maryland, headed by H. H. Messenger, Federalsburg, considering plans for building 75 mi. double track electric railway from Salisbury to Tolchester Beach, including 3 bridges.

Michigan—Michigan Northern Ry., Alma, having surveys made for line from Lansing to Bay City and Lansing to Kalamazoo, to use dual sytem of gas and electricity, 1st project to comprise about 130 mi. About $3,000,000. H. H. Esselstyn, ch. engr.

Texas—San Benito & Rio Grande Valley R.R., San Benito, plans to extend line up Rio Grande Valley to Roma, thence northwest to connection with Texas-Mexican R. R. at Aguilares. G. H. Winsor, genl. mgr.

California—Bd. Pub. Utilities ordered Los Angeles Ry., Pacific Electric Bldg., Los Angeles, to build double track line on Bway. from 10th to Pico Sts. About $50,000. T. Bultin, ch. engr.

California — See "Miscellaneous" under Newport Beach.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ohio—Cleveland Ry., Leader News Bldg., Cleveland, will build 7500 ft. double track on Union Ave. from East 116th St. to Cortlett Ave., estimated cost, $175,000; 3300 ft. double track on Kinsman Rd. from East 140th St. to 152nd Sts., $95,000; 5300 ft. single track on Broadview Rd. from West 25th St. to Schaaf Rd., $60,000; 8000 ft. double track on West 73rd St. from Denison Ave. to West Park Cemetery, $60,000. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

Mich., Detroit—Excavation—See "Streets and Roads."

Cal., Newport Beach — Dredging — See "Miscellaneous."

BIDS DESIRED

Minn., Grand Rapids—See "Streets and Roads."

Minn. Mankato—Ditch—Comrs. Blue Earth Co. having preliminary survey made for building Judicial Ditch No. 4, comprising 150,000 acres. About $2,000,000. C. L. Kennedy, co. aud.

Kan., Troy—Drainage—Burr Oak Bottoms D. D. having plans prepared for system to drain about 2000 acres. W. B. Hazen, Commercial Bldg., St. Joseph, Mo., engr.

Mo., Butler—Excavation—D. D. No. 1, Bates Co., plans to build 25 mi. ditches. About $750,000. J. Flamming, Butler, engr.

Tex., Beaumont—Drainage—Jefferson Co. is having preliminary surveys made by T. W. Rollins, civil engr., for drainage and dredging system for northern section of county. About $1,000,000.

Tex., Houston—Canal—Harris Co., Navigation Dist. voted to issue $1,500,000 bonds to widen Houston Ship Canal and deepen it to 30 ft., in conjunction with War Department. J. C. McVea, city engr.

Tex., Orange—See "Streets and Roads."

Ariz., Gila Bend—Reclamation—Town having surveys made reclaiming 70,000 acres of land by system of canals, in Gila River Recl. Project. Cost between $3,000,000 and $4,000,000. J. B. Girand, Fleming Bldg., Phoenix, engr.

Wash., Kelso—Drainage—Diking Impvt. Dist. No. 1 plans to drain Clarke Creek on outskirts of district and extend dike. About $25,000. G. J. Poysky, Kelso State Bank Bldg., engr.

Cal., Long Beach—Channel—C. T. Leeds, U. S. engr., Central Bldg., Los Angeles, soon lets contract digging channel 500 ft. wide and about 6 mi. long, also building levees to carry Los Angeles River from point near Dominguez Sta., through west portion of Long Beach into ocean. This project is part of Los Angeles Co. flood control project. U. S. Government will do this and other work in connection therewith; about $1,000,000 available for work.

DAM—GILBOA, N. Y.

Bids were received by Board of Water Supply, June 19, for constructing Gilboa Dam. Contr. No. 203, from (A) Hugh Nawn Contg. Co., 82 Savin St., Roxbury, Mass. (awarded contract); (B) P. McGovern, 50 East 42nd St., New York City; (C) Booth & Flinn, Ltd., 17 Battery Pl., New York City; (D) Smith, Hauser & MacIsaac, Inc., 18 East 41st St., New York City, $6,907,275; (E) Hardaway Contg. Co., Columbus, Ga., $6,983,035; (F) Winston & Co. 29 Bway., New York City, $7,563,760. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
Stream control, Schoharie Creek (lump sum)	$125,000.00	$204,727.00	$100,000.00
Stream control, Steen Kill (lump sum)	20,000.00	84,500.00	17,500.00
Erecting, maintaining and removing highway bridge (lump sum)	15,000.00	70,000.00	15,000.00
275,000 cu.yd. earth excavation for dam and spillway channel	1.00	1.35	2.00
21,000 cu.yd. earth excavation for core-wall and other trenches	3.00	3.00	3.50
100,000 cu.yd. earth excavation for highways and miscellaneous purposes	1.80	2.20	2.25
60,000 cu.yd. rock excavation for dam and spillway channel	3.50	4.50	4.00
2,500 cu.yd. rock excavation for highways and miscellaneous purposes	3.50	3.50	3.40
30,000 cu.yd. rock excavation from cut-off trench and when blasting is not permitted	7.00	11.00	7.00
500,000 cu.yd. refilling and embanking in 4-in. layers	1.00	1.15	2.25
70,000 cu.yd. refilling and embanking deposited through water	.70	.80	2.50
12,000 cu.yd. refilling and embanking with clean rock fragments	1.00	2.80	2.50
20,000 cu.yd. refilling and embanking by sluicing	.80	.60	2.25
15,000 cu.yd. refilling and embanking in bulk	.40	.50	2.00
480,000 bbl. Portland cement	2.95	2.70	2.90
370,000 cu.yd. cyclopean masonry	6.65	5.90	4.40
15,000 cu.yd. concrete masonry	9.50	10.00	7.00
25 cu.yd. reinforced concrete	32.00	18.00	15.00
20,000 cu.yd. rubble stone facing	16.00	11.00	10.00
6,000 cu.yd. edgestones for facing	27.00	16.00	20.00
50,000 sq.ft. face dressing of masonry	.45	.17	.50
10,000 lin.ft. chisel drafts	.50	.05	.40
300 sq.ft. flagging	1.00	.30	.25
500 cu.yd. rubble masonry in mortar	6.00	10.00	5.40
25,000 cu.yd. rubble paving in mortar or grouted	7.00	7.00	5.00
2,000 cu.yd. dry rubble masonry	5.00	7.00	4.50
16,000 cu.yd. slope paving	6.00	4.60	5.50
2,000 cu.yd. gutter paving	6.00	10.00	7.00
7,000 cu.yd. crushed stone and gravel	2.00	2.30	2.50
1,000 cu.yd. grout	15.00	17.00	5.00
3,500 lin.ft. drilling core borings	5.00	4.60	6.00
5,000 lin.ft. drilling small holes in rock or masonry	.75	.20	.40
30 ton cast-iron pipe and special pipe castings	125.00	115.00	140.00
3,000 lb. reinforcing steel	.07	.08	.06
140,000 lb. iron and steel	.10	.12	.09
6,000 lb. miscellaneous bronze, brass and copper	.80	1.00	1.00
35,000 lb. furnishing and placing small steel pipes	.15	.12	.15
100,000 lb. caring for and setting metal-work furnished by the city	.03	.02	.05
10,000 lb. galvanizing	.05	.06	.08
50 sq.yd. bituminous waterproofing	1.50	1.00	2.75
5,000 lin.ft. tile pipes 6 in. and less in diameter	.45	.45	.70
1,000 lin.ft. tile pipes 8 to 12 in. in diameter	.90	1.00	1.50
500 lin.ft. tile pipes larger than 12 in. and not exceeding 18 in. in diameter	1.25	2.00	2.90
11,000 lin.ft. bituminous macadam highway	3.55	7.00	3.00
15,000 lin.ft. wooden fences and guard-rails	.70	1.00	.80
1,500 lin.ft. stone guard walls	3.00	4.50	3.00
500,000 ft. b.m. timber and lumber	100.00	85.00	130.00
100 medical and surgical practitioners (prac. month)	450.00	400.00	500.00
78 sanitary services (month)	800.00	700.00	850.00
Cleaning up (lump sum)	7,500.50	10,000.00	25,000.00
Extended totals	$6,819,910	$6,882,108	$6,899,568

BIDS DESIRED

Ia., Marshalltown—Drainage—Until July 15, by Bd. Supervs. Marshall Co., building Iowa River Drainage Project in Bangor, Marietta, Linn, Liscomb, Iowa and Taylor Twps. Plans include straightening, widening, deepening and changing of channel of Iowa River involving 1,400,000 yds. excav. W. H. Jones, chn; advertised in this issue.

Ia., Wapello—See "Waterworks."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Jersey City—Dredging—Pennsylvania R. R., Pennsylvania Sta., New York City, let contract dredging between Piers F and G, to Morris & Cummings Dredging Co., 17 State St., New York City, dredging and legally disposing of material, $0.477 per cu.yd., labor 10%, material 10%, and subcontract 2½%, dredging with 8-yd. bucket including fire, $1000.

Mich., Lansing—See "Streets and Roads."

Industrial Works

PROPOSED WORK

Me., Sanford—Sanford Mills, c/o Lockwood-Greene Co., archts. and engrs., 101 Park Ave., New York City, having plans prepared for two 1 story rein.-con. and steel dye houses, rein.-con. flooring, concrete foundation. About $200,000.

Mass., Boston—Noyes Buick Co., 17 Lawton St., having plans repared by A. H. Bowditch, 44 Broomfield St., for superstructure of 5 story, 200 x 375 ft. rein.-con. storage and sales building, rein.-con. flooring, concrete foundation, on Commonwealth St. Contract for foundation awarded, to C. Gow Co., 166 Devonshire St.

Mass., Fitchburg—Crocker, Burbank & Co., Inc., 545 Westminster St., soon receives bids building 2 story, 60 x 200 ft. brick and steel addition to factory, concrete foundation, on Westminster St. About $100,000.

Mass., Holyoke—G. Haarmann & Co., Inc., Commerce St., plans to build new plant. About $60,000. Architect not selected.

Mass., New Bedford—Natl. Sponge Silk Co., c/o Lockwood-Greene Co., archts. and engrs., 101 Park Ave., New York City, having plans prepared building 4 story, 120 x 400 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, here. About $750,000.

Mass., Worcester — Walden-Worcester, Inc., 72 Commercial St., soon receives bids building 4 story, 56 x 400 ft. brick factory, concrete foundation, on Shrewsbury St. About $200,000.

Conn., Ansonia—H. C. Cook Co., Beaver St., having plans prepared by Fletcher-Thompson Inc., engrs., 1089 Broad St., Bridgeport, for 1 story, 60 x 250 ft. brick and concrete addition to factory, rein.-con. flooring, concrete foundation. About $40,000.

Conn., Bridgeport—J. W. Skinner, archt., 1188 Main St., soon receives bids building 2 story, 45 x 85 ft. factory and 2 story, 38 x 70 ft. office and storage building, brick, concrete foundation, on Water St., for J. D. Johnson Co., 54 Cliff St., New York City.

Conn., Bristol—A. R. Ellis, archt., 36 Pearl St., Hartford, soon receives bids building 3 story, 32 x 190 ft., brick and mill construction factory, concrete foundation. About $50,000. Owner's name withheld.

Industrial Works (Continued)

Conn., Hartford—Chamber of Commerce, 252 Asylum St., is back of project to build community industrial building to house smaller industries who cannot secure funds to build themselves. About $150,000. S. Ferguson, chn.

Conn., Jewett City—Fletcher-Thompson Inc., engrs., 1089 Broad St., Bridgeport, soon receive bids building 1 story, 60 x 100 ft. bleach house, 1 story, 24 x 24 ft. mill and 1 story, 20 x 24 ft. office, brick and mill construction, concrete flooring, concrete foundation, for Jewett City Textile Novelty Co. About $30,000.

Conn., New Haven—F. E. Fowler Co., 238 State St., having plans prepared by C. F. Townsend, archt., 185 Church St., altering and building 2 story, brick and steel addition to present plant, rein.-con. flooring, concrete foundation, on State and Crown Sts. About $60,000.

N. Y., Albany—G. H. Thacher, Thacher and Learned Sts., soon receives bids for machine shop and foundry, on Learned St. About $50,000.

N. Y., Attica—J. A. Berk, Vermillion, O., purchased Attica Mills, on Main St., here, and plans to alter and enlarge plant, mill construction. About $35,000.

N. Y., Brooklyn—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., preparing plans for 2 story, 100 x 125 ft. brick, steel and mill construction factory, rein.-con. flooring, brick foundation, on North Portland Ave. About $75,000. Owner's name withheld.

N. Y., Buffalo—Rogers-Brown Iron Co., Erie Co. Bank Bldg., soon lets contract building 1 and 2 story, 66 x 262 ft., rein.-con. machine shop, rein.-con. flooring, concrete foundation, on Hamburg Turnpike. About $75,000.

N. Y., Buffalo—Quayle Garage Co., Main and Rodney Sts., soon receives bids for brick garage. About $40,000.

N. Y., Buffalo—G. M. Wolfe, archt., 131 Norwalk Ave., soon receives bids building 7 story, 75 x 150 ft. rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Main St., for Cold Springs Storage Co., Main St. About $300,000.

N. Y., Carthage—C. J. Reeder, H. I. Starkweather, C. H. Lovejoy, F. P. Wilder, and others, all of Carthage, plans to incorporate and build brick garage. About $40,000. Address H. I. Starkweather, 16 Front St.

N. Y., Jamestown—Jamestown Panel Co., 34 Steele St., soon receives bids building 4 story, 40 x 129 ft. mill construction factory, on Lakeview Ave. About $50,000.

N. Y., Jamestown—Union Furniture Co., 234 Crescent St., soon receives bids building 5 story, 59 x 300 ft., mill construction factory. About $175,000. C. E. Nord, c/o owner, archt.

N. Y., Ogdensburg—See "Miscellaneous."

N. J., Jersey City—Eastern States Refrigerating Co., 147 16th St., plans to build 7-story, concrete and brick plant, on Provost St. Cost to exceed $150,000.

N. J., Jersey City—Novelty Candy Co., Claremont Ave., plans to build 6 story factory. Cost to exceed $100,000.

Pa., Bangor—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, soon let contract building 2½ story, 50 x 100 ft., brick and steel factory, rein.-con. flooring, concrete foundation, here. About $80,000. Owner's name withheld. Noted June 12.

Pa., Chester—Huber Baking Co., 9th and Union Sts., having plans prepared by Austin Co., engrs., Bulletin Bldg., Phila., for 1 story, 50 x 100 ft. and 2 story, 60 x 100 ft. bakery. About $100,000.

Pa., Phila.—T. T. Uezell, archt., 117 Walnut St., soon lets contract building 2 story, 13 x 72 ft. brick storage plant on Venango St. near Warnock St., for McCray & Hunter, 3525 Germantown Ave.

Pa., Phila.—Windsor Mfg. Co., 4060 Orchard St., having plans prepared by M. W. Easby, archt., 1420 Chestnut St., building 63 x 250 ft. factory of brick and slow-burning construction, on Butler and Jasper St.

Pa., Pittsburgh—Campbell-Neidringhaus Tire Serv. Co., Baum Blvd. and St. Clair St., plans to build 2 story, 75 x 100 ft., rein.-con. and steel garage and sales building, rein.-con. flooring, concrete foundation, on Baum Blvd. About $75,000. Architect not selected.

Md., Baltimore—Canton Air Brake Co., 563 Calvert Bldg., having plans prepared by R. Schoenwetter, engr., c/o company, and C. A. Zarobsky, engr., 563 Calvert Bldg., for first unit of plant, consisting of 2 story, 60 x 200 ft., rein.-con. machine shop, 24,000 sq.ft. floor space and concrete foundation, on Wilkens Ave. near Pennsylvania R. R. crossing. About $80,000. Noted Mar. 6.

Md., Baltimore—H. Corry and M. Goldstein, 145 West Hamburg St., plan to build 1 story, 46 x 155 ft., concrete and brick garage, cement concrete flooring, brick and concrete foundation, on Race and Cross Sts. About $50,000. J. C. Spedden, 2715 Harlem Ave., archt.

W. Va., Huntington—E. E. and H. D. Brinker plan to build 3 story (ultimately 7 story), brick and rein.-con. storage plant, rein.-con. flooring, concrete foundation, on 7th Ave. About $80,000.

N. C., Gastonia—C. L. Craig plans to build 2 story, 50 x 200 ft. brick garage, concrete flooring, on Ainline Ave. C. C. Wilson, 804 Palmetto Bldg., Columbia, S. C., archt.

La., St. Landry—W. E. Caldwell Co., Brook and D Sts., Louisville, Ky., plans to build 30,000 to 35.000 cut band saw mill here.

Ky., Louisville—Amer. Storage Warehouse Co., Louisville Trust Bldg., plans to build warehouse. About $400,000. B. B. Davie, Starks Bldg., archt.

O., Cleveland — Euclid Chester Co., Guardian Bldg., plans to build 2 story, 100 x 112 ft., rein.-con., steel and brick warehouse, at 2900 Chester Ave. About $100,000. Architect not selected.

O., Cleveland—Foster Bolt & Nut Mfg. Co., 3556 East 72nd St., preparing plans for 2 story, 77 x 125 ft., steel and brick warehouse. About $40,000.

O., Cleveland—Grabler Mfg. Co., 6565 Bway Ave., plans to build 4 story, 89 x 110 ft. oncrete, steel and brick addition to machine shop. About $80,000. Architect not selected.

O., Cleveland—Wheeler Radiator Mfg. Co., 1637 Collamer Rd., plans to build 4 story, 100 x 250 ft., concrete, steel and brick addition to factory. About $250,000. Architect not selected.

O., Columbus—D. L. Auld Co., 195 East Long St., plans to build 2-story, 45 x 390 ft. brick factory with 90 ft. wing, on 5th St. and 5th ave. About $60,000. C. W. Bellows, 69 Ruggery Bldg., archt.

O., Columbus—G. Bobbs & Sons Co., Main and Pearl Sts., plans to construct 3 or 4 story, 93 x 187 ft., wholesale grocery building. About $160,000.

O., Columbus—Marietta Paint & Color Co., 62 East Chestnut St., plans to build 2 story, 38 x 187½ ft., concrete and brick warehouse, on East Chestnut St. About $67,000. Architect not selected.

O., Dayton—Master Tire & Rubber Co., 706 Schwind Bldg., plans to build plant. cost, including equipment, $100,000.

O., Dayton—Mitchell Sales Co. plans to build 2 story, 80 x 176 ft., rein.-con. garage and salesroom, rein.-con. flooring, concrete foundation, on Main and Riverdale Sts. About $35,000. Architect not selected.

O., Springfield—Ohio Steel Fdry. Co., Lagonda Ave. and Gothic St., plans to construct 1 story, 60 x 70 ft., rein.-con. and steel, welding building and garage, and 1 story, 60 x 80 ft., rein.-con. laboratory and research building. About $25,000.

O., Springfield—Robbins & Myers Co., Lagonda Ave. and Farlow St., plans to build 1 story, 70 x 180 ft., rein.-con. and steel foundry, rein.-con. flooring, concrete foundation. About $120,000. Austin Eng. Co., 14320 Euclid Ave., Cleveland, engrs. and archts.

O., Springfield—Springfield Spring Co., East Pleasant St., plans to build 1-story, 30 x 273 ft. warehouse and 1-story, 30 x 76 ft. machine shop, steel and brick, brick foundation. About $70,000. Concrete Steel Constr. Co., 515 Mitchell Bldg., archts. and engrs.

O., Springfield—Superior Gas Engine Co., c/o P. S. Shouvlin, pres., Sheridan Ave., plans to build 2 story, 60 x 150 ft., rein.-con. machine shop, concrete flooring, 1 story, 110 x 280 ft., steel foundry, rein.-con. flooring and foundation, and 1 story, 95 x 160 ft., rein.-con. storage house, on Sheridan Ave. About $150,000.

Ind., Fountaintown—Hungate Wholesale Co. plans to build canning factory. About $90,000. W. J. Hungate, pres.

Ind., Indianapolis—Van Briggle Motor Driver Co., 429 North Capitol Ave., plans to build 3 story, 108 x 208 ft. rein.-con. factory. About $75,000. C. F. Bacon, 617 Merchants Bank Bldg., archt.

Mich., Detroit—A. Harvey Sons Mfg. Co., Woodbridge St., soon lets contract building, 6 story, 44 x 67 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Woodbridge and Front Sts. Smith, Hinch & Grylls, 710 Washington Arcade archts.

Mich., Kalamazoo—Western Board & Paper Co. preparing plans for 3 story, 60 x 218 ft., concrete and steel stock house, concrete foundation.

Mich., Lansing—City election July 26, to vote on $350,000 bonds to build extensions to electric light plant.

Ill., Chicago—C. A. Eckstrom, archt., 5 North La Salle St., soon receives bids building 6 story, 220 x 400 ft. rein.-con. warehouse, rein.-con. flooring, concrete foundation, on North Pier, for Chicago Dock & Canal Co., c/o archt. About $500,000.

Wis., Carrollville (Otjen P. O.)—H. J. Esser, archt., Camp Bldg., Milwaukee, soon lets contract building 2 story, 67 x 219 ft and 3 story, 50 x 50 ft. rein.-con. and brick fertilizing plant, rein.-con. flooring, concrete foundation, for U. S. Fertilizer Co., c/o U. S. Glue Co., Otjen. About $100,000.

Wis., Clintonville—Clintonville Car Co., c/o F. Spearbraker, soon lets contract building 1-story, 60 x 110 ft. rein.-con. and brick garage, brick foundation, on Main St. About $50,000. Foeller & Schober, 123 North Washington St., Green Bay, archts.

Wis., Milwaukee—Briggs & Stratton Co., 1047 Louis St., receives bids about July 1, building 5 story, 60 x 170 ft. factory, with 21 x 70 ft. wing, rein.-con. and brick, rein.-con. flooring, concrete foundaton, at 1047 Louis Ave. About $200,000. H. J. Esser, Camp Bldg., archt. Noted Jun. 12.

Wis., Milwaukee—Milwaukee Milk Producers' Assn., 425 East Water St., plans to build rein.-con. and brick, depot, concrete foundation. About $50,000. Architect not selected.

Wis., Sheboygan—Haack Motor Co., c/o C. Haack, plans to build 2 story, 45 x 120 ft. rein.-con. and brick garage, rein.-con. flooring, concrete foundation, on Indiana Ave. About $60,000. Architect not selected.

Wis., Sheboygan—Sheboygan Upholstering Co., c/o O. Mahnke, 1634 Georgia Ave., plans to build 3 story, 60 x 110 ft., brick, rein.-con. and steel factory, rein.-con. flooring, brick foundation, at Lyman's addition. About $30,000. C. Grasse, 1543 South 11th St., archt.

Minn., Minneapolis—United States Cereal Co., 316 Corn Exch., soon receives bids building 6 story, 60 x 160 ft., rein.-con. and brick flour mill, brick foundation, on California and 22nd Sts., N. E. About $500,000. C. W. Lunquist, 712 15th Ave., N. E., archt.

Minn., Wells—City receives bids in July building power plant. About $75,000, including equipment. G. L. Pillsbury Co., 801 Metropolitan Life Bldg., Minneapolis, engrs.

Kan., St. Johns—See "Water Works."

Kan., Sharon Springs — See "Water Works."

N. D., Mandan—Western Auto Co. soon lets contract building 1 story brick garage. About $40,000. Black & Griffin, Mandan, engrs. Noted June 5.

Wyo., Laramie—Midwest Oil & Refining Co. plans to build oil refinery here. 5000 bbl. capacity.

Mo., Caruthersville—See "Water Works."

Tex., Houston—Magnolia Coffee Co., Liberty and Bremmond Sts., plans to build 5 story, rein.-con. factory and warehouse. on Liberty and Maffitt Sts. About $75,000. Finger & Bailey, 601 Kress Bldg., archts.

Industrial Works (Continued)

Tex., Paris—Rodgers-Wade Co., 19th and Bonham Sts., plans to build mattress factory. About $30,000.

N. M., Albuquerque—Bd. Regents, University of New Mexico, soon lets contract building 1 story, 107 x 112 ft. machine shop.

Idaho, Nampa—Colorado Milling & Elevator Co., 1441 7th St., Denver, Colo., having tentative plans prepared for 400 bbl capacity flour mill and 65,000 bu. grain elevator, here, probably concrete. O. Knoche, local mgr.

Wash., Vancouver—Heusner Co. plans to build bakery, concrete and brick, containing 100 x 100 ft. floor space, with one 60 x 100 ft. wing on 5th St. and one 40 x 100 ft. wing on Columbia St. About $25,000.

Ore., Albany—D. E. Nebbergall Meat Co. plans to rebuild meat packing plant ½ mi. northeast from here, recently destroyed by fire. About $40,000. R. O. Bushong, secy.

Ore., Linnton—Associated Oil Co., Pittock Blk., Portland, having plans prepared for concrete garage with wood trusses; 32 x 180 ft. loading rack and shed, 14 x 60 ft. steel frame; 125 x 210 ft. rein.-con. warehouse, concrete retaining walls around storage tanks, 20 x 30 ft. concrete and steel building and bunkhouse and group of cottages, here. About $250,000. A. D. Parker, mgr. Noted May 15.

Ore., Portland—See "Buildings."

Cal., Avalon—City voted $88,000 bonds for combined electric light and waterworks plant, and $55,000 for gas plant. A. B. Waddingham, Tajo Bldg., Los Angeles, city engr. Noted June 5.

Cal., Newport Beach—See "Miscellaneous."

Cal., Redwood City—Pratt-Lowe Co., Santa Clara, purchased site and plans to build cannery. About $25,000.

N. S., Bear River—Clarke Bros., Ltd., having plans prepared for sulphate mill to have 30-ton daily capacity, cost $200,000; saw mill, 30,000 ft. daily capacity, $25,000; hardwood mills, $51,000; drydock, to include ship repair shops, $100,000.

N. S., Tiverton—Digby Fish Meal Co. receives bids in July building 3 story, 60 x 100 ft. steel and brick factory, concrete foundation, on Queen St. About $25,000.

Que., Chaleurs—Chaleur Bay Mills Co. plans to build sawmill on Chaleurs Bay. About $100,000.

Que., Montreal—P. L. Dupre, archt., 15 Blvd., St. Laurent, soon receives bids building two brick and steel factories, concrete foundation, for Dupre Iron Wks., Ltd. About $75,000.

Que., Montreal—Scott Canadian Magnesite Co., Ltd., Power Bldg., plans to construct industrial buildings on Shawinigan St. About $350,000.

Ont., Kitchener—Ames Holden McCready, 1221 Mt. Royal Ave. E., Montreal, receives bids about July 15, building rubber tire factory, on King St. here. About $1,000,000.

Ont., Listowel—Canadian Flax Mills, 96 King St. E., Toronto, plans to build 3 or 4 story, concrete mill. About $100,000. Address F. W. Lukes, supt. Architect not selected.

Ont., Ottawa—Beach Co., Spencer St., having plans prepared by J. A. Ewart, archt., Booth Bldg., building 3 story, brick factory. About $75,000.

Ont., Scarborough—Gendron Mfg. Co., 137 Duchess St., Toronto, purchased 10 acre site here and plans to build plant to consist of ten 1 story, buildings, 80 ft. wide, steel and brick varying in length from 300 to 550 ft. each and comprising machine, paint, and wood working shops, 2 story offices, boiler house, etc. About $500,000. James, Loudon & Hertzberg, 36 Toronto St., Toronto, engrs.

Ont., Toronto—Hydro Electric Power Comn. of Ontario, University St., plans to install 5 unit (about 60,000 h.p.) power plant and 200 ft. concrete dam, 43 ft. high, at Cameron Pool. F. A. Hogg, Toronto, engr.

Ont., Toronto—J. Wood Mfg. Co., Conshohocken, Pa., purchased 3½ acre site on Coxwell St. here, and plans to build factory. About $50,000.

BIDS DESIRED

Vt., Rutland—Until July 3, by Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, building 2 story, 50 x 110 ft. brick and steel factory, rein.-con. flooring, concrete foundation, here. About $80,000. Owner's name withheld. Noted June 12.

N. Y., New York—Until June 30, by H. O. Chapman, archt., 334-5th Ave., for 7 story, 130 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, at 543-545 West 43rd St., for Park & Tilford, 529 West 42nd St. Noted June 5.

N. J., Matawan—Until July 1, by Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York City, building two 1 story, 42 x 115 and 42 x 152 ft., rein.-con. and steel factories, rein.-con. flooring, concrete foundation, for A. P. Munning, c/o architects. About $35,000.

Pa., Carlisle—Until June 28, by Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York City, building 200 x 475 ft., rein.-con. and steel carpet factory, here, for C. H. Masland & Sons, c/o archt. About $750 000. Noted Apr. 17 under "Harrisburg."

Pa., Phila.—Until June 30, by F. E. Hahn, archt., 1112 Chestnut St., building 1 story, 74 x 154 ft., brick garage for M. Haisfield, Huntington Park Ave. and Broad St.

Pa., West Phila. (Phila. P. O.)—Custer & Gill, archts., 304 Market St., Camden, N. J., receiving bids for 6 story, 80 x 150 ft. storage warehouse here, brick and slow burning construction. About $50,000. Owner's name withheld.

W. Va., Logan—Armour & Co., Logan, receiving bids building pickling plant on Main St. About $150,000. R. C. Clark, Union Stock Yards, Chicago, Ill., archt.

Fla., Jacksonville — Commodore Point Terminal Co., 1949 East Adams St., receiving bids building frame and concrete warehouse on River between Duval and Beaver Sts. About $30,000.

Mich., Pontiac—Pontiac Spring Co., Branch St., receiving bids for 1 story, 100 x 186 ft. factory and 63 x 87 ft. office, concrete, brick and steel, concrete foundation. About $75,000.

Ill., Chicago—A. P. Dippold, archt., 4747 Cottage Grove Ave., receiving bids for 1 story, 100 x 250 ft., brick and timber garage, concrete foundation, at 5547 Harper Ave., for E. C. Leonard, c/o archt. About $90,000.

Ill., Columbia—Until June 30, by Village Clk., improving electric light and power plant in sections as follows: (1) building extensions and machinery foundations, (2) 100 hp. H.R.T. boiler and breeching, (3) 100 ft. x 4 in. concrete chimney, (4) 120 h.p. non-releasing Corlis or Unaflow Engine, (5) heater, boiler feed pump, pipe work and covering, (6) direct connected A. C. generator, exciter, transformer and switch board. Fuller & Beard, Chemical Bldg., St. Louis, Mo., engrs.

Minn., Duluth—Until Aug. 1, by F. H. Fitzgerald, archt., 1402 Alworth Bldg., building 3 story, 75 x 100 ft., brick and terra cotta garage and sales room, rein.-con. flooring, concrete foundation, on Superior St. and 5th Ave., E., for Pioneer Automobile Co., 328 East Superior St. About $60,000.

Minn., Minneapolis—J. W. Cohen, 238 Plymouth Bldg., receiving bids for 4 story, 66 x 112 ft., rein.-con. warehouse on 3rd St. and 1st Ave., N. About $75,000. Buchner & Orth, 500 Schubert Bldg., St. Paul, archt.

Minn., St. Paul—Zinsmaster-Smith Co., 29th Ave., W. and Superior St., Duluth, receiving bids for 3 story, 125 x 160 ft., rein.-con. and brick bakery on Park and Sherburne Aves. About $130,000.

Cal., Merced—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—F. E. and G. W. Johnston, 31 Jersey St., let contract building 4 story, 100 x 225 ft., rein.-con. service garage, rein.-con. flooring, concrete foundation, on Brookline Ave. and Boylston St., to E. S. Butterfield Co., Broad St. About $300,000.

★Mass., Boston—C. C. Whittemore, Massachusetts Ave., let general contract buildin 2 story, 32 x 94 ft., brick and rein.-con. storehouse and factory, rein.-con. flooring, concrete foundation, on Boylston St., to Macdonald & Joslin, 161 Devonshire St., foundation to C. R. Gow Co., 166 Devonshire St. About $50,000. Noted May 15.

★Mass., Gardner—Central Oil & Gas Stove Co. will build 1 story 50 x 120 ft. and 3 story, 40 x 50 ft. brick, steel and concrete addition to factory, rein.-con. flooring, concrete foundation. About $40,000. Work will be done by day labor. Noted May 15.

★R. I., Providence—Brown & Sharpe Mfg. Co., Promenade St., let contract building 6 story steel frame extension to present plant, 3 story mill construction pattern storage plant and 2 story rein.-con. cleaning plant, to Aberthaw Constr. Co., 27 School St., Boston. About $476,000.

★R. I., Providence—J. C. Dran & Sons, 150 Chestnut St., let contract building 7 story timber plant, on Chestnut and Elbow Sts., to C. I. Bigney Constr. Co., 898 Westminster St. About $30,000.

★Conn., Bridgeport—Alling Rubber Co., 1126 Main St., let contract building 3 story, 22 x 70 ft. rein.-con. store room, rein.-con. flooring, concrete foundation, on Middle St., to Schwarz Bros. Co., 95 River St. About $25,000

★Conn., Hartford—Automatic Refrigerating Co., 89 Willow St., let contract altering and building brick, concrete and steel boiler house, rein.-con. flooring, concrete foundation, on Capital Ave. Extension, to Wise & Upson, 36 Pearl St. About $30,000. Noted June 19.

★Conn., Hartford—E. M. Stone, archt. and engr., 327 Trumbull St., let contract, to W. J. Sexton, 43 Lilley Rd., West Hartford, building 6 story, 50 x 250 ft., brick and rein.-con. garage, rein.-con. flooring, concrete foundation, on Ann St., for C. P. Cooley and A. B. Wilson, c/o archt. About $150,000. Noted May 15.

★Conn., Hartford—G. A. Zunner, archt., 756 Main St., let contract, to W. T. Ryan & Son, 149 Barker St., building 1 story, 52 x 102 ft. brick and steel garage, rein.-con. flooring, concrete foundation, for T. Yaffo, 156 Lawrence St. About $25,000. Noted June 12.

★Conn., New Britain—Corbin Screw Co., High St., let contract building 6 story, 60 x 120 ft. brick and mill construction addition to factory, concrete foundation, to J. H. Grozier Co., 721 Main St., Hartford. About $90,000.

★Conn., New Britain—Stanley Wks., Grove Hill and Lake St., will build 1 story, 160 x 160 ft. and 40 x 160 ft. steel and timber additon to factory, concrete foundation, on North Burritt St. About $30,000. Work will be done by day labor.

★Conn., New Haven—New Haven Carriage Co., Walter and Franklin Sts., let contract building 2 story 52 x 160 ft., brick and steel addition to factory, concrete foundation, to Sperry Eng. Co., 82 Church St. About $50,000.

★Conn., New Haven—New Haven Malleable Iron Co., 385 Clinton Ave., let contract building 1 story, 72 x 134 ft., brick and steel addition to factory, rein.-con. flooring, concrete foundation, on Clinton Ave., to J. N. Leonard Co., 902 Chapel St. About $25,000.

★Conn., Norwalk—Pioneer Braid Co., 251 West 90th St., New York City, let contract building 2 story, 56 x 202 ft., brick, steel and concrete factory, concrete foundation, to H. Wales Lines Co., 134 State St., Meriden. About $60,000. Noted June 5.

★Conn., Waterbury—M. A. Doolittle, Watertown Ave., let contract building 2 story, 100 x 150 ft., brick, concrete and steel garage, rein.-con. flooring, concrete and rock foundation, on North Main and North Willow Sts., to Tracy Bros. Co., 52 Benedict St. About $70,000. Noted June 5.

★N. Y., Brooklyn—J. Gaydica, 1433 38th St., will build 1 story, 100 x 180 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on 38th St., between 10th Ave. and Ft. Hamilton Parkway. About $60,000. Work will be done by day labor.

★N. Y., Brooklyn—Kraslow Bldg. Co., c/o M. A. Cantor, archt., 371 Fulton St., will build 1 story, 60 x 90 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Columbia and Warren Sts. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn — McCormick Co., archts., 41 Park Row, New York City, let contract to Greenmann Co., 350 Fulton St., building 3 story, 45 x 60 ft., brick and steel extension to bakery, rein.-con. flooring, concrete foundation, for B. A. Cushman, 772 Nostrand Ave. About $50,000. Noted Mar. 13.

★N. Y., Brooklyn (Coney Island)—J. Newman, c/o M. A. Cantor, archt., 373 Fulton St., will build 1 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, brick forundation, on Mermaid Ave. and 16th St. About $25,000. Work will be done by day labor.

Industrial Works (Continued)

★N. Y., Brooklyn—J. Reiter, 157 Atlantic Ave., let contract altering 4 story, 50 x 120 ft., rein.-con. and steel warehouse, rein.-con. flooring, to F. G. Gibbons, 316 Columbia St. About $25,000.

★N. Y. Brooklyn—Saba Constr. Co., 44 Court St., will build 1 story, 100 x 120 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on 29th St., between 3rd and 4th Aves. About $30,000. Work will be done by day labor.

★N. Y., Buffalo—Culliton Ice Cream Co., 172 Guilford St., let contract building brick and concrete ice cream and ice plant adjacent to present plant, to Shautz Eng. Co. About $100,000.

★N. Y., Jamestown—Art Metal Constr. Co., Jones St. and Ave. G., let contract building 4 story, 120 x 380 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, to J. W. Ferguson, United Bank Bldg., Paterson, N. J. About $550,000.

★N. Y., Long Island City—Steinway & Sons, 107 East 14th St., New York City, let contract building rein-con. and steel factory addition, rein.-con. flooring, concrete foundation, on Ditmar Ave. between 15th and 16th Aves. here, to W. Koch, Elmhurst. About $75,000. Noted May 29.

★N. Y., New York—T. G. Carvon, 125 West 53rd St., will alter interior and exterior of 5 story, brick and steel garage, at 127-129 West 31st St. About $25,000. Work will be done by day labor.

★N. Y., New York—Morania Realty Co., 427 West 14th St., let contract building 2 story, 92 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on 18th St. and 10th Ave., to I. Hopper & Son, 15 East 40th St. About $100,000. Noted May 22.

★N. Y., New York—A. B. Meyer c/o L. A. Sheinart, archt., 194 Bowery, will build 1 story, 100 x 129 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Amsterdam Ave. and 184th St. About $25,000. Work will be done by day labor.

★N. Y., North Tonawanda—Buffalo Bolt Co., Tonawanda, let contract building 80 x 170 ft. addition to rolling mill and 40 x 340 ft. addition to tumbling room, to Lackawanna Bridge Co., Bell and Abby Sts., Buffao. About $60,000.

★N. Y., North Tonawanda—Frontier Chocolate Co. let contract building 1 story, 82 x 154 ft., rein.-con. warehouse, concrete foundation, on Payne Ave., to Morris & Allen, Builders' Exch., Buffalo. About $30,000. Cost plus percentage basis.

★N. J., Avenel—Steel Equipment Corp. let contract building 2 story, 80 x 160 ft., rein.-con. and brick factory, to Austin Co., Bulletin Bldg., Philadelphia.

★N. J. Bound Brook—Bound Brook Oilless Bearing Co., Main St., let contract building 2 story, 100 x 140 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, to Austin Co., 217 Bway., New York City. About $85,000.

★N. J., Newark—A. De Cozen, 20 Branford Pl., let contract building 1 story, 95 x 260 ft., concrete and brick garage and service station, to Essex Constr. Co., 85 Academy St. About $45,000.

★Pa., Altoona—W. H. & L. C. Wolfe, 1011 Chestnut Ave., will build 3 story, 50 x 133 ft., rein.-con., steel and brick garage and repair shop, rein.-con. flooring rock foundation, on Chestnut Ave. and 10th St. About $75,000. Work will be done by day labor.

★Pa., Pittsburgh—Duff Mfg. Co., Preble Ave., let contract building 1 story, rein.-con and steel forge shop, concrete foundation, on Preble Ave. near Island Ave., to Austin Co., Union Arcade. About $36,000.

★Pa., Pittsburgh—Pittsburgh Ice Cream Co., 121 2nd Ave., will build 2 story, 100 x 163 ft. brick plant, concrete foundation on Jackson and Irwin Aves. About $50,000. Work will be done by day labor.

★Pa., Pittsburgh—Seventeenth St. Garage Co. let contract building 4 story, 80 x 100 ft. fireproof garage, rein.-con. flooring, concrete foundation, on 17th St. and Penn Ave., to H. Miller & Sons, May Bldg. About $90,000. Noted May 22.

★Pa., Pittsburgh—Walker Chemical Co., 810 House Bldg., let contract constructing 1 story, 30 x 50 ft., 40 x 50 ft. and three 1 story, 50 x 50 ft. rein.-con. and steel industrial buildings, rein.-con. flooring, concrete foundation, to Truscon Steel Co., Youngstown, O.

★Md., Baltimore—Universal Garage Co., Fulton and Pensylvania Aves., let contract building 1 story, 98 x 350 ft., rein.-con., steel and brick garage, cement flooring, brick and concrete foundation, to J. J. O'Connor, 52 Knickerbocker Bldg., $56,500. Noted Apr. 17.

HIGHWAY—WASHINGTON

Bids were received by State Highway Commission, Olympia, (lowest 3) for constructing highway in Kelso Co., from (A) General Cnstr. Co., Spokane, (awarded contract); (B) Nettleton, Bruce, Eschbach & Co., Amer. Bank Bldg., Seattle; (C) Hojotte, Fobert & Winters, 343 East 24th St., N., Portland, Ore. The unit bids were as follows:

	A	B	C
187,295 cu.yd. common excavation, including haul of 400 ft	$0.36	$0.48	$0.57½
1,930 cu.yd. solid rock excavation, including haul of 400 ft	1.80	1.80	1.75
2,160 cu.yd. loose rock excavation, including haul of 400 ft	.70	.78	.80
493,100 cu.yd. overhaul on any of above materials, per sack 100 lb.	.03	.025	.035
20.2 acres clearing	175.00	110.00	225.00
11.7 acres grubbing	360.00	225.00	250.00
Cu.yd. rip rap hand placed	5.00	5.00	3.00
200.8 cu.yd. concrete first class box culverts and retaining walls	19.75	23.00	24.00
556.0 cu.yd. concrete, first class port'l Xing. Trsle. Br	27.00	23.00	24.00
65.0 cu.yd. concrete, second class	16.50	21.50	20.00
64,410 lb. steel reinforcing bars in place	.065	.065	.08
36 M.b.m. timber and plank in place, including spikes and bolts	45.00	46.75	35.00
1,760 lin.ft. piling in trestle	.60	.70	.90
780 lin.ft. piling in abutments	.80	.70	1.50
140 lin.ft. porous tile, 6-in.	.25	.35	.40
1,416 lin.ft. plain concrete pipe in place, 12-in. diameter	1.40	1.35	1.50
406 lin.ft. reinforced concrete pipe in place, 18-in. diameter	2.70	2.90	3.25
394 lin.ft. reinforced concrete pipe in place, 24-in. diameter	3.55	4.20	4.50
68 lin.ft. reinforced concrete pipe in place, 30-in. diameter	4.65	5.40	6.00
17,000 cu.yd. gravel surfacing	2.60	2.23	2.50
Extended totals	$171,518	$181,764	$214,339

PIPE CULVERT—ROME, N. Y.

Bids were received by E. S. Walsh, supt. of pub. wks., Capitol, Albany, for constructing 8 ft. pipe culvert across Barge Canal, here, from (A) Scott Bros., Arlington Blk. (B) Troy Pub. Wks. Co., 98 City Natl. Bldg., Utica; (C) Mohawk Dredge & Dock Co., Manion Blk., Herkimer; (D) Robert Provo, 105 Hiawatha St., $73,741. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
11,000 cu.yd. excavation	$1.10	$0.71	$1.15
2,700 cu.yd. forming embankment	.18	.15	.20
730 cu.yd. wash wall	4.00	4.50	4.00
20.2 M.ft.b.m. wooden sheet piling	110.00	120.00	110.00
455 lin.ft. foundation piles	.80	.82	.70
460 cu.yd. second-class concrete	12.00	12.00	14.00
7,900 sq.ft. wire mesh reinforcement	.05	.06	.06
0.85 M.ft.b.m. sawed lumber (yellow pine)	100.00	120.00	100.00
160 lb. metal reinforcement	.07	.07	.07
164,000 lb. metal in culvert pipe	.127	.15	.14
Cofferdams, pumping, bailing and draining (lump sum)	1,800.00	3,900.00	3,500.00
Extended totals	$46,731	$48,904	$52,121

HIGHWAY—CALIFORNIA

Bids were received by State Highway Comn., Forum Bldg., Sacramento, for constructing highway in Trinity Co., Div. 2. Route 20, Sect. "E," from (A) F. Rolandi, 550 Montgomery St.; (B) Erickson & Peterson, Inc., Monadnock Bldg.; (C) Palmer & McBryde, Hooker & Lent Bldg.; (D) W. A. Bechtel, $305,391. Contractors all of San Francisco. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
140,000 cu.yd. (excavation without classification) rubble masonry	$1.45	$1.50	$1.32
500 cu.yd. (retaining walls) dry rubble	9.50	15.00	9.00
1,800 cu.yd. (retaining walls) Portland cement concrete	7.50	10.00	6.00
950 cu.yd. Concrete Class "A" (culverts and monuments)	44.00	50.00	35.00
900 lin.ft. 12-in. corrugated metal pipe	1.50	2.00	1.25
1,800 lin.ft. 18-in. corrugated metal pipe	2.25	2.25	1.50
1,400 lin.ft. 24-in. corrugated metal pipe	2.75	2.75	2.50
1.0 mi. new property fences	450.00	350.00	200.00
1.0 mi. moving and resetting property fences	300.00	250.00	200.00
498 monuments	2.50	2.50	2.50
Extended totals	$242,320	$274,295	$294,545

☆Md., Baltimore—Zell Motor Co., 11-15 East Mt. Royal Ave., let contract building 3 story, 60 x 70 ft., rein.-con. garage and showrooms, cement flooring, concrete foundation, on Mt. Royal Ave., near Charles St., to West Constr. Co., 907 Amer. Bldg. About $50,000. Noted May 22.

★Md., Hagerstown—Hagerstown Welding & Automobile Wks., Virginia Ave., let contract construction of 2 story, 40 x 100 ft. and 1 story, 40 x 50 ft., concrete block and steel buildings, concrete foundation, on Virginia Ave., to J. B. Wolfhill, Hagerstown. About $50,000.

★Md., Westminster—Klee & Hoff let contract building 2 story, 60 x 198 ft., rein.-con. and brick garage, cement concrete foundation, to J. F. Roystone Eng. Co., Westminster. About $60,000; commission basis.

★Md., South Baltimore—Standard Guano Co., 1214 Continental Bldg., Baltimore, will build 2 story, 104 x 40[illegible] ft., rein.-con. and steel fertilizer factory, rein.-con. flooring, concrete foundation, on Aspen St. near Pennington Ave. About $96,000. Work will be done by day labor.

★N. C., Raleigh—International Vegetable Oil Co. plans to build addition to oil plant here. About $30,000. Work will be done by day labor.

★O., Akron—J. A. Rohner Paper Co., 803 South High St., let contract building 3 story, 50 x 163 ft., steel and brick warehouse, on South High St., to C. Rublin, 201 Cross St. About $50,000.

★O., Cleveland—Nickel Plate Fdry. Co., 1834 Charles Rd., let contract building 1 story, 96 x 160 ft., concrete, steel and brick foundry, on Woodworth and Coit Rds., to A. A. Lane Constr. Co., 1836 Euclid Ave. About $40,000.

★O., Dayton—Union Storage Co., East State St., let contract building 5 story, 78 x 100 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, to Frank Hill Smith Co., Inc., East 3rd St. About $74,000. Noted June 5.

O., Troy—See "Buildings."

★Mich., Detroit—General Motors Corp. Boyer Bldg., let contract building 1 story, 360 x 600 ft., differential shop and 2 story, 30 x 360 ft. office, concrete, brick and steel monitor type, concrete foundation, also 500 ft. concrete platform, to W. E. Wood Co., 1805 Ford Bldg. Noted May 29.

★Ill., Chicago—Anchor Leather Co., Division and Hickory Sts., let masonry contract for 3 story, 104 x 148 ft., mill construction factory, and 1 story boiler house, concrete foundation, to Van Etten Bros., 143 East 111th St. About $65,000.

★Ill., Chicago—J. Clemenssen Co., 2607 Flournoy St., let contract building 3 story, 80 x 195 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, at 3401 Potomac Ave., to R. F. Wilson & Co., 1851 Elston Ave. About $200,000.

★Ill., Chicago—Western Felt Wks., 4115 Ogden Ave., let contract building 3 story, 95 x 140 ft. factory, 3 story, 100 x 115 ft. warehouse, and 2 story, 95 x 140 ft. factory, rein.-con., rein.-con. flooring, concrete foundation, at 4045 Ogden Ave., to Scown Bldg. Co., 36 West Randolph St. About $200,000.

Industrial Works (Continued)

★Ill., East Moline—Moline Plow Co., 1420-3rd Ave., let contract building 2 story, 120 x 350 ft. rein.-con. and steel foundry, on 4th St., to H. W. Horst Co., Horst Bldg., Rock Island. About $275,000.

★Wis., Green Bay—Ft. Howard Paper Co. let contract building 1 story, 49 x 135 ft. brick, concrete and steel factory, rein.-con. flooring, concrete foundation, to L. Hansen, Green Bay. About $45,000. Noted Mar. 20.

Wis., Milwaukee—R. A. Johnston Co., 270 Florida St., let contract building 7-story, 185 x 310 ft. rein.-con., brick and steel factory, rein.-con. flooring, concrete foundation on 24th St. and National Ave., to G. A. Fuller Co., 418 B'way. About $500,000. Noted Feb. 13.

★Wis., Milwaukee—Pfister & Vogel Leather Co., Virginia St., let contract building 2 story, 60 x 180 ft. brick and mill construction addition to tannery, rein.-con. flooring, concrete foundation, on Bayview St., to C. A. Kleppe, 1026 1st St. About $30,000.

★Wis., Milwaukee—O. Schoenloeber, c/o Ambrosia Chocolate Co., 331-35 5th St., let contract building 2 story, 50 x 95 ft. brick and mill addition to factory, to Northern Constr. Co., Colby-Abbot Bldg. About $30,000. Noted June 5.

★Wis., Milwaukee—T. M., E. R. & L. Co., Pub. Serv. Bldg., let contract building 2 story, 60 x 80 ft. brick, rein.-con. and steel power station, rein.-con. flooring, concrete foundation, on 26th and Burnham Sts., to R. L. Reisinger, 1st Natl. Bank Bldg. Noted June 12.

★Wis., Milwaukee—West Side Buick Co., 2713 Grand Ave., let contract remodeling and building 2 story, brick, rein.-con. and steel addition to garage, rein.-con. flooring, concrete foundation, at 2713 Grand Ave., to Klug & Smith, Mack Bldg. About $27,000.

★Mo., Kansas City—E. Shukert, 1113 McGee St., will build 10 story, rein.-con. warehouse, rein.-con. flooring, on 26th St. and Grand Ave. Work will be done by day labor.

★Mo., St. Louis—Washington University Corp., 712 Spruce St., will build 3 story, 150 x 250 ft., rein.-con., steel and brick machine shop and mercantile building, rein.-con. flooring, concrete foundation, at 1815-29 Locust St. About $200,000. Work will be done by day labor. Noted June 19.

Ariz., Florence—See "Miscellaneous."

★Wash., Seattle—J. M. Colman Co., Colman Dock, let contract building 1 story, 139 x 150 ft. garage, machine shop, etc., covering 16,800 sq. ft. rein.-con. floor space, and concrete foundation, at 74-84 Jackson St., to J. A. McEachern Co., Bell St. Dock. About $55,000.

★P. E. I.—North Wiltshire—Dept. Pub. Wks., Ottawa, let contract building 2 story, concrete and timber power house and laundry, at Dalton Sanitorium, here, to Phillips & Mutch, Charlottetown. About $68,250. Noted May 8.

★Que., Granby—Miner Rubber Co., St. Peter St., let contract building steel and brick factory, to Dominion Bridge Co., 285 Beaver Hall Hill, Montreal. About $35,000.

★Ont., Toronto—Canadian Ice Machine Co., 82 Chestnut St., let contract building brick factory, to Frid Constr. Co., 65 Adelaide St. E. About $40,000. Noted Apr. 24.

★Ont., Walkersville — General Motors Corp., Brush and Congress Sts., Detroit, Mich., let contract building two 160 x 600 ft., steel motor assembling and axle plants, concrete foundation, including railroad siding and concrete loading platform, here, to W. E. Wood Co., 1805 Ford Bldg., Detroit. Noted Oct. 10.

Buildings

PROPOSED WORK

Mass., Boston—Office—Boston Globe Co., 244 Washington St., having plans prepared by E. Rawson, archt., 6 Beacon St., for office building on Washington St.

Mass., Boston—Sales—See "Industrial Works."

Mass., Holyoke — Store—Holyoke Dry Goods Co., 93 Hillside Ave., plans to build on High St. About $175,000. J. Zielinski, secy. Architect not selected.

Mass., New Bedford—Hotel—New Bedford Hotel Co., Pleasant St., plans to build 250-room hotel. About $500,000. B. Anthony, treas.

Mass., Springfield—Parish—Grace Episcopal congregation, 9 Kensington Ave., plans to build 2 story brick parish house, on Springfield and South Sts. About $50,000. Address, G. M. Burgess, pastor. Architect not selected.

R. I., Thornton—School—Hoppin & Field, archts., 32 Westminster St., Providence, receives bids about July 2, building 2 story, 80 x 150 ft. fireproof school, rein.-con. flooring, concrete foundation, here, for Johnston Twp. About $120,000. Noted May 8.

Conn., Bridgeport—Business, etc.—Middle St. Realty Co., 1188 Main St., plans to build 6 story business and loft building on Middle St. About $175,000.

Conn., Bridgeport—Office—See "Industrial Works."

Conn., Bristol—Club—Bristol Boys Club, Main St., plans to build fireproof club house on Church St. About $60,000. Architect not selected.

Conn., Hartford—Bank and Office—Connecticut Trust & Safe Deposit Co., 777 Main St., plans to erect bank and office building on Main St. and Central Row. About $750,000. Architect not selected.

Conn., Hartford—Bank—Mutual Bank & Trust Co., 18 Asylum St., plans to build 2 story, brick and marble, on Pearl St. About $100,000. I. A. Allen, Jr., 904 Main St., archt.

Conn., Manchester—Business—T. C. Hardie, 72 Russ St., Hartford, having plans prepared by F. C. Walz, archt., 348 Trumbull St., Hartford, for 3 story, brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and North School Sts., here. About $50,000.

Conn., Manchester—Fire Station—Town plans to build brick, concrete and steel fire house, on Main and Hillside Sts. About $50,000. Address J. F. Limerick, 75 Main St. Architect not selected.

Conn., Middletown—Housing—Middletown Housing Assn., 303 Main St., plans to build one hundred and fifty 1 and 2 story workmen's houses, on various streets. About $700,000. E. B. Caldwell, Jr., 886 Main St., Bridgeport, archt.

Conn., New Haven—Church—R. Williams, archt., 185 Church St., soon receives bids building brick and stone, brick, rock and concrete foundation, on Elm St., for 1st Baptist congregation. About $60,000.

Conn., New London—Hospital—J. Lawrence Hospital, Ocean Ave., receives bids in July for 3 story, 40 x 90 ft. brick, rein.-con. flooring, concrete foundation. About $100,000. Kendall, Taylor & Co., 93 Federal St., Boston, engrs.

N. Y., Adams—Bank — Citizens Natl. Bank soon receives bids remodeling and enlarging present building, concrete and brick. Cost between $50,000 and $60,000. Address C. N. Bank, Adams. D. D. Kieff, Flower Bldg., Watertown, archt. Noted June 19.

N. Y., Brooklyn—Synagogue—M. Whinston, archt., 63 Park Row, New York City, receives bids about July 8, building 2 story, 50 x 92 ft. brick, stone and steel, brick foundation, on Vermont Ave., near Sutter Ave., for Congregation Sechoi Thoras Moses, 369 Vermont Ave. About $60,000. J. Goldberg, pres.

N. Y., Buffalo—Church—Lansing, Bley & Lyman, archts., Delaware Ave., soon receive bids for 1 story, 60 x 87 ft. brick, rein.-con. and steel, rein.-con. flooring, concrete foundation, on Southampton St., for Emmans Lutheran congregation. About $75,000. E. A. Mueller, pastor.

N. Y., Buffalo — Office — Lansing Bley & Lyman, archts., Delaware Ave., soon receive bids building 2 story, 104 x 217 ft. and 104 x 140 ft. rein.-con., rein.-con. flooring, concrete foundation, on Delaware Ave., for W. K. Jackson, Buffalo. About $225,000.

N. Y., Mechanicsville—School—Bd. Educ. receiving competitive plans for 16 room school on Main St.

N. Y., New York—Auditorium and Office—Metropolitan Life Insurance Co., 1 Madison Ave., having plans prepared by D. E. Waid, archt. and engr., 1 Madison Ave., for 16 story, 75 x 150 ft., brick, stone and steel, brick foundation, at 11-15 Madison Ave. About $800,000.

N. Y., New York—Hotel—D. M. Linard Co., c/o Warren & Wetmore, archts., 16 East 47th St., having plans prepared for 180 x 200 ft., brick, stone and steel, brick foundation, on Park Ave. and 51st St. About $7,500,000.

N. Y., New York—Theatre—Plaza Theatre, 59th St. and Madison Ave., having plans prepared by T. W. Lamb, archt., 644 8th Ave., for 2 story, 40 x 60 ft. brick and steel addition, brick foundation. About $50,000.

N. Y., Niagara Falls—Bank—Niagara Co. Savings Bank, 304 Niagara St., soon lets contract building 3 story, 60 x 90 ft. brick, on 3rd St. Cost between $75,000 and $100,000. C. M. Young, pres.

N. Y., Rochester—School—Bd. Educ. soon receives bids building P. S. No. 31, on North Goodman St. About $250,000.

N. Y., Schenectady—Theatre—M. Speigel, Strand Theatre Bldg., New York City, having plans prepared by DeRosa & Pereira, archts. and engrs., 110 West 40th St., New York City, altering interior and exterior of 2 story brick, steel and stone theatre, here. About $100,000.

N. Y., Tonawanda—Auditorium, etc.—O. Johnstone, archt., North Tonawanda, soon receives bids building 3 story brick and concrete auditorium and gymnasium here, for Chamber of Commerce. About $125,000. H. P. Smith, chn.

N. Y., Utica—High School—Bd. Educ. having plans prepared by Kiehm & Jennison, archts., Utica, for Junior High School in 16th Ward. About $250,000.

N. Y., Watertown — Bank—Watertown Natl. Bank, 100 Court St., having plans prepared and will soon receive bids remodeling present building and erecting new vaults; also adding steel reinforcement and new marble front. About $75,000. Address W. W. Rice, c/o owner.

N. J., Elizabeth—School — Bd. Educ. plans to build school at Bayway and South Broad St. About $350,000.

N. J., Montclair—School—Bd. Educ. having plans prepared by Starrett & Van Vleck, archts. and engrs., 8 West 40th St., New York City, for 1 story, brick and steel addition, brick foundation, on Edgemont St. About $55,000.

N. J., Plainfield — School—Wilder & White, archts., 50 Church St., New York City, receive bids about July 19, building 2 story, 55 x 150 ft., brick and steel, brick foundation, on Emerson Ave., for Bd. Educ. About $140,000. Noted June 19.

Pa., Harrisburg—Theatre — P. Magaro, 410 Market St., soon lets contract altering and building 2 story, 52 x 210 ft. steel, brick and timber addition. About $50,000. Henan-Hoffman, Finance Bldg., Phila., archts.

Pa., Phila.—Theatre—H. C. Hogens, archt., 1312 Walnut St., receives bids in about 3 weeks, building 2 story, 100 x 200 ft. concrete and brick, on Germantown and Lehigh Aves. About $200,000. Owner's name withheld. Noted May 1.

Pa., Tamaqua—High School—Bd. Educ. plans to build high school and campus. About $300,000.

Md., Baltimore—Schools—Bd. School Comrs. having plans prepared by C. N. Osborn, bldg. inspector, building School No. 76 at Latrobe Park and Fort Ave., cost $350,000; School No. 65 on Poplar Grove St. and Lafayette Ave., $200,000; one on 33rd St. Blvd. and Montebello Park and one on Falls Rd. and 36th St., West Park, cost between $200,000 and $250,000 each; all concrete and brick, concrete and stone foundations. Noted Feb. 13 and Apr. 17.

Md., Salisbury—Hotel—Shoreman Hotel Corp. plans to build 7 story, concrete, steel and brick, stone and concrete foundation. Address J. W. Miles, U. S. Custom House, Baltimore, or M. Cooper, c/o Wicomico Bldg. & Loan Assn., Salisbury.

Md., Towson—Sanatorium—State Tuberculosis Comn. has acquired 50 acre site adjoining Eudowood Sanatorium, near here, and plans to build sanatorium. About $75,000 appropriated for project. S. K. Dennis, 2 East Lexington St., Baltimore, secy.

Va., Portsmouth — School — Bd. Educ. soon lets contract building 3 story, 67 x 163 ft. About $60,000. J. G. Wilson, clk. C. M. Robinson, Times Bldg., Richmond, archt.

W. Va., Parkersburg—Bank—First Natl. Bank of Parkersburg purchased site on 7th and Market Sts., and plans to build 1 story, 26 x 90 ft. brick. About $60,000. Architect not selected.

N. C., Greensboro—Dining Hall—State Bldg. Com., Raleigh, soon receives bids building dining hall at State College for Women, here. About $50,000. L. R. Woodhull, Raleigh, engr.

Buildings (Continued)

N. C., Greenville—School—State Bldg. Com., Raleigh, soon receives bids building 2 or 3 story school. Cost between $75,000 and $100,000. L. R. Woodhull, Raleigh, engr.

N. C., Kinston—School—State Bldg. Com., Raleigh, soon receives bids building school. About $150,000. L. R. Woodhull, Raleigh, engr.

N. C., Raleigh—Agriculture—State Bldg. Com. soon receives bids constructing brick, agricultural building. About $250,000. L. R. Woodhull, Raleigh, engr. Noted Apr. 24.

S. C., Charleston—High School—Bishop England High School launched campaign to raise $50,000 to build new high school on Calhoun St.

S. C., Orangeburg—Jail—Comrs. Orangeburg Co. plan to build 3 story, 50 x 80 ft. brick, rein.-con. flooring, brick foundation, near Public Sq. About $80,000. J. C. Johnson, 1006 Palmetto Bldg., Columbia, archt.

S. C., York—School—School Bd. receives bids about Sept. 1, building 2 story, 100 x 150 ft., brick, brick foundation. About $110,000. C. C. Wilson, 804 Palmetto Bldg., Columbia, archt.

Ga., Albany—Masonic Temple—Edwards, Sayward & Leitner, archts., Chamber Commerce Bldg., Atlanta, receive bids about Aug. 1, building 6 story, 60 x 100 ft., for Masons. About $100,000.

Ga., Atlanta — Synagogue — Ahavath Achim congregation purchased site on Washington and Gilmer Sts. and plans to build. About $75,000. J. Dorfan, pres.

La., New Orleans—Bank—Whitney Central Natl. Bank, St. Charles and Gravier Sts., plans to build 14 story, 100 x 200 ft., brick, on Common St. About $1,500,000.

O., Akron—Office—P. R. Snyder, 154 North Union St., plans to build 10 story, 23 x 66 ft., on Main and Exchange Sts. Architect not selected.

O., Akron—Restaurant, etc.—Henry & Murphy, archts., 2nd Natl. Bank Bldg., soon let contract building 3 story, 50 x 165 ft., rein.-con., steel and brick, concrete foundation, on South Main St., for F. M. Leatherman, State Bank Bldg. About $50,000. Noted May 8.

O., Cleveland—Commercial—Altman Furniture Co., 2142 East 9th St., had plans prepared by Christian, Schwartzenberg, Gaede Co., archts., 1900 Euclid Bldg., for 4 story, 48 x 117 ft., rein.-con., steel and brick, on East 152nd St. and St. Clair Ave. About $75,000.

O., Cleveland—Commercial—C. Graber, 15703 Detroit Ave., preparing plans for 3 story, 67 x 94 ft., concrete, steel and brick. About $100,000.

O., Cleveland — Hospital — Evangelical Deaconess Society, West 33rd St. and Pearl Rd., plans to build 3 story, 100 x 150 ft., concrete, steel and brick. About $150,000. Architect not selected.

O., Cleveland—School—Bd. Educ. plans to build 2 story, 80 x 100 ft., concrete, steel and brick, on Miles Ave. About $200,000. H. R. McCormack, East 6th St. and Rockwell Ave., archt. and engr.

O., Cleveland—School—Bd. Educ. plans to build 2 story, 100 x 100 ft., concrete, steel and brick, on Eddy Rd. About $250,000. H. R. McCormack, East 6th St. and Rockwell Ave., archt. and engr.

O., Columbus—Cottages—Bd. Administration, Oak St., preparing plans for five 2 story, brick, at Institution of Feeble Minded, West Broad St. About $220,000.

O., Columbus—Theatre—W. B. James Co., West Broad St., plans to build 3 story, 104 x 187 ft., steel and brick, on West Broad St. About $600,000. C. H. Crane and W. G. Kiehler Co., Dime Bank Bldg., Detroit, Mich., archts.

O., Dayton — Business — Metropolitan Clothing Store, 4th and Ludlow Sts., plans to build 3 story, 78 x 105 ft., steel and brick addition to present building. About $75,000. J. H. Margolis, owner. Architect not selected.

O., Dayton—Sales—Stomps Auto Sales Co., 330 South Jefferson St., plans to build 4 story, 60 x 150 ft., rein.-con., rein.-con. flooring, concrete foundation, on South Main St. About $65,000. A. Ostendorf, 833 South Clement Ave., archt.

O., Gallipolis—Cottages — Bd. Administration, Oak St., Columbus, had plans prepared by Richards, McCarty & Bulford, archts., Hartman Bldg., Columbus, for two 2 story, brick, at Epileptic Hospital, here. About $88,000.

O., Miamisburg—High School—City plans election soon to vote on $150,000 bonds to build high school.

O., Toledo—Welfare Farm House—City soon receives bids building 2 story, 82 x 128 ft., concrete and brick, concrete foundation, on Work House Farm. About $50,000. F. R. Creswell, 305 Valentine Bldg., archt.

Mich., Bay City—Schools—Union School Dist. plans to build Senior High School, about $600,000; build or alter, repair or reconstruct present east side school for use as Junior High School, $100,000; West Side School, $300,000.

Mich., Detroit — Parish House — Grace Episcopal congregation, c/o Smith, Hinchman & Grylls, archts., 710 Washington Arcade, having plans prepared for 3 story concrete, brick and steel, concrete foundation, on Virginia Park and 12th St. About $76,000.

Mich., Detroit—Theatre—Loop Theatre Co., c/o J. M. Townsend, archt., 255 West Hancock St., having plans prepared for 2 story, 82 x 120 ft., rein.-con. brick and steel, rein.-con. flooring, concrete foundation, on Grand River Ave. and Beverly Court.

Mich., Grand Rapids—Church—Central Church of Christ, Sherry St. and Madison Ave., having plans prepared for 1 story, 176 x 176 ft., brick, steel and stone, brick foundation. T. S. Ethridge, chn. bldg. com.

Mich., Lansing—Hospital—City election July 26 to vote on $100,000 for detention hospital.

Mich., Wyandotte—High School — City having plans prepared by B. C. Wetzel & Co., archts., 2317 Dime Bank Bldg., Detroit, for 2 story, 150 x 350 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Superior and 3rd Sts. About $400,000.

Ill., Joliet—Store—L. F. Beach & Co. having plans prepared for 4 story, 45 x 150 ft., rein.-con. department store, rein.-con. flooring, concrete foundation, on Cass St. and Chicago Ave. About $150,000. D. H. Burnham & Co., 209 South La Salle St., Chicago, archts.

Ill., Mooseheart—Memorial—L. O. O. M., Mooseheart, having plans prepared by C. P. Berger, archt. 1416 South Penn Sq., Philadelphia, for 2 story, 66 x 135 ft. cement block memorial building here. About $75,000.

Wis., Delavan — Dormitory — Bradley Knitting Co. plans to build 2 story, 100 x 136 ft., concrete and brick dormitory, to include gymnasium, swimming pool and dance hall. About $80,000.

Wis., Janesville — School — St. Patrick's Catholic congregation had plans prepared by Van Ryn & De Gelleke, archts., Caswell Blk., Milwaukee, for 2 story, 80 x 110 ft., brick and mill construction, concrete foundation. About $60,000. Address E. E. Reilly, 315 Cherry St.

Wis., Milwaukee — Church — Bethany Evangelical Lutheran congregation soon lets contract building 1 story, 60 x 131 ft., brick, rein.-con. and stone, rein.-con. flooring, concrete foundation, on 38th St. and Lisbon Ave. About $50,000. H. H. Steege, 690 33rd St., pastor. H. H. Bruns, 845 26th St., archt.

Wis., Milwaukee—Dormitory — Big Sisters' Home, 469 Hanover St., plans to build rein.-con. and brick, rein.-con. flooring, concrete foundation. About $75,000. R. M. Purdue, supt. Architect not selected.

Wis., Milwaukee—School—School Bd., 10th and Prairie Sts., soon lets contract building 2 story, brick, rein.con. and steel, rein.-con. flooring, concrete foundation, on 27th St. and Grand Ave. Van Ryn & De Gelleke, Caswell Blk., archts. Noted Feb. 6.

Wis., Washburn — High School — City election soon to vote on $100,000 bonds to build high school.

Wis., West Allis—Church—First Baptist congregation having sketches prepared by Herbst & Kuenzli, archts., 722 Caswell Blk., Milwaukee, for 1 story, brick and stone, concrete foundation on 77th Ave. About $50,000. Rev. F. F. Parson, 679 77th Ave., pastor.

Ia., Clinton—High School — A. H. Paddock, secy. bd. educ., receives bids in August building 2 story, 206 x 226 ft. brick, stone or terra cotta, to include chemistry room, offices, library, heating plant, swimming pool, etc. About $300,000. Miller, Fullenwider & Dowling, 6 North Michigan Ave., Chicago, archts. Noted June 5.

Ia., Sioux City—Administration—Lutheran Hospital soon receives bids building 3 story, 39 x 110 ft., rein.-con. and brick, rein.-con. flooring, rock and brick foundation. About $80,000. Beuttler & Arnold, 230 Grain Exch., archts.

Minn., East Grand Forks—Schools—Bd Educ. receives bids about July 5 building concrete and brick grade school, brick foundation, cost, $50,000; concrete high school, rein.-con. flooring, brick foundation, $150,000. B. D. Keck, 1st Natl. Bank Bldg., Grand Forks, N. D., archt.

Minn., Minneapolis—School—Bd. Educ. receives bids about July 28, building 2 story, 60 x 194 ft., rein.con., rein.-con. flooring, on 19th Ave., N. E., and Pierce St., to be known as Whitney School. About $75,000. E. H. Enger, 305 City Hall, archt.

Minn., Mountain Lake—Hospital—City having plans prepared by Jacobson & Jacobson, archts., Owatonna, building 3 story, rein.-con. and brick community hospital. About $75,000. F. Tustison, 355 Auditorium Bldg., Minneapolis, engr.

Kan., Arkansas City—Memorial Hall—City plans election soon to vote on $100,000 bonds to build memorial hall. W. L. McAtee, Arkansas City, archt.

Kan., Atchison—Schools—City voted $125,000 bonds to build and improve schools. W. H. Sayler & Co., 300 Reliance Bldg., Kansas City, Mo., archts.

Kan., Girard—Court House and Jail—Crawford Co. plans to build 3 story, here. About $300,000. Tonini & Bramblett, 417 Terminal Bldg., Oklahoma, Okla., archts.

Kan., Pittsburg—School—Bd. Educ. plans election soon to vote on $275,000 bonds to build school.

Neb., Omaha—Stores—Burgess-Nash Co., 16th and Harney Sts., had preliminary plans prepared by G. B. Prinz, archt., 1037 Omaha Natl. Bank Bldg., for 8 story, 88 x 152 ft., on 17th and Harney Sts. About $600,000.

Neb., Superior—School—School Bd. having plans prepared by E. Davis, archt., Lincoln, building 2 story, brick, rein.-con flooring, concrete foundation. P. Johnson, pres. About $100,000.

S. D., Freeman—College—Freeman Mennonite College plans to build 3 story. About $100,000. A. J. Regier, pres.

S. D., Tyndall—Bank—Security Bank soon receives bids building 1 story, 40 x 70 ft. brick and stone. About $50,000. A. Moorman & Co., 501 Minnesota Bldg., St. Paul, Minn., engrs. and archts.

N. D., Rolla—Temple — Rolla Masonic Lodge plans to build 3 story, 43 x 74 ft. brick. About $50,000. J. A. Shannon, Jamestown, archt.

Wyo., Thermopolis—High School—Hot Springs Co. election soon to vote on $50,000 bonds to build county high school. W. A. Woodrow, co. clk. Architect not selected.

Mont., Deer Lodge—Court House—Powell Co. election Sept. 2 to vote on $100,000 bonds to build new court house.

Mont., Deer Lodge — Municipal — City Council plans to construct building. About $300,000.

Mont., Havre—Church—St. Jude Thaddeus Church plans campaign to raise $100,000 to build church.

Mont., Lewiston—High School—Fergus Co. election Sept. 2 to vote $150,000 bonds to build 2nd unit of high school.

Mont., Lewistown—School—Bd. Educ. having plans prepared by Link & Haire, archts., 317 Electric Bldg., Billings, for high school. About $300,000.

Buildings (Continued)

Mo., St. Louis—Church—St. Mark's Lutheran congregation plans to build 1 story, 60 x 90 ft., brick and stone, rock foundation, on Forest St. and Clayton Ave. About $55,000. W. E. Wheeler, 4908 Euclid Terrace, pastor. Architect not selected.

Mo., St. Louis—Schools — Bd. Dir. of Washington University Corp., Skinker and Lindell Sts., considering plans to build three, 2 story, concrete and brick, rock foundation, on campus. About $1,000,000.

Mo., Springfield — Hotel — J. Landers, Landers Bldg., having plans prepared by Heckenlively & Mark, archts., Landers Bldg., for 8 story, 100 x 130 ft., rein.-con. and brick addition, rein.-con. flooring, brick and concrete foundation. About $90,000.

Tex., Cameron—High School—Bd. Educ. plans to build 2 story. About $100,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts. This item incorrectly noted in our issue of June 12.

Tex., Halletsville—School—School Bd. soon lets contract building 1 story school. About $65,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts. Noted June 5.

Tex., Houston—School—City plans to build high school. About $120,000 available.

Tex., Houston—School—City voted $600,000 bonds to build schools.

Tex., Houston—High School—Bd. Educ. having plans prepared by Sanguinet Staats & Gottlieb, archts., 618 Carter Bldg., for Central High School, on site of recently demolished school. About $500,000.

Tex., Victoria—Bank—Levy Bank & Trust Co. plans to build 2 story. About $70,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts.

Okla., Oklahoma—Bank—Hawk & Parr, archts., 501 Security Bldg., receives bids in 30-60 days, building 10 story, 60 x 90 ft. steel bank, rein.-con. flooring, on Main and Broad Sts., for Tradesmen's State Bank, 105 West Main St. About $300,000.

Okla., Tulsa—Club—S. G. Kennedy, 1029 Kennedy Bldg., having plans prepared by A. J. Black & Son., archts. and engrs., Tulsa, for 2 story, brick. About $75,000.

Utah, Ogden — Temple — Ogden Labor Temple Assn., Inc., plans to build temple. About $150,000.

Wash., Raymond — Theatre — E. W. Houghton, archt., 630 Lumber Exch. Bldg., Seattle, preparing plans for 50 x 145 ft., pressed brick, tile and terra cotta. About $60,000. Owner's name withheld.

Wash., Walla Walla—Store—A. M. Jensen Co., 2nd and Alder Sts., having plans prepared by H. B. Pearce, archt., Arcade Bldg., Seattle, and Beezer Bros., archts., Seaboard Bldg., Seattle, for 120 x 165 ft., probably brick or cement, concrete foundation, on East Main St. About $125,000. Noted May 15.

Ore., Eugene—Gymnasium, etc.—State having plans prepared by Lawrence & Holford, archts., Chamber of Commerce Bldg., Portland, for 3 story, 86 x 276 ft. gymnasium and club building for women, on University Campus, here. About $200,000. P. Campbell, pres. bd. regents.

Ore., Marshfield—Lodge — B. P. O. E. having plans prepared by Houghtaling & Dougan, archts., Henry Bldg., Portland, for lodge hall and home here. About $50,000.

Ore., Pendleton—Church—Presbyterian congregation plans to build 2 story fireproof church with balcony, auditorium (250 seating capacity), gymnasium, club house, kitchens, etc. About $100,000 available. Address J. F. Morgan, Presbyterian Manse, Alta St., pastor.

Ore., Portland—Church—First Christian congregation, Park and Columbia Sts., plans to build 4 story church on present lot. Cost between $75,000 and $100,000. H. H. Griffis, pastor.

Ore., Portland—Offices, etc.—Mitchell, Lewis & Staver Co., 346 East Morrison St., plans to build 3 story, 100 x 130 ft. automobile business house to include offices, sales rooms, service department, second hand department, shop, stock rooms, etc., on Bway. and Everett St. A. L. Smith, sales mgr.

PAVING—DILLON, MONT.

Bids were received by city for paving in Improvement District No. 5, from (A) Clifton, Applegate & Toole, Anaconda; (B) G. H. Nash, Missoula; (C) Robert Metcalfe, Butte. The unit bids were as follows:

	A	B	C
Removing old crosswalk (lump sum)	$500.00	$1,000.00	$1,500.00
2,272 cu.yd. excavation	1.25	1.25	1.50
10,000 lin.ft. 4-in. drain tile	19	40	35
550 cu.yd. gravel or rock	2.50	2.25	3.00
12 monument cases	15.00	10.00	15.00
2,472 lin.ft. curb	80	.90	90
6 catch basins	75.00	75.00	55.00
1,896 lin.ft. 8-in. sewer pipe connections	50	.70	.75
26,458 sq.yd. reinforced concrete pavement, 6-in. sides, 8-in. center, 1:1½:3 mix	2.63	2.70	2.80
26,458 sq.yd. asphaltic concrete on concrete base, 5-in. of 1:2:4 mix for base; 2-in. Topeka top	2.58	2.15	....
26,458 sq.yd. bitulithic 5-in. concrete base; 2-in. bitulithic top	....	2.50	....
26,458 sq.yd. asphaltic concrete on bituminous base, 3-in. asphaltic base, 2-in. Topeka top	2.40	....	....
Extended totals reinforced concrete pavement	$86,005	$90,886	$95,797
Extended totals asphaltic concrete pavement	$84,682	$76,334	...
Extended totals bitulithic pavement	....	$85,595	....
Extended totals asphaltic concrete pavement on bituminous base	$79,920	....	....

SEWER—STRATFORD, CONN.

Bids were received by city, June 9, for constructing sewerage system in portion of Central Dist. from (A) N. Mangine, 17 Cliff Ave., Yonkers, N. Y.; (B) Ambrosio & Delbalso, 1737 Main St., Bridgeport; (C) Forgione & Romano Co., 811 Fidelity Bldg., Portland, Me.; (D) Ralph E. Relly, 1821 Ferry St., Easton, Pa., $100,249; (E) Fenlack Constr. Co., 2363 Lyon Ave., New York City, $106,972; (F) N. C. Cosciano & Co., 60 Temple St., Hartford, $108,590; (G) Pierce Mfg. Co., 785 Housatonic Ave., Bridgeport, $114,110; (H) C. Ippolito, 253 Main St., Orange, N. J., $166,679. The unit bids of the lowest 3 bidders were as follows:

		A	B	C
7,952 ft. 8-in. vitrified tile pipe,	0–6	$1.35	$1.19	$1.00
19,487 ft. 8-in. vitrified tile pipe,	6–8	1.40	1.40	1.24
2,485 ft. 8-in. vitrified tile pipe,	8–10	1.70	2.00	1.85
602 ft. 8-in. vitrified tile pipe,	10–12	2.00	2.25	3.47
2,412 ft. 10-in. vitrified tile pipe,	6–8	1.60	2.00	1.59
401 ft. 12-in. vitrified tile pipe,	0–6	1.50	1.35	1.64
595 ft. 12-in. vitrified tile pipe,	6–8	1.70	1.50	1.98
815 ft. 12-in. vitrified tile pipe,	8–10	1.95	2.00	2.37
130 ft. 12-in. vitrified tile pipe,	10–12	2.40	2.50	3.00
1,024 ft. 15-in. vitrified tile pipe,	8–10	2.95	3.75	2.55
1,052 ft. 15-in. vitrified tile pipe,	10–12	3.55	4.50	4.70
274 ft. 15-in. vitrified tile pipe,	12–14	4.05	5.50	5.90
515 ft. 24-in. vitrified tile pipe,	0–6	3.50	5.00	3.90
305 ft. 24-in. vitrified tile pipe,	6–8	3.90	6.00	4.20
605 ft. 24-in. vitrified tile pipe,	8–10	4.80	7.50	4.75
665 ft. 24-in. vitrified tile pipe,	10–12	5.90	8.50	6.60
400 ft. 24-in. vitrified tile pipe,	12–14	6.80	8.50	7.49
149 ft. manholes, 0–8 ft		95.00	100.00	114.00
45 ft. manholes, extension depth 8 ft		5.00	12.00	11.00
1,000 ft. 5-in. deep house connections		.25	.50	1.00
6 tons cast iron pipe		90.00	50.00	100.00
10,000 ft.b.m. sheeting		80.00	50.00	70.00
20,000 ft.b.m. foundation		80.00	50.00	90.00
50 yd. 1-3-5 concrete		12.00	12.00	15.00
50 yd. 1-2-4 concrete		15.00	12.00	17.00
Rock		4.00	4.00	9.00
Extended totals		$90,144	$97,903	$99,604

Cal., Berkeley—School—Bd. Educ. soon receives bids building 9 room addition to Claremont School, frame and stucco, concrete foundation. About $50,000. J. W. Plachek, 2014 Shattuck Ave., archt.

Cal., Berkeley—Schools—Bd. Educ. having plans prepared by J. W. Plachek, archt., 2014 Shattuck Ave., for additions to John Muir and Francis Willard Schools, cost, $51,350 and $42,500 respectively.

Cal., Fresno—Schools — City voted $1,120,000 bonds to build high schools and $880,000 bonds for intermediate schools. Architect not selected. Noted June 5.

Cal., Los Angeles—Recreation, etc.—Bd. Supervs. Los Angeles Co. having plans prepared for 2 story recreation building at County Hospital on Mission Rd., to contain plunge, 30 x 60 ft. gymnasium, assembly hall and six 2 story cottages, also 2 cottages and 6 room residence at Sylmar Sanitarium near San Fernando. About $110,000. A. M. McPherrin, clk.

Cal., Redlands—Hall, Dormitory and Library—Redlands University having plans prepared by N. F. Marsh, archt., 210 Bway. Central Bldg., Los Angeles, for science hall, men's dormitory and library. About $150,000. Noted June 19.

Cal., San Francisco—Loft and Store—Livingston & Co., c/o G. A. Lansburgh, archt., Gunst Bldg., having plans prepared for 6 story, 50 x 120 ft., rein.-con., rein.-con. flooring, concrete foundation, on Geary St. and Union Sq. Ave. About $150,000.

Cal., Santa Barbara—Clubhouse—B. P. O. E. Lodge plans to build clubhouse. About $150,000. H. J. Doulton, member of com. Architect not selected.

Cal., Tracy—Jail—See "Miscellaneous."

Cal., Tulare—Auditorium—City having plans prepared by Perry & Sturgeon, archts., San Francisco, for auditorium. Bonds for $60,000 voted for project. F. M. Eldridge, city clk. Noted May 8.

N. B., Moncton—Temple—Knights of Pythias purchased site on Seymour St. and plans to build. About $80,000.

Que., Hull—School—City plans to build Technical School. About $100,000.

Que., Lotbiniere—Fair Buildings—Lotbiniere Exposition Co. soon receives bids constructing fair buildings. About $100,000. L. Auger, St. John St., Quebec, archt.

Que., Montreal—Court House—Provincial Government, Quebec, plans to build 5 story, 100 x 150 ft. rein.-con. and brick, concrete foundation, on Notre Dame St., E., here. About $600,000. Dept. Pub. Wks., Quebec, engrs.

Que., Verdun—Y. M. C. A., 127 Drummond St., Montreal, plans to construct building on Williston St., here. About $75,000.

Ont., Barrie—School—Edwards & Edwards, archts., 18 Toronto St., Toronto, soon lets contract building 2 story, brick, for School Bd. About $55,000. F. Marr, secy.

Ont., Campbellford—School—Bd. Educ. having plans prepared building concrete, steel and brick. About $69,000.

Buildings (Continued)

Ont., Ottawa — Hall — Loyal Orange County Lodge C-97 plans to build 3 story, 65 x 85 ft., on **Gloucester St. About $55,000.** Address L. E. Stanley, Rideau St.

Ont., Ottawa—School—School Bd. plans to build on Clarendon Ave. About $75,000. W. C. Beattie, Elgin St., building supt.

Ont., Owen Sound—Collegiate Institute—Dept. Educ., Parliament Bldg., Toronto, plans to build 3 story, brick, here. About $125,000. E. R. Heakes, Parliament Bldg., Toronto, archt.

Ont., Pembroke—Exchange—Bell Telephone Co., 118 Notre Dame St., W., Montreal, Que., having plans prepared by W. J. Carmichael, archt., 29 Hospital St., Montreal, building here. About $75,000.

Ont., Renfrew—Civic Center—City Council plans to build civic center to include memorial hall, city hall, Carnegie Library, fire station, band stand and memorial monument. About $100,000. Millson & Burgess, Booth Bldg., Sparks St., Ottawa, archts.

Ont., Sandwich—School—Separate School Bd. plans to build brick and steel. About $50,000. G. Jaques, 5 Medbury Bldg., archt.

Ont., Saulte Ste. Marie—School—Bd. Educ. soon lets contract building 8 room addition to school. About $55,000. C. A. Findlay, 527 Queen St., archt. Noted May 1.

Ont., Toronto—Bank—Dominion Bank of Canada, Dominion Bank Bldg., purchased site on Bay and Queen Sts. and plans to build 2 story, brick and stone. About $150,000. J. M. Lyle, 19 Avondale Rd., archt.

Ont., Toronto—Theatre—Eastern Theatres, Ltd., Adelaide St., having plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, building 2 story, steel, brick and stone, brick foundation, on Victoria St. About $600,000.

Man., Dufferin—Memorial Hall—Municipal Council soon lets contract building brick and steel, concrete foundation. About $60,000. Pratty-Ross, 710 Electric Bldg., Winnipeg, archts.

Man., Winnipeg — Service Building — Dept. Pub. Wks., Ottawa, soon lets contract for stone, brick and steel addition to service building at Military Hospital, here. About $100,000.

BIDS DESIRED

N. Y., Brooklyn—Theatre—Until July 7, by T. W. Short, archt., 370 Macon St., building 2 story, 100 x 140 ft., brick, stone and steel, brick foundation, on St. Johns Pl. and Utica Ave., for I. Miller, 166 Union St. About $150,000. Noted June 12.

N. Y., Malone—Armory—Until July 17, by E. S. Walsh, supt. pub. wks., Capitol, Albany, building 50 x 75 ft., brick addition, concrete foundation, here. About $50,000.

N. Y., Port Jervis—School—Until July 10, by Tooker & Marsh, archts., 101 Park Ave., New York City, building 4 story, brick and steel, brick foundation, for Bd. Educ., here. About $85,000.

N. J., Glassboro—High School—Until June 30, by C. S. Adams, archt., 1509 Arch St., Phila., building 2 story, 73 x 142 ft., concrete and stone, on Academy St., here, for Bd. Educ. About $80,000.

N. J., Lakewood—Hotel—Until July 1, by Zipkes, Wolff & Kudroff, archts., 24 West 42nd St., New York City, building 3 story, 50 x 110 ft., rein.-con. and brick, concrete foundation, on 5th and Lexington Aves. About $100,000.

Pa., Coatesville — Hotel, Theatre and Stores—Until June 30, by Stuckert Co., archts., 1420 Chestnut St., Phila., building 2 and 3 story, 150 x 200 ft., brick, steel and rein.-con., on 1st Ave. and Main St., for W. F. B. Boogar. About $150,000.

Pa., Phila.—Bank—Until June 30, by P. A. Davis, archt., 1713 Sansom St., building 2 story, 80 x 110 ft. brick, at 1645 North Broad St., for 10th Natl. Bank. Noted Apr. 10.

N. C., Gastonia—Church—Until Aug. 1, by J. S. Separk, chn., Main St. Methodist Church, building 1 story, 175 x 200 ft., brick and stone, brick foundation, on Main St. C. C. Wilson, 804 Palmetto Bldg., Columbia, S. C., archt.

N. C., Sanatorium—Hospital—Until July 10, by State Bldg. Com., Raleigh, building rein.-con. hospital here. L. R. Woodhull, Raleigh, engr.

N. C., Wilson—Business—Until July 1, by A. Benton, archt., Wilson, building 3 story, 120 x 120 ft., brick, on Barnes and Lodge Sts., for Bern & Harrell Co., Wilson. About $50,000.

S. C., Hartsville—High School—Until July 1, by J. W. Goodson, chn. school bd., building 2 story, 100 x 150 ft., brick and timber. About $95,000. C. C. Wilson, 804 Palmetto Bldg., Columbia, archt. Noted June 5.

Fla., Palatka—School—Until July 8, by city and comrs. Putnam Co., building school. About $50,000. Mark & Sheftall, 210 Clark Bldg., Jacksonville, archts.

O., Lorain—School—Until July 23, by Bd. Educ., building school. Perkins, Fellows and Hamilton, 814 Tower Court, Chicago, Ill., archts.; advertised in this issue.

Mich., Pontiac—Office—See "Industrial Works"

Ill., Chicago—Church—J. E. O. Pridmore, archt., 38 South Dearborn St., receiving bids for 60 x 145 ft. steel addition, at 5749 Kenmore Ave., for Episcopal Church of Atonement. About $50,000.

Minn., Austin—High School—Until July 30, by Bd. Educ., building 3 story, 180 x 220 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation. About $450,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt. Noted May 22.

Minn., Bemidji—School—D. F. Mullen, c/o State Bd. Control, St. Paul, and C. H. Johnston, archt. and engr., 715 Capital Bank Bldg., St. Paul, receiving bids for normal school, 2 story, 42 x 120 x 120 ft., rein.-con. and brick, brick foundation. About $100,000.

Minn., Brainerd—Courthouse—Until July 15, by Comrs. Crow Wing Co., building 3 story, 90 x 125 ft., rein.-con. and stone. About $275,000. Alden & Harris, 1011 New York Life Bldg., St. Paul, archt. and engrs. Noted Apr. 3.

Minn., Duluth—Sales—See "Industrial Works."

Minn., Duluth—School—Until July 9, by C. A. Bronson, clk. bd. educ., building 3 story, 80 x 100 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on 7th St. and 5th Ave., E. About $95,000. Croft & Boerner, Lonsdale Bldg., archts. and engrs. Noted Jan. 23.

Minn., Minneapolis—School—Until July 2, by Bd. Educ., building 2 story rein.-con. addition to George Bancroft School on 14th Ave., S., and 38th St. About $90,000. E. H. Enger, 305 City Hall, archt.

Minn., St. Paul—Hospital—St. Andrew's Hospital receiving bids for 5 story, 42 x 124 ft., rein.-con. and brick, on 7th Ave. S. E. and 5th St. About $75,000. Beuchner & Orth, 500 Shubert Bldg., archts.

Minn., St. Paul—Hospital—Northern Pacific Beneficial Assn., 203 R. R. Bldg., receiving bids for 3 story, 80 x 280 ft., brick and stone, on Snelling Ave. About $500,000. L. Bassindale, 321 Capital Bank Bldg., archt. Noted Mar. 27.

Minn., Winona—Dormitory—Until July 1, by State Bd. Control, Capitol, St. Paul, building 3 story, 46 x 130 ft., rein.-con. and brick, at State Asylum here. About $100,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. Noted June 12.

Kan., Marysville — Bank — First Natl. Bank receiving bids building 2 story, 43 x 72 ft., brick, rein.-con. flooring, concrete foundation. About $50,000. R. E. Pedan, 945 New York Life Bldg., Kansas City, Mo., archt.

Kan., Wellington — Auditorium — Until July 8, by city, building 2 story, 120 x 190 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation. C. Boller & Bro., Kansas City, Mo., archts. Noted Mar. 13.

S. D., Gilbert—Bank—First Natl. Bank receiving bids for 1 story, 30 x 70 ft. brick and stone. About $50,000. A. Moorman & Co., 501 Minnesota Bldg., St. Paul, Minn., archts.

Wyo., Greybull—School—Until July 15, by School Dist. No. 41, Big Horn Co., building 2 story, grade and high school. About $75,000. W. J. Rogers, clk. W Dedrick, 308 Securities Bldg., Billings, Mont., archt.

Tex., George West—Court House and Jail—Until July 2, by Comrs. Live Oak Co., (Oakville), building 3 story, 75 x [illegible] ft. About $140,000. A. Giles Co., "F[illegible]" Bldg., San Antonio, archts.

Cal., Merced—High School—Until July 11, by Trustees High School Dist., building high school to include 1 and 2 story administration building, 1 story domestic science building, 1 story manual arts and commerce building, 1 story gymnasium and power house. Alternate bids will be received on hollow tile and brick, concrete foundation. About $130,000. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts. Noted Feb. 27.

Que., Three Rivers—Theatre—Until July 9, by C. Lafand, archt., Three Rivers, building 50 x 100 ft. concrete theatre, concrete foundation on Notre Dame St for T. Trow, Port Henry, N. Y. About $50,000.

Ont., Kingston—Nurses Home—Until July 2, by R. C. Desruchers, Secy. Bd. Pub. Wks., Ottawa, building 4 story, 75 x 80 ft. rein.-con., steel and brick, concrete foundation, on Syndenham St., for Dept. of Militia. About $150,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Easthampton — Houses — West Boylston Mfg. Co., Hampton Mills, let contract building 2 story timber houses, to F. T. Ley Co., 185 Devonshire St., Boston. About $400,000. Noted June 5.

★Mass., Greenfield—Schools—Bd. Educ. let contract building 1 story school in Nash Mills Dist. and 1 story school on Montague City Rd., both brick, rein.-con. flooring, concrete foundation, to P. M. Tuomey Co., 20 Woodleigh Ave. About $65,000. Noted April 17.

★Mass., Newton (Boston P. O.)—School—Trustees Fessenden School let contract building 3 story, 48 x 124 ft. rein.-con., concrete foundation, to Aetna Constr. Co., Boston. About $100,000.

★Mass., Springfield—School—Bd. Educ. let contract building 1 story brick, concrete and steel addition to Chestnut St. School, rein.-con. flooring, concrete foundation, to L. S. Wood, 14 Stockbridge St. Cost, excluding heat and plumbing, $125,000. Noted April 10.

★Mass., Springfield—Theatre—H. Goodsire, pres., Capitol Theatre Co., Fidelity Bldg., Portland, Me., let contract building 5 story, 60 x 154 ft. brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and Pynchon Sts., to F. T. Ley & Co., Inc., 499 Main St. About $200,000. Noted May 1.

★Mass., Webster—School—Town let contract building school, to H. H. Bail, Southbridge. About $62,000.

★Conn., New Haven—Business—P. J. Kelly & Co., 74 Orange St., let contract building 4 story brick and steel addition, to F. A. Dusinberre, Port Washington, N. Y. About $60,000. Noted May 29.

★Conn., Stratford (Bridgeport P. O.)—Business—H. C. Lovell, 2419 Main St., let contract building 3 story, 100 x 104 ft. brick and concrete, rein.-con. flooring, concrete foundation, on Main St., to T. J. Pardy Constr. Co., 15 Fairfield Ave., Bridgeport. About $120,000. Noted May 29.

★N. Y., Brooklyn—Office, etc.—Gibbons Co., 316 Columbia St., will build 5 story, 125 x 175 ft., rein.-con. and steel office and storage building, rein.-con. flooring, concrete foundation, on Columbia St. and Hamilton Ave. About $250,000. Work will be done by day labor.

★N. Y., Brooklyn—School—St. Cyryl & Methodius congregation let contract building 2 story, 68 x 100 ft. brick, stone and steel, brick foundation, on Du Pont St., between Franklin and Manhattan Aves., to Miller-Reed, 103 Park Ave., New York City. About $90,000. Noted Jan. 23.

★N. Y., Brooklyn — Theatre — A. H. Schwartz, 815 Flatbush Ave., will build 1 and 2 story, 80 x 180 ft., brick, stone and steel, brick foundation, on Flatbush Ave. and Farragut Rd. About $60,000. Work will be done by day labor. Noted Apr. 24

Buildings (Continued)

★N. Y., Buffalo—Office—Amer. Radiator Co., Elmwood Ave., will build 2 story, 45 x 65 ft. brick and rein.-con., rein.-con. flooring, concrete foundation. About $50,000. Work will be done by day labor.

★N. Y., Central Islip — Hospital—State Hospital Comn., Albany, let general contract building 3 story, 39 x 296 ft. addition, with 3 wings, 35 x 39 ft. brick and rein.-con., concrete foundaton, to Central Islip Hospital, here, to W. L. Crow Constr. Co., 103 Park Ave., New York City, $289,900; sanitary work to Jarcho Bros., 22 East 105th St., New York City, $24,000; heating, to W. B. Armstrong Co., 3 Fulton St., Albany, $22,842. Noted June 12.

★N. Y., Endicott—Church—Methodist Episcopal congregation let general contract building 77 x 151 ft. brick, concrete foundation, on Monroe St. and McKinley Ave., to Mitchell & Co., Binghamton. About $88,600.

★N. Y., Little Valley—Hall—Cattaraugus Co. let contract building 3 story, 40 x 70 ft. brick, steel and concrete addition to hall of records, rein.-con. flooring, concrete foundation, to Warren Constr. Co., Gokey Bldg., Jamestown. About $60,000.

★N. Y., New York—Mercantile—G. Backer Constr. Co., 11 East 55th St., will build 11 story, 50 x 100 ft., brick and steel, brick foundation, at 16-18 West 36th St. About $225,000. Work will be done by day labor.

★N. Y., New York—Theatre—B. S. Moss, 729 7th Ave., let contract building 2 story, 125 x 150 ft., brick and steel, brick foundation, on 161st St. and Prospect Ave., (Bronx Boro.) to Fleischman Constr. Co., 531 7th Ave. About $600,000.

N. J., Jersey City—School—Bd. Educ. received lowest bid building School No. 23, from M. Connelly, 238 17th St., $719,000. Noted June 12.

★Pa., Drexel Hill—Church—Church of Incarnation let contract building 2 story, 42 x 82 ft. stone, to Bowden Constr. Co., 1713 Sansom St., Phila.

★Pa., Phila.—Sales and Service—J. J. Greenberg, Morris Bldg., let contract building 2 story, 137 x 225 ft., concrete and brick, on Broad and Master Sts., to Wark Co., 1737 Filbert St.

★Pa., Phila.—Store—S. S. Kresge Co., 931-937 Market St., let contract for altering and building 3 story, 60 x 190 ft. addition, to G. A. Fuller Co., Widener Bldg. About $100,000.

★Pa., Pittsburgh—Church—St. Andrews congregation, East Liberty St., let contract building, 2 story, to E. Wehr, Highland Bldg.

★Pa., Tamaqua—Bank—First Natl. Bank let contract building 1 story, 50 x 63 ft., brick and concrete, concrete foundation, to A. Breslin, Summit Hill.

★Md., Mt. Washington (Baltimore P. O.) — School and Dormitories — Sisters of Mercy, Mt. St. Agnes College, let contract building 3 story, 46 x 104 ft., rein.-con., steel and brick, brick and concrete foundation, to Frainie Bros. & Haigley, 18 Clay St., Baltimore. About $50,000 ommission basis.

★N. C., High Point—Theatre—O. E. Kearns let contract building 2 story, 40 x 100 ft. brick, to J. O. Cannon, High Point. About $50,000.

★S. C., Charleston—School—School Bd. let general contract building 2 story, 100 x 170 ft., on King St., to McDavitt Fleming Co., Chattanooga, Tenn., $93,200. Noted May 1.

★S. C., Hartsville—High School—School Bd. let contract building 2 story, 100 x 150 ft., timber, to J. W. Stout & Co., Sanford, N. C. About $64,000. Noted June 5.

★Ala., Bessemer—Court House and Jail—Bd. Revenues Jefferson Co. let contract building 3 story, 100 x 140 ft., on 18th St. and 3rd Ave., to Smallman, Brice Constr. Co., Amer. Trust Bldg., Birmingham. About $117,600. Noted May 15.

★O., Cleveland—Theatre—S. Somerfield, 6114 Echott Ave., will build 1 story, 66 x 108 ft., concrete, steel and brick, on West 32nd St. and Bridge Ave. About $50,000. Work will be done by day labor.

★O., Troy—Sales—Troy Automobile Co., Market St., let contract building 2 story, 60 x 170 ft., rein.-con. sales building and garage, rein.-con. flooring, concrete foundation, to Concrete Steel Constr. Co., 415 Mitchell Bldg., Springfield. About $50,000.

★Mich., Detroit—Office—See "Industrial Works."

Mich., Detroit—Schools—Bd. Educ., 50 Bway., received bids building (a) Longfellow School, (b) Roosevelt School, (c) Standard School; (1) masonry, (2) carpentry, (3) heating and ventilating, from F. H. Goddard, 516 Franklin Ave., (a1) $59,000, (b1) $138,500, (c1) $188,000; Culbertson & Kelley, 814 Ford Bldg., (a1) $64,880, (b1) $157,870, (c1) $207,186; M. A. Mahoney, Penobscot Bldg., (a1) $65,499; Lennane Bros., 809 Union Trust Bldg., (b1) $138,407; M. Bartholomaei, 466 Warren Ave., E., (c1) $225,000; E. Thiede, 287 Berlin St., (a2) $22,755, (b2) $32,961, (c2) $48 742; Harcus & Co., 774 Russell St., (a2) $25,849, (b2) $41,635, (c2) $58,204; H. M. Martens Co., 221 Moffat Bldg., (a2) $26,700, (b2) $33,300, (c2) $50,714; J. H. Partlan, 51 Park Pl., (a3) $43,744, (b3) $61,008, (c3) $90,129; R. L. Spitzley Constr. Co., 396 Mt. Clair Ave., (a3) $44,744. Noted May 22.

★Ill., Buda—Schools—Bd. Educ. let contract building 2 story, 89 x 90 ft., high school, and 2 story, 36 x 92 ft., grade school, with 28 x 36 ft. wing, to replace school in Dist. 137, to T. D. Hobson & Son, Harvey. About $100,000.

★Ill., Chicago—Bank—Standard Trust & Savings Bank, 102 South Clark St., let contract altering 3 story, 47 x 90 ft., at 110 South Clark St., to A. Brundage, 110 South Dearborn St. About $50,000.

★Wis., Jefferson — Sanitarium — Bd. Supervs., Jefferson Co., let contract building 1 and 2 story, 50 x 100 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to Hansen Constr. Co., 425 East Water St., Milwaukee, $89,956. Noted June 5.

★Wis., Milwaukee—Store—Gimbel Bros., Grand Ave. and West Water St., let contract building 6 story, 75 x 130 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on Sycamore and West Water Sts., to P. Riesen & Sons, 1018 Humboldt Ave. About $250,000. Noted June 5.

★Minn., Minneapolis — Exchange and Office—Northwestern Telephone Exch. Co., 224 South 5th St., let contract building 11 story, 132 x 157 ft., on 3rd Ave., S., and 5th St., to Lanquist & Illsley Co., 1100 North Clark St., Chicago. About $1,000,000. Noted Apr. 3.

★Minn., Minneapolis — Office—Chamber of Commerce let contract building 35 x 50 x 75 ft., rein.-con. and brick addition to school on 3rd St. and 4th Ave., S., to O. V. Haglin, 226 Library Exch. About $52,000.

★Minn., Wilmar—Cottages — State Bd. Control, Capitol, St. Paul, let general contract building 2 story, 45 x 120 ft., rein.-con. and brick, at State Asylum, here, to J. Peterson, 3152 10th Ave., S., Minneapolis, $116,500. Noted June 12.

★Kan., Sabetha—Memorial Hall—City let contract building 2 story, 75 x 130 ft., rein.-con., stone and brick, rein.-con. flooring, to Petterson Constr. Co., Salina, $55,500. Noted June 12.

★Neb., Omaha—Store—E. L. Means, Orleans, let contract building 6 story, 120 x 132 ft., brick and rein.-con., concrete foundation, rein.-con. flooring, on 11th and Dodge Sts., to J. L. Carnegie & Sons Co., 189 West Madison St., Chicago. About $160,000. Noted May 29.

★N. D., Pembina—High School—Bd. Educ. let contract building high school, to B. F. Marshke, Pembina. About $80,000. Noted May 15.

★Mo., St. Louis—Mercantile—Allen Estate, 903 La Salle Bldg., let contract building 3 story, 40 x 70 ft. rein.-con., steel and brick addition, rein.-con. flooring, at 300-304 North 4th St., to Pelligreen Constr. Co., 1500 South Grand Ave. About $50,000.

★Tex., Hearne—High School—City let contract building 2 story, 74 x 116 ft. brick, rein.-con. and steel, concrete foundation, to Fischer & Lambie, 108 West 5th St., Austin. About $50,000.

★Okla., Pawhuska—High School—Bd. Educ. let contract building 2 story, 150 x 150 ft. brick, rein.-con. flooring and concrete foundation, to Bradley Constr. Co., Pawhuska; $104,051. Noted Mar. 6.

★Ariz., Gilbert—School—School Trustees let contract building 2 story, 7 room, including auditorium, brick and hollow tile, concrete foundation, to J. W. Tucker, Phoenix, $64,400. Noted May 1.

★Ore., Corvallis—Laboratory—State Agricultural College let contract building 2 story, 56 x 220 ft. brick and concrete, concrete foundation, on college campus, to Snook & Travers, Albany, $69,987. Noted June 19.

★Cal., Anaheim—Church—First Methodist Episcopal congregation let contract building 2 story, 80 x 120 ft., frame and stucco, concrete foundation, to Daniels & Farris, 918 Herkimer St., Pasadena, $54,250. Noted Apr. 3.

★Cal., Los Angeles — Hotel — Wilshire Blvd. Hotel Co. let contract building 5 story, rein.-con. and brick, on Wilshire Blvd., 8th, Fedora and Catalina Sts., main building to be "H" shaped, with wings 500 ft. long, to Weymouth Crowell, 902 South Alvarado St., $709,950. California Hotel Corp., Maryland Hotel, Pasadena, lessee. Noted May 22.

★Que., Montreal—Y. W. C. A., Dorchester St., let contract constructing 5 story, stone, steel and concrete building, to include 20 x 60 ft. swimming pool, 48 x 64 ft. gymnasium, roof garden, cafeteria, etc., to E. G. M. Cape Co., New Birks Bldg. About $300,000. Noted Mar. 13.

Federal Government Work

PROPOSED WORK

Pa., Phila.—Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to complete erection of portable steel building, here; Spec. 3987. About $17,182.

Del., Wilmington—Dredging—U. S. Engr. Office, Old Federal Bldg., rejected bids dredging between Rehoboth Bay and Delaware Bay. Noted May 15.

Md., Annapolis — Garage—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3988. About $30,000.

Va., Quantico—Road and Floor—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans to build concrete road and floor for hangar, here; Spec. 3980. About $44,000.

S. C., Paris Island—Lining Drydock—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to line drydock with concrete; Spec. 3979. About $25,000.

Fla., St. Augustine—Shore Protection—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3973. About $1000.

Ky., Louisville—Lock and Abutment—U. S. Engr. Office, Louisville, received no bids building lock and abutment for Dam No. 45, Ohio River, at Addison, Ky. Noted June 5.

Tex., El Paso—Warehouse—U. S. Constr. Quartermaster plans to build warehouse to cover 500,000 sq.ft. floor space. About $1,000,000.

Tex., San Antonio—Hangars—U. S. Constr. Quartermaster soon receives bids building twelve 1 story, 66 x 200 ft. hangars.

Tex., San Antonio—Storage Building—U. S. Constr. Quartermaster, San Antonio, soon receive bids building 1 story, 136 x 240 ft. storage building. About $140,000.

BIDS DESIRED

Mass., Boston—Cranes — Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in addition to structural shop, here; Spec. 3946. About $65,000; $10 deposit required for plans and spec. Noted June 19.

Mass., Hingham—Officers' Quarters—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 2 officers' quarters, here; Spec. 3804. About $24,000; $10 deposit required for plans and spec. Noted Feb. 13.

N. Y., Brooklyn—Cranes—Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in Navy Yard, here; Spec. 3933. About $200,000; $10 deposit required for plans and spec. Noted June 5.

Federal Government Work (Continued)

N. Y., New York—Dredging—Until July 21, by U. S. Engr. Office, 39 Whitehall St., dredging in Passaic River, N. J.; advertised in this issue.

N. Y., New York—Removing Wreck—Until July 23, by U. S. Engr. Office, 39 Whitehall St., removing wreck of steamship Port Phillip in main entrance to New York Harbor; advertised in this issue.

N. Y., Rockaway—Extension to Steam Heating System—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending steam heating system at Air Sta., here; Spec. 3976. About $20,000; $10 deposit required for plans and spec.

N. Y., Rockaway—Latrine and Washroom—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Air Sta., here; Spec. 3975. About $12,000; $10 deposit required for plans and spec.

Pa., Phila.—Dredging—Until July 25, by U. S. Engr. Office, Phila., dredging Schuylkill River; advertised in this issue.

Md., Baltimore—Dredging—Until July 21, by U. S. Engr. Office, Baltimore, dredging in channel to Curtis Bay; advertised in this issue. Noted June 5.

D. C., Bellevue—Crane and Fire Protection System—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C. installing at pier, here; Spec. 3972. About $55,000; $10 deposit required for plans and spec.

D. C., Wash.—Officers' Quarters—Until July 15, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building medical officers' quarters at U. S. Marine Hospital, here.

Va., Hampton Roads—Boat Shed and Dredging—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building boat shed and dredging, here; Spec. 3974. About $60,000; $10 deposit required for plans and spec.

Va., Quantico—Repairs to Flying Field, Road and Floor—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C. repairing flying field, building road and concrete floor for hangar, at Marine Aviation Field, here; Spec. 3980. About $48,000; $10 deposit required for plans and spec.

Va., Yorktown—Machine Shop — Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3978. About $5000; $10 deposit required for plans and spec.

N. C., Wilmington—Officers' Quarters—Until July 15, by J. A. Westmore, superv. archt., treas. dept., Wash., D. C., building medical officers' quarters, here.

S. C., Charleston—Quarters for Guards—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3977. About $50,000; $10 deposit required for plans and spec.

Ga., Savannah—Dredging—Until July 21, by U. S. Engr. Office, Savannah, dredging Savannah Harbor; advertised in this issue.

Fla., Jacksonville—Coal—Until July 24, by U. S. Engr. Office, Jacksonville, furnishing 6000 short tons coal for U. S. dredges on Hillsboro Bay and tributary waters; also 5000 short tons coal for U. S. dredges on St. Johns River and tributary waters; advertised in this issue.

Fla., Jacksonville—Jetty—Until July 24, by U. S. Engr. Office, Jacksonville, building jetty at entrance to St. Johns River; advertised in this issue.

Ala., Andalusia—Post Office—Until July 22, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building, here.

La., New Orleans—Stone—Until July 15, by U. S. Engr. Office, Customhouse, furnishing and delivering stone for Head of Passes, South Pass and Southwest Pass, Mississippi River; advertised in this issue.

Mich., Sault Ste. Marie—Dredging—Until July 22, by U. S. Engr. Office, Sault Ste. Marie, dredging Grosse Pointe Channel, Lake St. Clair; advertised in this issue.

S. D., Rapid City—School—Until July 16, by C. Sells, comr. Indian Affairs, Wash., D. C., building school, here. Noted Mar. 20.

HIGHWAYS—GILBOA, N. Y.

Bids were received by Board of Water Supply, Municipal Bldg., New York City, June 10, for constructing highways around Schoharie Reservoir, Contr. No. 202, from (A) Schunnemunk Constr. Co., Highland Mills; (B) Beaver Eng. & Contg. Co., 51 Chambers St., New York City, (C) S. Beskin, Beacon; (D) Ward & Tully, Inc., 2047 West 11th St., Brooklyn, $229,225; (E) Langthorn Co., Inc., 2 West 45th St., New York City, $252,950; (F) J. F. Chapman, Hillside, N. J., $259,325; (G) Rosoff Eng. Co., Inc., 2323 Park Row Bldg., New York City, $287,650. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
110,000 cu.yd. earth excavation	$0.80	$0.75	$0.90
2,500 cu.yd. rock excavation	2.50	3.88	3.00
2,000 cu.yd. dry paving	5.00	3.88	2.75
750 cu.yd. grouted paving	7.00	5.13	3.50
500 cu.yd. dry masonry	7.00	5.13	3.50
300 cu.yd. rubble masonry	9.00	6.38	6.00
3,000 cu.yd. concrete masonry	8.00	9.50	14.00
6,500 bbls. portland cement	3.00	3.88	3.00
1,000 sq.ft. flagging	1.00	.75	.18
3,000 lin.ft. 6-in. tile underdrains	.40	1.38	.12
5,000 lb. steel for reinforcing concrete	.10	.20	.15
22,000 lin.ft. guard-rails	.50	.75	.50
800 cu.yd. broken stone and gravel	4.00	3.88	5.00
10M. ft.b.m. timber and lumber	60.00	125.00	70.00
Extended totals	$176,700	$188,751	$196,665

SEWAGE TREATMENT WORKS—PONTIAC, MICH.

Bids were received by city, (lowest 3), June 9, for constructing sewage treatment works from (A) Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa.; (B) Warner Constr. Co., 189 West Madison St., Chicago, Ill.; (C) Montague-Forwey Co., 813 Ford Bldg., Detroit. The unit bids were as follows:

	A	B	C
2,052 ft. 42-in. sewer	$9.00	$10.92	$24,790.00
6 manholes	130.00	190.00	
Tanks:			
3,200 cu.yd. excavation above 100	1.00	.82	1.00
9,820 cu.yd. excavation below 100	2.50	3.00	5.63
436 cu.yd. Class "A" concrete	28.00	25.82	25.72
2,190 cu.yd. Class "B" concrete	28.00	25.25	22.75
14.3 tons cast iron	150.00	230.00	133.20
2 screens	100.00	65.46	100.00
Valves, etc. (lump sum)	3,700.00	6,000.00	3,925.68
Weirs, plank (lump sum)	300.00	425.00	500.00
Sludge Bed:			
4,360 cu.yd. excavation	1.25	.82	1.00
62 cu.yd. Class "C" concrete	15.00	15.75	21.80
2,530 sq.yd. sand bed	1.00	1.70	1.22
100 concrete posts	1.00	4.50	4.00
2,000 plank	70.00	128.00	111.00
1,300 ft. track	.90	.75	1.00
9 switches	60.00	72.00	75.00
1 dump car	150.00	218.00	211.00
Filters:			
13,800 cu.yd. excavation	1.50	.82	1.50
1,000 cu.yd. Class "A" concrete	21.00	19.39	25.82
8,280 sq.yd. floor	1.20	1.37	1.80
15,620 cu.yd. filter stone	4.25	4.00	4.10
18 tons cast iron	150.00	270.00	116.00
2,000 plank	70.00	76.00	156.50
1 24-in. sluice gate	300.00	475.00	275.00
Installing distributors (lump sum)	800.00	428.00	1,320.00
Underdrains (lump sum)	6,400.00	11,800.00	6,055.00
Secondary Tanks:			
1,730 cu.yd. excavation	3.00	3.00	3.00
320 cu.yd. Class "A" concrete	23.00	19.93	25.82
4 18-in. sluice gates	200.00	220.00	166.50
3 6-in. valves and boxes	30.00	51.00	24.97
2.75 tons cast iron	180.00	235.00	111.00
Inlets and outlets (lump sum)	1,200.00	1,564.00	1,665.00
Pump house (lump sum)	1,200.00	2,462.00	2,220.00
Miscellaneous Items:			
Bridge (lump sum)	2,000.00	2,739.00	2,775.00
1,800 cu.yd. excavation of river	1.00	.82	2.60
530 cu.yd. 6-in. sludge line	2.00	2.41	2.50
1,400 cu.yd. 6-in. water main	2.00	2.51	3.00
6 hydrants	65.00	100.00	100.00
75 ft. 24-in. reinforced concrete pipe	3.00	4.05	5.10
406 ft. 30-in. reinforced concrete pipe	4.00	5.07	6.10
36 ft. 30-in. cast iron pipe	14.00	18.45	17.00
184 ft. 15-in. vitrified pipe	1.00	2.40	1.77
180 ft. 24-in. vitrified pipe	2.00	3.50	3.30
2,350 sq.yd. roadways	.50	.50	.72
0.83 acres seeding	200.00	90.00	900.00
1,560 sq.yd. sodding	.50	.60	.66
130 sq.yd. riprapping	1.00	2.70	2.10
Extended totals	$295,796	$299,992	$338,096

Tex., Galveston—Paving Material—Until July 7, by U. S. Engr. Office, Galveston, furnishing 19,000 cu.yd. freshwater sand, 46,000 bbls. Portland cement, 38,000 cu.yd. broken stone, and 1,070,000 lb reinforcing steel.

Tex., San Antonio — Warehouse — Until July 1, by U. S. Constr. Quartermaster, building warehouse, to cover 1,000,000 sq. ft floor space. About $2,000,000.

Idaho, Sorrento—Cottage—Until July 23, by C. Sells, comr. Indian Affairs, Wash., D. C., building physicians cottage at Coeur d'Alene School, here.

Ariz., Leupp—Bridges—Until July 23, by C. Sells, comr. Indian Affais, building two steel highway bridges, one over Little Colorado River and one over Canyon Diable, near here.

Cal., Mare Island—Cranes—Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 3 electric traveling cranes in structural shop, here; Spec. 3903. About $275,000; $10 deposit required for plans and spec. Noted June 19.

H. T., Honolulu—Dredging—Until Aug. 26, by U. S. Engr. Office, Honolulu, dredging Honolulu Harbor; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. H., Portsmouth** — Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building at Marine Barracks, here, to T. A. Cassidy, 54 Boylston St., Fitchburg, Mass., (1) $11,600, (60 days). Noted June 19.

Federal Government **Work (Continued)**

★Mass., Boston—Repairing Pier Walls—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract repairing walls of Pier 1, to Dewey Cement Gun Constr. Co., 836 Hamilton St., Allentown, Pa., $35,438, items (1), (2), (3) and (4), (90 days). Noted June 12.

★Mass., Chelsea—Heating and Distributing system—Bureau of Yards & Docks, Navy Dept., Wash., D. C., let contract extending heating plant and distriubting system, here, to Power Efficiency Corp., White Bldg., Buffalo, N. Y., $54,886 (75 days). Noted June 19.

★Mass., Hingham — Dredging — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract dredging at Naval Ammunition Depot, here, to Bay State Dredging & Contg. Co., 62 Condor St., East Boston. Noted June 19.

★Mass., Hingham—Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing here, (a) to Pittsburgh-Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $27,190, (140 days); (b) Carleton Mace Eng. Corp., 294 Washington St., Boston, Mass., $87,352, (120 days). Noted June 19.

★R. I., Newport—Marine Railway—Local Navy Yard let contract building marine railway, to W. L. Miller Co., 171 Alford St., Boston, Mass., $49,873, (150 days). Noted May 22.

★N. Y., Brooklyn—Building, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing Building "F" and altering stairway in main hospital, here, to Nugent Constr. Corp., 505 5th Ave., New York City, $250,422 (120 days). Noted June 19.

★N. Y., Brooklyn—Fire Protection Apparatus—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing additional fire protective apparatus, at Medical Supply Depot, here, to G. E. Eng. Co., 22 Laight St., New York City, $5080 (15 days). Noted May 1.

★N. Y., New York—Chimney—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building chimney for boiler plant, here, to M. W. Kellogg Co., 90 West St., $12,873, (90 days). Noted June 5.

★N. Y., New York — Dredging—U. S. Engr. Office, 39 Whitehall St., let contract dredging and removing rocks in East River, to N. J. Shipbuilding & Dredging Co., foot of 28th St., Bayonne, N. J., $646,197.

★N. J., Cape May—Roads and Walks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to H. S. Roberts, 1123 Bway, New York City, $70,792, (150 days). Noted June 5.

★D. C., Anacostia—Earth Fill—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building earth fill, here, to Sheer & Deckelbaum, 1359 H St., N. E., Wash., 12,000 (50 days). Noted June 19.

D. C., Wash.—Equipment—First Asst. Postmaster General received bids June 19, furnishing equipment for post office garage, from I. Freund, 1315 7th St., N. W., $10,352, alternate $450; W. K. Moran & Co., Inc., 405 Lexington Ave., New York City, $11,757, alternate $350; Standard Eng. Co., 2129 I St., N. W., $12,490, alternate $520.

D. C., Wash.—Garage—First Asst. Postmaster General received bids June 19, building garage at post office, from A. C. Moses Constr. Co., 918 New York Ave., N. W., $51,649, alternate (a) $2420, alternate (b) $700, alternate (c) $300, alternate (d) $250, alternate (e) $950; Skinker & Garrett, 1416 F St., N. W., $52,506, alternate (a) $2640, alternate (b) $1000, alternate (c) $700, alternate (e) $700; Boyle Robertson Constr. Co., Evans Bldg., $54,780, alternate (a) $1200, alternate (b) $800, alternate (c) $500, alternate (d) $500, alternate (e) $700.

★D. C., Wash.—Laboratory—U. S. Constr. Quartermaster, War College, let contract building 2 story, photographic laboratory, here, to E. Diebitsch, 383 Madison Ave., New York City, $62,359. Noted June 19.

D. C., Wash.—Pavement—Bureau Yards and Docks, Navy Dept., Washington D. C., received only bid June 18, paving with vitr. brick at Marine Barracks, from Costigan & Maloney, 407 Colorado Bldg., $4934. Noted June 5.

D. C., Wash.—Sewers—Dist. Comrs., Dist. Bldg., received bids June 23, constructing Luzon Ave. trunk sewer, (1) excavation per cu. yd.; (2) concrete masonry per cu.yd.; (3) vitr. brick masonry per cu.yd.; (4) sewer brick per cu.yd., from W. F. Cush, 3rd and R Sts., N. E., (1) $2.85, (2) $15.40, (3) $45, (4) $24; W. F. Brenizer, 101 New York Ave., N. E., (1) $2.50, (2) $15.50, (3) $45, (4) $25; G. Hyman, 1116 Morse St., N. E., (1) $3, (2) $17, (3) $40, (4) $30. Noted June 12.

D. C., Wash.—Sewage Disposal Plant—Dist. Comrs., Dist. Bldg., received bids June 23, constructing substructure for Rock Creek Pumping St. of sewage disposal system, here, (1) excavation per cu.yd.; (2) concrete masonry, from W. F. Brenizer Co., 101 New York Ave., N. E., (1) $3.90, (2) $15; Backer & Chapman, 314 Equitable Bldg., Baltimore, Md., (1) $5.47, (2) $20.77. Noted June 5.

Va., Hampton Roads — Bridge—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, building transfer bridge at Operation Base, here, (1) work complete, from
Raymond Concrete Pile Co., 140 Cedar St., New York City, (1) $113,420 (210 days), (2) $ .85, (3) $ .50.
McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $114,745 (200 days), (2) add $1.25, deduct $ .10, (3) add $ .65, deduct $ .05.
McHarg Barton Co., 171 Madison Ave., New York City, (1) $123,900 (210 days), (2) add $ .75, deduct $ .20, (3) add $ .40, deduct $ .10. Noted June 5.

★Va., Hampton Roads—Buildings, Railroad, Sewer and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing industrial buildings, railroad, sewer and water systems, at Submarine Base, here, to Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., $210,290, (210 days). Noted June 5.

★Va., Hampton Roads—Electric Distributing System — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Submarine Base, here, to Hatzel & Buchler, Inc., 373 4th Ave., New York City, (1) $48,813 plus $2750 for furnishing Underground Cable Co. terminal boxes, (120 days). Unit prices on (2), (3) and (4) also accepted. Noted June 19.

Va., Hampton Roads — Pier — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, building merchandise pier, here, (1) work complete, from McLean Contr. Co., Fidelity Bldg., Baltimore, Md., (1) $657,000, (295 days), (2) deduct $120, (3) $45; J. Gill & Sons, 1302 Citizens Bldg., Cleveland, O., (1) $669,000, (300 days), (2) $670, (3) $490; H. P. Converse & Co., 31st St. and Colonial Ave., Norfolk, Va., (1) $679,800, (270 days), (2) $1000, (3) $70; Boyle Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $629,497, (300 days), (2) $900, (3) $100. Noted June 5.

Va., Newport News—Boilers—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 20, installing in post office and custom house, here, from W. Wilby, Selma, Ala., $1968; C. J. Gleason, Augusta, Ga., $2148; Noland-Clifford Co., 330 28th St., $2365. Noted June 5.

★Va., Norfolk—Dredging—U. S. Engr. Office, Custom House, let contract dredging and widening channel to Newport News, to Sanford & Brooks Co., Commerce and Water Sts., Baltimore, Md., $370,313. Noted April 10.

Va., Quantico — Storehouses — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, metal storehouses, here, (1) work complete, from Austin Co., 1026 Bulletin Bldg., Philadelphia, Pa., (1) $262,000, (2) $245,000, (4) $286,000; Boyle Robertson Const. Co., Evans Bldg., Wash., D. C., (1) $266,600, (60) days), (2) $254,119, (60 days), (4) $289,541, (5) $2.50, (20 days), alternate (1) $272,488, (2) $260,955; Newport Contg. & Eng., Co. Silsby Bldg., Newport News, (1) $274,697 (60 days), (2) $259,147, (60 days), (4) $297,862, (60 days), (5) add $2.92, (30 days). Noted June 12.

★Va., Quantico—Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building steel water tank and tower at Marine Barracks, here, to Pittsburgh & Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $5580, (75 days). Noted June 19.

★Va., Quantico—Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., $124,975, (145 days). Noted June 5.

S. C., Charleston — Building — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, constructing amusement building, here, (1) work complete, from D. F. Brandon & Co., 806 James Bldg., Chattanooga, Tenn., (1) $36,774, (120 days), (2) $1847, (3) $1025; H. S. Roberts & Co., 1123 Bway., New York City, (1) $39,644, (180 days), (2) add $1500, (3) deduct $2700; Simons-Mayrant Co., Peoples Office Bldg., (1) $41,497, (120 days), (2) add $900, (3) deduct $1000. Noted June 5.

S. C., Clinton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 18, building, here, (materials furnished by Government), from W. J. Brent, 632 Law Bldg., Norfolk, Va., $25,296; Unkefer Constr. Co., Minerva, O., $39,350. Noted May 29.

S. C., Paris Island — Dredge—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, furnishing 12 in. steam-driven, hydraulic dredge, at Marine Recruiting Sta., here, from Ely Constr. Co., 201 East Henry St., Savannah, Ga., $55,000, (second-hand dredge); Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $73,500 (120 days). Noted June 5.

★S. C., Port Royal—Dredge—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing 12 in. hydraulic dredge, here, to Ellicott Machine Co., Bush and Severn Sts., Baltimore, Md., $73,500, (120 days). Noted June 5.

★Fla., Jacksonville — Dredging — U. S. Engr. Office, Jacksonville, let contract dredging in Miami Harbor (Biscayne Bay), to Bowers Southern Dredging Co., Amer. Natl. Insurance Bldg., Galveston, Tex., $60,000. Noted April. 3.

★S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building post office, here, to C. E. Goodham, Chadron, Neb., $54,750, (14 months). Noted June 12.

★Mont., Hamilton—Road Work—Bureau Pub. Rds., Missoula, let contract grading 5.1 mi. East Fork Bitterroot National Forest Rd., to P. O'Connor, Missoula, $16,026. Noted June 5.

★Col., Denver—Boilers—J. A. Wetmore, superv. archt., treas, dept., Wash., D. C., let contract installing 2 boilers in post office, here, to C. J. Gleason, Augusta, Ga., $5675. Noted June 19.

★Idaho, Coeur d'Alene—Road Work—Bureau Pub. Rds., Missoula, Mont., let contract grading 3 mi. Sect. 2, Fourth of July Canyon Rd., Kootenai Co., to De Camp Bros. & Hughes, Chatcolet, $21,500. Noted May 15.

★Cal., San Fransico—Fireproofing—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract fireproofing powerhouse and machine shop here, to Tiburon Cutleben Bros., New Call Bldg., $17,691, (97 days).

★P. I., Cavite—Power Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing, here, to C. C. Moore & Co., Sheldon Bldg., San Francisco, Cal., $112,642, (140 days). Noted June 5.

P. R., Cayey—Radio Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building addition to operators' quarters and 2 cottages at High Power Radio Sta., here (1) work complete, from Hamilton & Chambers Co., 29 Bway., New York City, (1) $37,400, 180 days); King Lumber Co., Charlotesville, Va., (1) $54,000, (180 days), (2) $24,000; (3) $35,000. Noted May 29.

Miscellaneous

PROPOSED WORK

Electric Light System—Endicott, N. Y. —Village Bd. Trustees soon receive bids installing ornamental electric lighting system on Washington Ave. Cost between $12,000 and $15,000.

Airdrome, etc.—Ogdensburg, N. Y.— Amer. Handley Page Co., Inc., recently incorporated with $5,000,000 capital stock, plans to build airdrome, including repair and machine shops. Cost, including equipment, $100,000. Adress W. H. Workman, 82 Ford St., dir.

Fire Alarm and Telegraph Systems—Rensselaer, N. Y.—R. Greenalch, city engr., soon receives bids altering and extending fire alarm and telegraph systems. Cost between $18,000 and $20,000.

Miscellaneous (Continued)

Coal Pocket—Rochester, N. Y.—A. R. Miller, Jr., 500 West Ave., soon receives bids building rein.-con. circular coal pocket, 50 ft. diameter, 40 ft. high, near Buffalo, Rochester & Pittsburgh R.R. on West Ave. Cost between $12,000 and $15,000.

Pavilion—Syracuse, N. Y.—Supervs. Onondaga Co. voted appropriation of $500 to have plans drawn for children's pavilion at Onondaga Tuberculosis Sanatorium. Cost between $75,000 and $100,000. Address C H. Searl, Syracuse.

Truck, etc. — Syracuse, N. Y. — Bd. Supervs., Onondaga Co., soon receives bids for 1 light truck, $1800, 2 tar kettles, $600 and 1 trailer, $2000.

Swimming Pool—Montclair, N. J.—Bd. Educ. having plans prepared by Starret & Van Vleck, engrs., 8 West 40th St., New York City, for swimming pool in present high school. About $50,000.

Swimming Pool—Grand Rapids, Mich.—See "Buildings."

Cemetery—Lansing, Mich.—City election July 26 to vote on $38,000 bonds to enlarge Mt. Hope Cemetery.

Telephone Line — Livingston, Mont. — Paradise Valley Telephone Co., Livingston, plans to build 20. mi. telephone lines to farming community in Paradise Valley. R. B. Smith, pres.

Flood Protection—Chillicothe, Mo.—Grand River D. D., Livingston Co., having surveys and plans prepared building flood protection for Grand River Valley, to reclaim 100,000 acres of farm lands. About $1,500,000. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs.

Memorial Park—Kingsville, Tex.—City plans to build park. Plans include 35 x 100 ft. concrete swimming pool, dressing rooms for men and women, play ground, etc.

Park—Astoria, Ore—Chamber of Commerce and Bd. Park Dirs. having preliminary plans made for purchasing site and establishing park, to include ½ mi. race track, fair exhibit building, playground, bandstand, stadium, air-plane hangar, foot ball field, base ball grounds, grandstand and bleachers (between 8000 and 9000 seating capacity). Cost site, $37,100, and improvements $85,100. E. G. Gearhart, aud.

Retaining Wall—Linnton, Ore.—See "Industrial Works."

Sewerage System—Ore., Portland—City Council plans to build on East 37th St. and Raymond Ave. sewerage system in East 37th St. to Harold Aves. and 55th Ave. proposed trunk sewer; 53rd Ave. S. E.; 47th St. S. E.; 50th Ave.; East 39th St.; East 38th St.; East 40th St.; 41st St. S. E.; 42nd St. S. E.; 44th St. S. E.; 45th St. S. E.; estimated cost, cement or vitr. pipe, $43,282; including service and branch pipes, manholes, catchbasins and lampholes; also building sewerage system in East 77th St. N., vitr. or cement pipe, $5483; in East 76th St. vitr. or cement pipe, $4924. O. Laurgaard, city engr.

Harbor Improvements—Newport Beach, Cal.—Bd. Supervs. Orange Co., Santa Ana, voted following amounts to improve Newport Beach harbor: $137,000 for cutting new channel for Santa Ana River through sand; $270,000 for dredging channel in bay, $43,000 for wharf, warehouse and railroad connection; $50,000 for extending rock jetty. J. M. Banks, co. clk. Leeds & Barnard, Central Bldg., Los Angeles, engrs. Noted Apr. 17.

Water Meters—Tulare, Cal.—City plans to purchase 750 water meters. A. P. Bosworth, city engr.

Cement, Crushed Stone, etc. — Three Rivers, Que.—Bellefeuille & Trepanier, St. Francis Xavier St., plans to purchase 20,000 bags cement, 5000 cu.yd. crushed stone and 12,000 sq.yd. road steel mesh.

Incinerator—Verdun, Que.—City plans to build incinerating plant. About $106,500. G. E. Ghysene, City Hall engr.

Dike—Verdun, Que.—Town Council voted $600,000 by law to build dike here. G. E. Ghysene, City Hall, engr.

Purifier, etc.—Kingston, Ont.—Municipal Council plans to expend $30,000 for new purifier, $10,000 for liner and $10,000 for generator, in connection with gas plant.

Cement, Brick, etc.—Kitchener, Ont.—O. G. Scheifele, 43 Weber St., plans to purchase 100 bbls. cement, 26,000 rugged bricks and $4000 worth pine and chestnut lumber.

Garbage Incinerator—Niagara Falls, Ont.—City soon lets contract building incinerator. About $50,000. W. J. Seymour, clk. Noted June 12.

Turntable—Peterboro, Ont.—Canadian Pacific Ry., Windsor St., Montreal, Que., plans to build turntable here. About $30,000. J. R. M. Fairbairn, asst. ch. engr.

BIDS DESIRED

Cast Iron Pipe—Jersey City, N. J.—Until July 8, by city, furnishing and delivering c. i. water pipe.

Mason's Materials—Jersey City, N. J.—Until July 8, by city, furnishing and delivering 6 months supply of masons' materials to include lime, sand, cement, etc. Noted May 8.

Riprap, etc.—Ft. Pierce, Fla.—Until June 30, by C. M. Horton, secy. Ft. Pierce Inlet Dist., building inlet cut and riprapping work involves 85,000 cu.yd. earth excav., 1720 cu.yd. jetty hearting, 2200 tons jetty capping and 1200 cu.yd. riprap. M. Hallowes, Ft. Pierce, engr.; advertised in this issue.

Pumping Engine — Milwaukee, Wis. — Until July 16, by Central Bd. Purchases, City Hall, building pumping engine with 20,000,000 gal capacity. About $250,000. G. F. Staal, city engr.

Road Gravel—Cambridge, Minn.—Until July 14, by F. A. Norall, aud. Isanti Co., furnishing 7000 cu.yd. road gravel, f.o.b. Minneapolis, to be used for 5 mi. road. P. M. Torrell, Cambridge, engr.

Incinerator—Sedalia, Mo.—Until July 7, by city, furnishing material and building 20-ton incinerator. F. T. Leaming, city engr.

Dam—Gila Bend, Ariz.—See "Excavation and Dredging."

Pier and Freight Shed—Astoria, Ore.—Until July 1, by Port of Astoria Comn., for all labor and material, except plumbing, sprinkler system and electrical work for building Pier No. 3 and Freight Shed No. 4 Work involves furnishing and driving 280 brace piles, 4960 straight piles (all fender piles considered straight piles), involving 366,660 lin.ft. piling, 40-90 ft. under cutoff, 392,000 B. M. sash and sway bracing, 670,000 ft. B. M. lagging, 48,000 ft. B. M. whaling strips, 336,000 sheet piling; 11,000 cu.yd. rock rip rap; 35,200 lb. w.i. machine bolts; 31,000 lbs. wire w.i. boat spikes, 34,250 malleable washers; 1586 ft. pile and timber frontage, on Slip No. 2, 535 ft. pierhead line, 1760 ft. frontage on Slip No. 3, 100 ft. bulkhead across end of Slip No. 3, sand fill dredged in by 20 in. suction dredge, Natoma; building rein.-con. walls, frame trusses and roofs of freight shed 160 ft. 8 in. x 1520 ft., including fabricating and placing reinforcing steel, Ogden steel turnover doors, roller doors, rails, asphalt paving, hydrated lime, cement, etc. G. W. Warren, secy. R. R. Bartlett, ch engr.

Lift Gates—Los Angeles, Cal.—Until July 11, by Bd. Pub. Serv., furnishing hydraulic lift gates. W. Mulholland, 645 South Olive St., engr.

Lighthouse Tower, etc.—Ottawa, Ont.—Until July 7, by Marine Dept., Ottawa, building rein.-con. lighthouse tower, fog alarm building and dwelling combined, at Triple Island, in Brown Passage, northern British Columbia, for Dominion Government. Work involves 75 cu.yd. rock excav. and 525 cu.yd. rein.-con. About $25,000. B. H Fraser, c/o Marine Dept., engr.

Wharf—Thessalon, Ont.—Until July 11, by R. C. Desrochers, secy. dept. pub. works, rebuilding wharf in Dist. of Algoma. Noted Apr. 10 under "Canada."

Wharf—Comax, B. C.—Until July 15, by Dept. Pub Wks., Ottawa, Ont., repairing wharf here, pile and timber superstructure, 1014 ft. long, 20 ft. 8 in. wide and 100 x 137 ft. at end, with about 300 piles. Estimated cost, $20,000. E Lafleur, c/o Dept. Pub. Wks., ch. engr. Noted April 10 under "Canada."

Wharf—Half Moon Bay, B. C.—Until July 23, by Dept. Pub. Wks., Ottawa, building wharf in Comax-Atin Dist. R. C. Desrochers, secy.

Wharf—Naramata, B. C.—Until July 9, by Dept. Pub. Wks., Ottawa, Ont., building pile and timber wharf, Yale Dist., here, 182 ft. long, 48 ft. wide; also 1 story, 20 x 100 ft. frame warehouse on end of pier. About $25,000. E. Lafleur, c/o Dept. Pub. Wks., ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tank—Haverhill, Mass.—M. T. Stevens & Sons Co. let contract building [illegible]0,000 gal circular concrete fuel oil tank, 10 ft. deep, 35 ft. diam., for Pentucket Mills, to T. I. Ellis, 171 Westminster St., Providence, R. I.

★Capstans and Hoists—Albany, N. Y.—L. Nixon, supt. pub. wks., Capitol, let contract furnishing, testing and delivering electric capstans and trolley hoists at various barge canal terminals, Contr. 113, to General Electric Co., 527 West 34th St., New York City, cost $14,090; battery charging motor generator sets with switch board panels for barge canal terminals in New York City, Contr. 117, to Electric Products Co., 1067 East 152nd St., Cleveland, O., $5293. Noted June 12.

★Paving Materials—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering 20,000 bags Portland cement and 100,000 sewer bricks, to J. A. McCarthy, 551 Exterior St., $15,400 and $1785, respectively; 2000 cu.yd. mixed aggregate, to C. Tompkins, $5300; 5800 cu.yd. binder stone and 3800 ton limestone, to New York Trap Rock Co., 101 Park Ave., $11,029 and $30,000, respectively; 200,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $9970; 600,000 gal. refined asphalt, to Warner Quinlan Asphalt Co., 79 Wall St., $32,820. Noted June 19.

Bulkhead—Hackensack, N. J.—City received lowest bid building bulkhead on Passaic River, from Linde & Griffith, foot 4th St., Newark, $16,500.

Pier—Phila., Pa.—Dept. Wharves, Docks & Ferries, Bourse Bldg., received bids, building, with appurtenant work, Penn Treaty Recreation Pier No. 57, North Delaware River, from Simpson & Brown, New York City, $52,105; Snare & Priest, Penn Bldg., $59,900, Armstrong & Latta, North Land Title Bldg., $63,677. Noted April 17.

★Retaining Walls—Hamilton, O.—H. Ford & Son, Inc., Dearborn and Michigan Sts., Detroit, Mich., let contract building retaining wall near factory site along reservoir, here, to F. K. Vaughn Bldg., Co., 204 Rentschler Bldg. About $300,000.

★Platform—Detroit, Mich.—See "Industrial Works.'

★Asphaltic Concrete—St. Paul, Minn.—H. W. Austin, city purch. agt., let contract furnishing 320 tons asphaltic concrete, to Camden Petroleum Co., 208 La Salle St., Chicago, $19 per ton in tank cars. Noted June 19.

★Retaining Wall—St. Louis, Mo.—M. Cates Stock Co., Syndicate Trust Bldg., let contract building rein.-con. retaining wall, 4 mi. long and 20 ft. high, 30 mi. northwest of here, to J. W. Strupps Co., 240 2nd St., Kansas City. About $38,000.

Pipe, Tanks, etc.—Florence, Ariz.—City let contract for wood pipe, to Pacific Pipe & Tank Co., Seattle, Wash., cost plus percentage basis; steel tanks, to Pittsburg, Des Moines Co., Des Moines, Ia., $7000; pumping machinery, engine and switchboard to Dousman Warner Co., $26,980; pipe lines and power house, to C. Fisher, 845 North 6th St., Phoenix, cost plus percentage basis.

Foundation—Tacoma, Wash.—City Park Bd. received bids building first unit of concrete foundation, 2, 3 or 4 bents, for proposed $500,000 pavilion and bath house at Point Defiance Park, from Pratt & Wilson, Tacoma, $27,894 on 2 bents, $14,180 for each extra bent, and $45,328 for 2 bents with floor above; S. C. Erickson, Natl. Realty Bldg.; $26,786 for 2 bents, $44,802 for adding floor above on 2 bents; Hurley Mason Co., Perkins Bldg., $22,896 on 2 bents, with suggested plan for change, reducing bid to $20,701.

★Mausoleum—Baker, Ore.—Mount Hope Abbey let contract building 31 x 53 ft. mausoleum to include sand tombs, 130 crypts, family and store rooms, stone exterior and cement interior, to Portland Mausoleum Co., Pittock Blk., Portland.

★Pier Shed, etc.—Portland, Ore.—Pub. Dock. Comn. let contract building pier shed superstructure with towers and conveyor galleries on one level section, Pier No. 1, St. Johns Municipal Terminal, east side Willamette River, North St. Johns Dist., to J. M. Dougan Ry. Exch Bldg., $235,950. Noted June 19.

★Swimming Pool, Gymnasium, etc.—Montreal, Que.—See "Buildings."

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 7.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, December 6th, 1918.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 7th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT NO. 191.

Erie Canal—Section 9.

For excavating the canal channel in the Genesee river south of the temporary dam near Elmwood avenue bridge.

Length about 0.62 mile. Sheets 1 to 5 inclusive.

—2—

CONTRACT NO. 192. (Readvertisement)

Erie Canal—Section 9.

For completing the canal from the east guard-lock to the Genesee river, and the work in Genesee Valley park.

Sheets 1 to 28, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bond required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work, according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds, co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., December 23, 1918.—Sealed Proposals will be opened in this office at 3 p. m., January 23, 1919, for the construction of the United States Post Office at Russellville, Ark. Drawings and specifications may be obtained from the custodian of the site at Russellville, Ark., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000	cubic yards
Reinforcing steel ...	1,550,000	pounds
Wood block or asphalt pavement..	8,276	square yards
Miscellaneous metal	25,000	pounds
Earth embankment.	22,000	cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Bids: Jan. 6.

Road Work

Tulsa, Okla.

Sealed bids will be received by the Board of County Commissioners of Tulsa County, Oklahoma, on Monday, January 6, 1919, until 2 o'clock in the County Court House of Tulsa, Oklahoma, for the construction of the hereinafter described roads; such roads to be graded and brought to the established grade, preparatory to the future hard surfacing of the same.

Section of State Road	Miles in Length
......"Y"......	......"6"......
......"H"......	......"6"......
......"K"......	......"4"......
......"L"..(Mi. 4-5 & 6)	......"3"......
......"N"......	......"5"......
......"D"......	......"7"......
......"A"..(Mi. 1 & 2)	......"2"......

The Commissioners reserve the right to reject any and all bids, all bids to be accompanied by a certified check covering 10% of bid. Plans and specifications are now on file in the office of the County Engineer of Tulsa, Oklahoma.

BY ORDER OF THE BOARD OF
COUNTY CAMMISSIONERS OF
TULSA COUNTY

LEWIS CLINE,
County Clerk.

Bids: Jan. 14.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 14th, 1919, at which place and hour they will be publicly opened and read, for improving the Cayuga and Seneca canal pursuant to the provisions of Chapter 391 of the Laws of 1909, and Chapter 147 of the Laws of 1903, and amendatory laws, and for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT "T"

Cayuga and Seneca Canal—Section 1.

For extending the core wall and other work at the north end of Dam No. 2, Seneca Falls.

Sheets 1 and 2.

—2—

CONTRACT NO. 197.

Erie Canal—Section No. 2.

For drilling holes in the sill of the dam and the toe of the river wall of the lock, near Rotterdam, and making necessary repairs.

Sheets 1 and 2.

And for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—3—

TERMINAL CONTRACT NO. 102.

For furnishing and installing two three-ton electric semiportal revolving jib cranes on Pier 6, East river, New York City.

Contract plans, sheets 1 to 17 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract, in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

Dec. 13, 1918.

Bids: Jan. 6.

Advertising $100,000 Contract Concrete Culverts

Tulsa, Okla.

Sealed bids will be received by the Board of County Commissioners of Tulsa County, Oklahoma, on Jan. 6, 1919, until 2 o'clock P.M., in the County Court House of Tulsa, Oklahoma, for the construction of the following described culverts:

Mile 6, Sec. D, 4′ x 3′ x 26′ Concrete Culvert (Standard).

Mile 6, Sec. R, Concrete Box 4′ x 3′ x 24′ (Standard).

Mile 6, Sec. R, Concrete Box 4′ x 3′ x24′ (Standard).

Mile 4, Sec. M, Concrete Culvert 8′ x 4′ x 24′ (Standard).

Mile 4, Sec. M, Concrete Culvert 8′ x 4′ x 24′ (Standard).

Mile 4, Sec. L, Concrete Culvert 8′ x 4′ x 37′ (Standard).

Mile 4, Sec. L, Concrete Culvert 6′ x 4′ x 42′ (Standard).

Mile 4, Sec. L, Concrete Culvert 6′ x 4′ x 42′ (Standard).

Mile 1, Sec. L, 3′ x 6′ x 15′ extension to culvert.

Mile 2, Sec. L, 10′ x 3.5′ x 8′ extension to culvert.

Mile 4, Sec. K, 25′ of 30″ Vitrified tile, Concrete H. W.

Mile 4, Sec. K, 25′ of 30″ Vitrified tile, Concrete H. W.

Mile 3, Sec. K, 25′ of 30″ Vitrified tile, Concrete H. W.

Bt. Sec. 28 & 33, T, 21, R, 13, 36′ x 16′ steel concrete Br. Steel to be furnished by county.

Bt. Sec. 20 & 29, T, 21, R, 13, 30′ x 16′ steel concrete Br. Steel to be furnished by county.

Mile 1, Sec. H, 9′ extension and wings, to 2′ x 3′ box culvert.

Mile 2, Sec. H, 4′ x 4′ x 26′ Concrete Culvert (Standard).

Mile 3, Sec. H, 5′ x 7′ x 3′ extension to Concrete Culvert.

Mile 5, Sec. H, 3′ x 3′ x 24′ Concrete Culvert (Standard).

The Commissioners reserve the right to reject any and all bids, all bids to be accompanied by a certified check covering 10% of bid. Plans and specifications are now on file in the office of the County Engineer in Tulsa, Oklahoma.

BY ORDER OF THE BOARD OF
COUNTY COMMISSIONERS
By LEWIS CLINE,
County Clerk.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

Bids: Jan. 21.

Road Work

STREET DEPARTMENT

Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd. more or less of sheet asphalt pavement. The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer

SEALED PROPOSALS will be received at this office, Room 511, District Building, until 2 o'clock P.M., on Jan. 14, 1919, for the construction of sewers in the District of Columbia, involving the construction of approximately 140 lin.ft. of 7 ft. 0 in. x 7 ft. 0 in. concrete sewer and 1065 lin.ft. of 6 ft. 0 in. x 6 ft. 0 in. concrete sewer. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineering Department, Room 427, District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners, D. C.

PROPOSALS

Bids: Jan. 14.

Heating, Plumbing, etc.

Sonyea, N. Y.

Sealed proposals for construction, heating, plumbing and drainage and electric work for dining room and kitchen buildings, West Group, Craig Colony for Epileptics, Sonyea, N. Y., will be received by Hon. Percy L. Lang, president of the Board of Managers, Craig Colony for Epileptics, Sonyea, N. Y., until 2 o'clock P.M., on Tuesday, January 14, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3102, 3104, 3105 and 3106. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the Craig Colony for Epileptics, Sonyea, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 24, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

POSITIONS VACANT

CLEVELAND engineer and general contractor has steady work for mechanical man on design of heating systems, power and general plant piping, etc. Give experience and salary wanted. P-221, Eng. News-Record, Leader-News Bldg., Cleveland.

COMPETENT chemist wanted; one thoroughly familiar with the distillation of tar oils. State experience and salary desired. The Jennison-Wright Company, Toledo, Ohio.

DESIGNING mechanical engineer, thoroughly experienced in design of cranes, coal and ore handling bridges and towers, coal screening and sizing equipments, shipbuilding and wharf cranes, coal tipple equipments, conveying machinery, etc. High-grade technical man wanted to take charge of design. State education, nationality, salary desired. Information confidential. Location, Canada. P-217, Eng. News-Record.

DRAFTSMAN wanted, paper mill work. Permanent position. $125.00 to start. Address P-218, Eng. News-Record, Phil.

DRAFTSMEN and detailers wanted for industrial plant layout work, preferably men with experience in elevating and conveying machinery. State age, education, nationality, previous experience and salary desired. P-143, Eng. News-Record, Philadelphia.

GENERAL manager for a small structural fabricating shop, capacity 200 to 300 tons per month. Located in Middle West. Man under 40 years preferred. Must give good reference, be capable of taking full control of business. State experience and salary desired. P-222, Eng. News-Record, Leader-News Bldg., Cleveland.

POSITIONS VACANT

HIGH GRADE master mechanic wanted for medium sized Meat Packing Plant. Address P-819, Eng. News-Record, Chicago.

ENGINEER or high class draftsman wanted with experience in the design and construction of belt conveyors. Must be able to make up attractive sales sketches of proposed simple conveyor installations of limited sizes. Man preferred that can direct the publication of printed matter illustrating standardized belt conveyors constructed from standard parts which we manufacture. Position is permanent with attractive future. In answering, state age, whether married, education, experience, whether now employed, habits and what salary expected. Location one half hour from N Y City. P-254, Eng. News-Record.

JUNIOR (civil) engineers for work on subway construction, New York City; provisional appointments pending examination; entrance salary, $1501 per annum, with opportunities of advancement; two years' construction experience required; technical graduates preferred; open to citizens only. Apply, giving full information as to education and experience to the Public Service Commission, 49 Lafayette Street, New York City.

MECHANICAL engineer with experience in cement industry wanted for large cement plant in East. State past experience and salary expected. P-225, Eng. News-Record, Philadelphia.

SUPERINTENDENT or assistant superintendent wanted, who has had cement mill and quarry experience to take charge of a large lime and stone crushing plant. Must be a hustler and good practical man, able to handle several hundred men. Splendid opening for the right man, with an excellent future. Man with cement mill experience preferred. State fully previous experience, reason for desiring change, and salary expected. P-223, Eng. News-Record, Philadelphia.

Draftsman and Estimator
Structural and Ornamental
Iron-Work

Medium Sized Plant at
Detroit, Mich.

Reply Stating—Age, Experience
and Salary Desired

P87—Eng. News-Record
657 Leader-News Bldg, Cleveland, Ohio

DRAFTSMAN and
ESTIMATOR

Medium sized plant of Structural and Ornamental Iron Work, Detroit, Mich., wants Chief Draftsman and Estimator. Address reply, stating experience, competency and salary desired, to

P137—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

For some time we have been improving the Construction News section of the Engineering News-Record. That we are not yet satisfied is proved by this advertisement. At least

37 CORRESPONDENTS ARE WANTED

who are in close touch with construction work and can devote a little spare time during business hours to gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Augusta, Me.
Austin, Texas
Birmingham, Ala.
Boston, Mass.
Carson City, Nev.
Chattanooga, Tenn.
Cheyenne, Wyo.
Concord, N. H.
Erie, Pa.
Helena, Mont.
Jersey City, N. J.
Johnstown, Pa.
Kansas City, Mo.
Lansing, Mich.
Lincoln, Neb.
Little Rock, Ark.
Lowell, Mass.
Montgomery, Ala.
Montreal, Que.
Newark, N. J.
New Orleans, La.
Oklahoma, Okla.
Omaha, Neb.
Phoenix, Ariz.
Pierre, S. D.
Quebec
Reading, Pa.
Richmond, Va.
Sacramento, Cal.
Spokane, Wash.
Tallahasse, Fla.
Topeka, Kan.
Toronto, Ont.
Trenton, N. J.
Vancouver, B. C.
Worcester, Mass.

Write—telling all about your present work and how much time you have available—to

L. V. FLETCHER
Engineering News-Record, 10th Ave., at 36th Street, New York

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Tutoring
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space in 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in., $4.00 an in.
4 to 7 in., 3.90 an in.
8 to 14 in., 3.80 an in.
15 to 26 in., $3.70 an in.
27 to 49 in., 3.60 an in.
50 to 99 in., 3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind," ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
1570 Old Colony Bldg.,	Chicago
657 Leader-News Bldg.,	Cleveland
935 Real Estate Trust Bldg.,	Philadelphia
501 Rialto Bldg.,	San Francisco
519 Newhouse Bldg.,	Salt Lake City

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

WANTED

CHIEF ENGINEER

For Portland Cement Plant in Lehigh Valley, familiar with Water Tube Boilers, Cross-Compound Corliss Condensing Engines, A.C. Generators and Motors. Give full experience and references, salary wanted and how soon you could report for work.

P279—Engineering News-Record
10th Ave. at 36th St., New York City

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

THE CORNELL SOCIETY OF CIVIL ENGINEERS

Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

WANTED

STRUCTURAL DESIGNERS AND ESTIMATORS

Address reply stating experience and salary desired to P. O. Box 984, Buffalo, N. Y.

POSITIONS VACANT

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record, Philadelphia.

WANTED immediately by cement plant, located near city: Experienced quarry foreman, permanent position. Write, stating experience, whether married or single, and salary expected. P-288, Eng. News-Record.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

THE ENGINEERING AGENCY, the oldest technical employment bureau in the world, now in its twenty-sixth successful year, has positions open for engineers and draftsmen. Particulars furnished free on request—no advance fee if you mention this advertisement. 1662 Monadnock Bldg., Chicago, Ill.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

POSITIONS WANTED

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

GRADUATE mechanical engineer, 29 years old, 1½ years on construction, 3 years' purchasing experience in connection with public utilities and general contractors, desires position in purchasing department where purchases are made in accordance with commercial and engineering principles. PW-289, Eng. News-Record.

MECHANICAL engineer, draftsman, technical training, 15 years' experience general and special machine designing, also reinforced concrete, and general engineering construction, open for position. Would be valuable to engineering and contracting company or concern contemplating improvements or extension to plant and equipment. PW-209, Eng. News-Record.

MECHANICAL engineer, assistant superintendent plant maintenance and production, construction, purchase and installation of electrical machinery and factory equipment, design and upkeep power plants, handle men, business experience, responsible position desired, salary, $200 month, location New York City or vicinity. PW-207, Eng. News-Record.

Civil Engineers

AVAILABLE at once, graduate civil engineer, 9 years' field and office experience, factory design, construction, equipment and maintenance. PW-135, Eng. News-Record.

THE BEST WAY

to get a good position in Drafting or Engineering is to file an application direct with some of our clients who are depending on us to get competent and experienced applicants for their Vacant Positions. Send stamp for Blank and List of Vacant Positions.

The Cleveland Engineering Agency Co.
Rose Building, Cleveland, Ohio

HUNDREDS OF SUCCESSFUL DRAFTSMEN AND ENGINEERS owe their Rapid Advancement to PROFICIENCY in my SYSTEM OF LETTERING.

Correspondence Course of RECOGNIZED STANDARD by Author of System. — Guarantee Results.

C. W. REINHARDT
Arlington, N.J.

Perspectives, Commercial, Drafting-Maps

Freehand Lettering

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000 cubic yards
Reinforcing steel ...	1,550,000 pounds
Wood block or asphalt pavement..	8,270 square yards
Miscellaneous metal	25,000 pounds
Earth embankment.	22,000 cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.

Dec. 21, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

Bids: Jan. 21.

Road Work

STREET DEPARTMENT

Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd. more or less of sheet asphalt pavement. The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer.

Bids: Jan. 24.

State Road Construction

KANSAS HIGHWAY COMMISSION,
TOPEKA, KANSAS
SHAWNEE COUNTY

Topeka, Kansas.

Notice is hereby given that sealed proposals will be received at the office of the County Clerk of Shawnee County, Topeka, Kansas, up and until 11:00 o'clock A.M., January 24, 1919, for the construction of the Topeka-Lawrence State Road on the Fort to Fort Highway in Shawnee County.

The improvement is to be two-course Portland cement concrete 18 ft. wide, 5 ft. earth shoulders, together with all work as shown on the plans and in the specifications.

The total net length of the improvement is 51799.6 ft. Bids will be received as follows:

Alternative Proposal No. 1, Sections A and B, length of improvement 51,799.6 ft.

Alternative Proposal No. 2, Section A, length of improvement 20,536.5 ft.

Alternative Proposal No. 3, Sections B, length of improvement 31,263.1 ft.

Plans are on file for inspection in the offices of the County Engineer and County Clerk at the Courthouse, Topeka, Kansas, and in the office of the State Highway Commission, State House, Topeka, Kansas.

All bids must be accompanied by a check for five (5) per cent. of the value of the work.

The County Board reserves the right to waive technicalities and reject any or all proposals.

December 27, 1918.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering News-Record
10th Ave. at 36th St.
New York

37

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted	Vacation Work Wanted
Evening Work Wanted	Tutoring
	Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted	Positions Vacant
Agents Wanted	Partner Wanted
Business Opportunities	Representations Wanted
Desk Room for Rent	Salesmen Wanted
Educational	Patents for Sale
Employment Agencies	Plants for Sale
Desk Room Wanted	Sub-Contracts Wanted
Foreign Business	Work Wanted

Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space in 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind," ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
1570 Old Colony Bldg.,	Chicago
657 Leader-News Bldg.,	Cleveland
935 Real Estate Trust Bldg.,	Philadelphia
501 Rialto Bldg.,	San Francisco
519 Newhouse Bldg.,	Salt Lake City

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

WANTED

CHIEF ENGINEER

For Portland Cement Plant in Lehigh Valley, familiar with Water Tube Boilers, Cross-Compound Corliss Condensing Engines, A.C. Generators and Motors. Give full experience and references, salary wanted and how soon you could report for work.

P279—Engineering News-Record
10th Ave. at 36th St., New York City

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

THE CORNELL SOCIETY OF CIVIL ENGINEERS
Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

WANTED

STRUCTURAL DESIGNERS AND ESTIMATORS

Address reply stating experience and salary desired to P. O. Box 984, Buffalo, N. Y.

POSITIONS VACANT

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record, Philadelphia.

WANTED immediately by cement plant, located near city: Experienced quarry foreman, permanent position. Write, stating experience, whether married or single, and salary expected. P-288, Eng. News-Record.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

THE ENGINEERING AGENCY, the oldest technical employment bureau in the world, now in its twenty-sixth successful year, has positions open for engineers and draftsmen. Particulars furnished free on request—no advance fee if you mention this advertisement. 1662 Monadnock Bldg., Chicago, Ill.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

POSITIONS WANTED

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

GRADUATE mechanical engineer, 29 years old, 1½ years on construction, 3 years' purchasing experience in connection with public utilities and general contractors, desires position in purchasing department where purchases are made in accordance with commercial and engineering principles. PW-289, Eng. News-Record.

MECHANICAL engineer, draftsman, technical training, 15 years' experience general and special machine designing, also reinforced concrete, and general engineering construction, open for position. Would be valuable to engineering and contracting company or concern contemplating improvements or extension to plant and equipment. PW-209, Eng. News-Record.

MECHANICAL engineer, assistant superintendent plant maintenance and production, construction, purchase and installation of electrical machinery and factory equipment, design and upkeep power plants, handle men, business experience, responsible position desired, salary, $200 month, location New York City or vicinity. PW-207, Eng. News-Record.

Civil Engineers

AVAILABLE at once, graduate civil engineer, 9 years' field and office experience, factory design, construction, equipment and maintenance. PW-135, Eng. News-Record.

THE BEST WAY

to get a good position in Drafting or Engineering is to file an application direct with some of our clients who are depending on us to get competent and experienced applicants for their Vacant Positions. Send stamp for Blank and List of Vacant Positions.

The Cleveland Engineering Agency Co.
Rose Building, Cleveland, Ohio

HUNDREDS OF SUCCESSFUL DRAFTSMEN AND ENGINEERS owe their Rapid Advancement to PROFICIENCY in my SYSTEM OF LETTERING.

Correspondence Course of RECOGNIZED STANDARD *by Author of System. — Guarantee Results.*

C. W. REINHARDT
Arlington. N.J.

Perspectives, Commercial, Drafting Maps.

Freehand Lettering

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000	cubic yards
Reinforcing steel ...	1,550,000	pounds
Wood block or asphalt pavement..	8,270	square yards
Miscellaneous metal	25,000	pounds
Earth embankment.	22,000	cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.

Dec. 21, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE

By T. S. LIPPY, Secretary.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

Bids: Jan. 21.

Road Work

STREET DEPARTMENT

Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd more or less of sheet asphalt pavement The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer.

Bids: Jan. 24.

State Road Construction

KANSAS HIGHWAY COMMISSION,
TOPEKA, KANSAS
SHAWNEE COUNTY

Topeka, Kansas.

Notice is hereby given that sealed proposals will be received at the office of the County Clerk of Shawnee County, Topeka, Kansas, up and until 11:00 o'clock A.M., January 24, 1919, for the construction of the Topeka-Lawrence State Road on the Fort to Fort Highway in Shawnee County.

The improvement is to be two-course Portland cement concrete 18 ft. wide, 5 ft. earth shoulders, together with all work as shown on the plans and in the specifications.

The total net length of the improvement is 51799.6 ft. Bids will be received as follows:

Alternative Proposal No. 1, Sections A and B, length of improvement 51,799.6 ft.

Alternative Proposal No. 2, Section A, length of improvement 20,536.5 ft.

Alternative Proposal No. 3, Sections B, length of improvement 31,263.1 ft.

Plans are on file for inspection in the offices of the County Engineer and County Clerk at the Courthouse, Topeka, Kansas, and in the office of the State Highway Commission, State House, Topeka, Kansas.

All bids must be accompanied by a check for five (5) per cent. of the value of the work.

The County Board reserves the right to waive technicalities and reject any or all proposals.

December 27, 1918.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering News-Record
10th Ave. at 36th St.
New York

POSITIONS VACANT

BOILER room foreman wanted, also refrigeration foreman, for medium-sized packing house in Middle West. P-316, Eng. News-Record.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

CIVIL engineer-draftsman wanted, experienced in municipal engineering, waterworks and sewer design. Position offers advancement. Apply to B. M. Hart, City Engineer, Oklahoma City, Okla.

COMPETENT chemist wanted; one thoroughly familiar with the distillation of tar oils. State experience and salary desired. The Jennison-Wright Company, Toledo, Ohio.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

EXPERIENCED structural draftsmen and checkers. Apply stating experience, education, and salary expected. Whitehead & Kales Iron Works, Detroit, Mich.

HIGH GRADE master mechanic wanted for medium sized Meat Packing Plant. Address P-819, Eng. News-Record, Chicago.

INDUSTRIAL concern has opening for a technically trained engineer with construction experience and executive ability; headquarters, New York City. State briefly complete details of training, experience, age, salary, etc., in original application. P-317, Eng. News-Record.

MECHANICAL engineer to fill position as estimator and correspondent in New York sales office handling all types of pumping equipment, condensers, feed water heaters, etc. Write stating experience, age and salary expected to P-314, Eng. News-Record.

RAILROAD engineer experienced on construction to act as assistant pilot on valuation, Eastern district. State education, experience, salary expected and when available. 127 E. Baltimore St., Baltimore, Md.

SUPERINTENDENT or assistant superintendent wanted, who has had cement mill and quarry experience to take charge of a large lime and stone crushing plant. Must be a hustler and good practical man, able to handle several hundred men. Splendid opening for the right man, with an excellent future. Man with cement mill experience preferred. State fully previous experience, reason for desiring change, and salary expected. P-223, Eng. News-Record, Philadelphia.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

TRACK body or trailer, designer wanted; Watson, Canastota, N. Y.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ARMY officer, electrical engineer, desires civilian connection, seven years' broad experience, testing, appraisal, engineering, purchasing. PW-405, Eng. News-Record, Phila.

ASSISTANT mechanical engineer, married, 24 years old, college education, experienced in plant construction, inspection, design of special machinery, etc., desires position with well established company. Will consider any location in U. S. PW-363, Eng. News-Record.

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

MECHANICAL engineer, all branches with good concern permanently desired; near New York; salary not less than $50 per week; active experience over 20 years, covering construction, machinery installation and can handle men. PW-392, Eng. News-Record.

MECHANICAL, industrial engineer, practical and technical education; aged 32; married; American; now holding responsible position with large corporation, good organizer and systematizer, experienced in reviewing of tenders and writing of specifications, extensive experience in plant layout, conveying and transmission machinery and general heavy machine design. Shop and construction experience. PW-391, Eng. News-Record.

THE CORNELL SOCIETY OF CIVIL ENGINEERS
Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

DREDGING MANAGER
WANTED

by a large contracting firm to take charge of their valuable dredging and marine plant. Only men of exceptional ability and large experience in similar position need apply. All applications will be treated as confidential.

P312—Eng. News-Record
10th Ave. at 36th St., New York City

Construction and Industrial
Laborers—Mechanics
Supplied

free of any charge to employers, provided transportation is advanced.

Commissaries conducted on a modern plan.

EMPIRE LABOR AGENCY
93 Mulberry St., New York City
Telephones Franklin 1745-3164

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

STRUCTURAL STEEL DRAFTSMEN

wanted immediately for shipyard production department work. Answer in full regarding age, salary expected, when available, etc., to

F. T. WARNER
Groton Iron Works
Groton, Conn.

DRAFTSMAN and ESTIMATOR

Medium sized plant of Structural and Ornamental Iron Work, Detroit, Mich., wants Chief Draftsman and Estimator. Address reply, stating experience, competency and salary desired, to

P137—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

HULL DRAFTSMEN

for breakdown work in production department. Reply with full particulars regarding age, salary expected, experience, when available, etc., to

F. T. WARNER
Groton Iron Works
Groton, Conn.

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000 cubic yards
Reinforcing steel ...	1,550,000 pounds
Wood block or asphalt pavement..	8,270 square yards
Miscellaneous metal	25,000 pounds
Earth embankment.	22,000 cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

PROPOSALS FOR BOILERS.—Office. Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m. Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

OFFICE OF THE COMMISSIONERS, Washington, D. C.—Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., February 11, 1919, for constructing a concrete encased steel plate girder bridge in the line of South Dakota Avenue crossing the tracks of the Baltimore & Ohio R.R. Company. Forms of Proposals, Specifications, and necessary information may be obtained from the Chief Clerk of the Engineering Department, Room 427, District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, C. W. Kutz, Commissioners, D. C.

PROPOSALS

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta,

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Baltimore, Md., at 2 o'clock P.M., March 1, 1919, for construction of concrete foundation and placing of rip rap at Tangier Sound Light Station, Va. Information upon application to the above office.

SEALED PROPOSALS will be opened by the Superintendent of Lighthouse, Buffalo, N. Y., at 2 o'clock P.M., February 10, 1919, for furnishing metal work for third order helical bar lantern, including plate glass. Information upon application to the above office.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

Bids: Jan. 25.

Setting and Connecting Boilers

Hoffman Island.

Sealed proposals for Setting and Connecting Two Boilers (Repairs or Replacement of Equipment), Quarantine Station, Hoffman Island, N. Y., will be received by Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, New York, until 12 o'clock noon, Saturday, January 25, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, adn shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3159 The right is reserved to reject any or all bids. Drawings and specialfications and blank forms of proposal may be consulted at the office of Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and Specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 13, 1919.

POSITIONS VACANT

ADVERTISING manager, who knows trade journals, mailing lists, sales letter writing and catalog work. Must be an executive, hustler and produce results. Should have broad knowledge of machinery, equipment, etc. Right salary to right man. In first letter tell us all about yourself and salary expected. Confidential. Walter A. Zelnicker Supply Co., St. Louis, Missouri.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

ESTIMATOR wanted, capable of taking off and pricing quantities in all classes of general contracting work. Only experienced man need reply, stating age, experience and salary expected. P-431, Eng. News-Record.

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

POSITIONS VACANT

MAN with civil engineering education or broad knowledge of that field, also experienced in engineering promotion publicity work, particularly familiarity with concrete construction and its application to all kinds of structures as well as roads, to train for position as editorial assistant. Work requires unusual ability, foremost in which is ability to write well, simply and clearly in popular vein, much of which will have to be developed through experience in the particular position above mentioned. Salary commensurate with actual ability in work mentioned at the start, with satisfactory prospects as efficiency is acquired. To enable intelligent consideration of your application, age, past and present connections, salary earned and desired, education, and any other points or qualifications you wish to bring out should be mentioned at length. Box P-458, Eng. News-Record, Chicago.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

POSITIONS VACANT

MASTER mechanic—Position as master mechanic of one of the largest car shops in the Middle West is open for a man who can qualify. Position requires executive, technical and practical ability. Give details of training, experience, present salary, etc. P-465, Eng. News-Record, Chicago.

INSPECTOR to teach civil engineering subjects by correspondence, in an Eastern city. Position permanent for one who can qualify. State education, experience and initial salary expected. P-[illegible]24, Eng. News-Record, Philadelphia.

SYSTEMATIZER wanted. A retail coal and building material yard in New England, laying out new yards, requires the services of an experienced man to lay out the yards and warehouses and systematize the handling and loading facilities. Address, System, stating terms P-414, Eng. News-Record.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

AN OPPORTUNITY to make some extra money. Construction work is ready for a big boom and the Engineering News-Record wants to publish it all. To do this we must add to our list at least

36 CORRESPONDENTS

The kind of men we want are those who are in close touch with construction work in their community and can devote a little spare time during business hours to calling on engineers, contractors, etc., gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Augusta, Me.
Austin, Texas
Birmingham, Ala.
Boston, Mass.
Carson City, Nev.
Chattanooga, Tenn.
Cheyenne, Wyo.
Concord, N. H.
Erie, Pa.
Harrisburg, Pa.
Jersey City, N. J.
Kansas City, Mo.
Lansing, Mich.
Little Rock, Ark.
Lowell, Mass.
Madison, Wis.
Montgomery, Ala.
Montreal, Que.
New Orleans, La.
Oklahoma, Okla.
Omaha, Neb.
Philadelphia, Pa.
Phoenix, Ariz.
Pierre, S. D.
Pittsburgh, Pa.
Providence, R. I.
Quebec
Richmond, Va.
Sacramento, Cal.
Tallahasse, Fla.
Topeka, Kan.
Toronto, Ont.
Trenton, N. J.
Vancouver, B. C.
Worcester, Mass.

Write—telling all about your present work and how much time you have available—to

L. V. FLETCHER

Engineering News-Record, 10th Ave., at 36th Street, New York

District Manager

We want a high-grade man capable of taking charge of our Chicago District Office on either salary or commission or both. We have a very attractive proposition for the right man who must thoroughly understand the Contractors' Machinery business and come with a clear record and a reputation of having produced the business in whatever locality he has been or is now located.

We invite correspondence.

OSHKOSH MFG. COMPANY

Oshkosh, Wis.

Bids: Feb. 14.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES

550 Bourse Building, Philadelphia.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Kenilworth Street Pier, No. 30 South Delaware Wharves," will be received until 12 o'clock noon, Friday, February 14, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of twenty five dollars ($25.00), to cover the cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition, and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Ace of June 18, 1917, relative to workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance requiring proposal bonds on all bids exceeding in amount $500, approved May 25, 1860, have been complied with.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

January 18, 1919.

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Rumson for the permanent improvement of the Rumson Road, in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P.M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 14.

Furnishing Screens and Guards

Bedford Hills, N. Y.

Sealed proposals for construction work (screens and guards)—Additional window guards for two cottages of farm group, New York State Reformatory for Women, Bedford Hills, N. Y., will be received by William G. Barrett, President of the Board of Managers, New York State Reformatory for Women, Bedford Hills, N. Y., until 10.30 A.M. on Friday, February 14, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3116-R. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Reformatory for Women, Bedford Hills, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 15, 1919.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

Bids: Feb. 8.

Concrete Sewer

Granite City, Ill.

Bids will be received by the Board of Local Improvements of the City of Granite City, Illinois, at the hour of Two o'clock P.M., February 8th, 1919, at the City Hall in Granite City, Illinois.

Estimated 18,000 lin.ft. of concrete sewer from Nine (9) feet diameter to Three feet Six inches (3′ 6″) diameter.

Specifications, plans and estimated may be seen at the office of Edmund Hall, Engineer, First National Bank Building, Granite City, Illinois.

POSITIONS VACANT

BOILER room foreman wanted, also refrigeration foreman, for medium-sized packing house in Middle West. P-316, Eng. News-Record.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

CIVIL engineer-draftsman wanted, experienced in municipal engineering, waterworks and sewer design. Position offers advancement. Apply to B. M. Hart, City Engineer, Oklahoma City, Okla.

COMPETENT chemist wanted; one thoroughly familiar with the distillation of tar oils. State experience and salary desired. The Jennison-Wright Company, Toledo, Ohio.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

EXPERIENCED structural draftsmen and checkers. Apply stating experience, education, and salary expected. Whitehead & Kales Iron Works, Detroit, Mich.

HIGH GRADE master mechanic wanted for medium sized Meat Packing Plant. Address P-819, Eng. News-Record, Chicago.

INDUSTRIAL concern has opening for a technically trained engineer with construction experience and executive ability; headquarters, New York City. State briefly complete details of training, experience, age, salary, etc., in original application. P-317, Eng. News-Record.

MECHANICAL engineer to fill position as estimator and correspondent in New York sales office handling all types of pumping equipment, condensers, feed water heaters, etc. Write stating experience, age and salary expected to P-314, Eng. News-Record.

RAILROAD engineer experienced on construction to act as assistant pilot on valuation, Eastern district. State education, experience, salary expected and when available. 127 E. Baltimore St., Baltimore, Md.

SUPERINTENDENT or assistant superintendent wanted, who has had cement mill and quarry experience to take charge of a large lime and stone crushing plant. Must be a hustler and good practical man, able to handle several hundred men. Splendid opening for the right man, with an excellent future. Man with cement mill experience preferred. State fully previous experience, reason for desiring change, and salary expected. P-223, Eng. News-Record, Philadelphia.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

TRACK body or trailer, designer wanted; Watson, Canastota, N. Y.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ARMY officer, electrical engineer, desires civilian connection, seven years' broad experience, testing, appraisal, engineering, purchasing. PW-405, Eng. News-Record, Phila.

ASSISTANT mechanical engineer, married, 24 years old, college education, experienced in plant construction, inspection, design of special machinery, etc., desires position with well established company. Will consider any location in U. S. PW-363, Eng. News-Record.

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

MECHANICAL engineer, all branches with good concern permanently desired; near New York; salary not less than $50 per week; active experience over 20 years, covering construction, machinery installation and can handle men. PW-392, Eng. News-Record.

MECHANICAL, industrial engineer, practical and technical education; aged 32; married; American; now holding responsible position with large corporation, good organizer and systematizer, experienced in reviewing of tenders and writing of specifications, extensive experience in plant layout, conveying and transmission machinery and general heavy machine design. Shop and construction experience. PW-391, Eng. News-Record.

THE CORNELL SOCIETY OF CIVIL ENGINEERS

Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

DREDGING MANAGER

WANTED

by a large contracting firm to take charge of their valuable dredging and marine plant. Only men of exceptional ability and large experience in similar position need apply. All applications will be treated as confidential.

P312—Eng. News-Record
10th Ave. at 36th St., New York City

Construction and Industrial

Laborers—Mechanics

Supplied

free of any charge to employers, provided transportation is advanced.

Commissaries conducted on a modern plan.

EMPIRE LABOR AGENCY
93 Mulberry St., New York City
Telephones Franklin 1745-3164

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

STRUCTURAL STEEL DRAFTSMEN

wanted immediately for shipyard production department work. Answer in full regarding age, salary expected, when available, etc., to

F. T. WARNER
Groton Iron Works
Groton, Conn.

DRAFTSMAN and ESTIMATOR

Medium sized plant of Structural and Ornamental Iron Work, Detroit, Mich., wants Chief Draftsman and Estimator. Address reply, stating experience, competency and salary desired, to

P137—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

HULL DRAFTSMEN

for breakdown work in production department. Reply with full particulars regarding age, salary expected, experience, when available, etc., to

F. T. WARNER
Groton Iron Works
Groton, Conn.

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000 cubic yards
Reinforcing steel ...	1,550,000 pounds
Wood block or asphalt pavement..	8,270 square yards
Miscellaneous metal	25,000 pounds
Earth embankment.	22,000 cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.

Dec. 21, 1918.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m. Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," and of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE

By T. S. LIPPY, Secretary.

OFFICE OF THE COMMISSIONERS, Washington, D. C.—Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., February 11, 1919, for constructing a concrete encased steel plate girder bridge in the line of South Dakota Avenue crossing the tracks of the Baltimore & Ohio R.R. Company. Forms of Proposals, Specifications, and necessary information may be obtained from the Chief Clerk of the Engineering Department, Room 427, District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, C. W. Kutz, Commissioners, D. C.

PROPOSALS

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta,

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Baltimore, Md., at 2 o'clock P.M., March 1, 1919, for construction of concrete foundation and placing of rip rap at Tangier Sound Light Station, Va. Information upon application to the above office.

SEALED PROPOSALS will be opened by the Superintendent of Lighthouse, Buffalo, N. Y., at 2 o'clock P.M., February 10, 1919, for furnishing metal work for third order helical bar lantern, including plate glass. Information upon application to the above office.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

Bids: Jan. 25.

Setting and Connecting Boilers

Hoffman Island.

Sealed proposals for Setting and Connecting Two Boilers (Repairs or Replacement of Equipment). Quarantine Station, Hoffman Island, N. Y., will be received by Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, New York, until 12 o'clock noon, Saturday, January 25, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, adn shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3159. The right is reserved to reject any or all bids. Drawings and specialfications and blank forms of proposal may be consulted at the office of Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and Specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 13, 1919.

POSITIONS VACANT

ADVERTISING manager, who knows trade journals, mailing lists, sales letter writing and catalog work. Must be an executive, hustler and produce results. Should have broad knowledge of machinery, equipment, etc. Right salary to right man. In first letter tell us all about yourself and salary expected. Confidential. Walter A. Zelnicker Supply Co., St. Louis, Missouri.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

ESTIMATOR wanted, capable of taking off and pricing quantities in all classes of general contracting work. Only experienced man need reply, stating age, experience and salary expected. P-431, Eng. News-Record.

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

POSITIONS VACANT

MAN with civil engineering education or broad knowledge of that field, also experienced in engineering promotion publicity work, particularly familiarity with concrete construction and its application to all kinds of structures as well as roads, to train for position as editorial assistant. Work requires unusual ability, foremost in which is ability to write well, simply and clearly in popular vein, much of which will have to be developed through experience in the particular position above mentioned. Salary commensurate with actual ability in work mentioned at the start, with satisfactory prospects as efficiency is acquired. To enable intelligent consideration of your application, age, past and present connections, salary earned and desired, education, and any other points or qualifications you wish to bring out should be mentioned at length. Box P-458, Eng. News-Record, Chicago.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

POSITIONS VACANT

MASTER mechanic—Position as master mechanic of one of the largest car shops in the Middle West is open for a man who can qualify. Position requires executive, technical and practical ability. Give details of training, experience, present salary, etc. P-465, Eng. News-Record, Chicago.

INSPECTOR to teach civil engineering subjects by correspondence, in an Eastern city. Position permanent for one who can qualify. State education, experience and initial salary expected. P-224, Eng. News-Record, Philadelphia.

SYSTEMATIZER wanted. A retail coal and building material yard in New England, laying out new yards, requires the services of an experienced man to lay out the yards and warehouses and systematize the handling and loading facilities. Address, System, stating terms. P-414, Eng. News-Record.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

AN OPPORTUNITY to make some extra money. Construction work is ready for a big boom and the Engineering News-Record wants to publish it all. To do this we must add to our list at least

36 CORRESPONDENTS

The kind of men we want are those who are in close touch with construction work in their community and can devote a little spare time during business hours to calling on engineers, contractors, etc., gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Augusta, Me.
Austin, Texas
Birmingham, Ala.
Boston, Mass.
Carson City, Nev.
Chattanooga, Tenn.
Cheyenne, Wyo.
Concord, N. H.
Erie, Pa.
Harrisburg, Pa.
Jersey City, N. J.
Kansas City, Mo.
Lansing, Mich.
Little Rock, Ark.
Lowell, Mass.
Madison, Wis.
Montgomery, Ala.
Montreal, Que.
New Orleans, La.
Oklahoma, Okla.
Omaha, Neb.
Philadelphia, Pa.
Phoenix, Ariz.
Pierre, S. D.
Pittsburgh, Pa.
Providence, R. I.
Quebec
Richmond, Va.
Sacramento, Cal.
Tallahasse, Fla.
Topeka, Kan.
Toronto, Ont.
Trenton, N. J.
Vancouver, B. C.
Worcester, Mass.

Write—telling all about your present work and how much time you have available—to

L. V. FLETCHER

Engineering News-Record, 10th Ave., at 36th Street, New York

District Manager

We want a high-grade man capable of taking charge of our Chicago District Office on either salary or commission or both. We have a very attractive proposition for the right man who must thoroughly understand the Contractors' Machinery business and come with a clear record and a reputation of having produced the business in whatever locality he has been or is now located.

We invite correspondence.

OSHKOSH MFG. COMPANY

Oshkosh, Wis.

Bids: Feb. 14.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES
550 Bourse Building, Philadelphia.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Kenilworth Street Pier, No. 30 South Delaware Wharves," will be received until 12 o'clock noon, Friday, February 14, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of twenty five dollars ($25.00), to cover the cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition, and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Ace of June 18, 1917, relative to workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance requiring proposal bonds on all bids exceeding in amount $500, approved May 25, 1860, have been complied with.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

January 18, 1919.

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Rumson for the permanent improvement of the Rumson Road, in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P.M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 14.

Furnishing Screens and Guards

Bedford Hills, N. Y.

Sealed proposals for construction work (screens and guards)—Additional window guards for two cottages of farm group, New York State Reformatory for Women, Bedford Hills, N. Y., will be received by William G. Barrett, President of the Board of Managers, New York State Reformatory for Women, Bedford Hills, N. Y., until 10.30 A.M. on Friday, February 14, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3116-R. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Reformatory for Women, Bedford Hills, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 15, 1919.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

Bids: Feb. 8.

Concrete Sewer

Granite City, Ill.

Bids will be received by the Board of Local Improvements of the City of Granite City, Illinois, at the hour of Two o'clock P.M., February 8th, 1919, at the City Hall in Granite City, Illinois.

Estimated 18,000 lin.ft. of concrete sewer from Nine (9) feet diameter to Three feet Six inches (3' 6") diameter.

Specifications, plans and estimated may be seen at the office of Edmund Hall, Engineer, First National Bank Building, Granite City, Illinois.

PROPOSALS

Bids: Feb. 4.

Courthouse Bonds

NOTICE OF BOND SALE

Lusk, Wyoming.

Public notice is hereby given that the Board of County Commissioners of Niobrara County, in the State of Wyoming, intends to issue and negitiate the Courthouse Bonds of said County, in the aggregate amount of Sixty Thousand Dollars ($60,000) to provide means for the construction of a courthouse and for the necessary furnishings and equipment of the same in and for the county. Said bonds will be issued in conformity with the provisions of an order and resolution adopted and approved January 8, 1919 ,and pursuant to the approval of more than a majority of the qualified electors of said county, voting upon the question at the regular election for electing county officers held in said county on Tuesday, the 5th day of November, A. D. 1918.

Said bonds will bear date the first day of February, A. D. 1919, will be payable at the option of the County ten (10) years after date and absolutely due and payable twenty (20) years after date. Said bonds will be issued in the denomination of One Thousand Dollars ($1000) each. The principal of said bonds and the interest thereon will be payable at the banking house of Kountze Brothers in the City of New York, State of New York, U. S. A. Said bonds will bear interest at a rate not exceeding six per centum (6%) per annum, payable semi-annually, on the 1st day of August and the 1st day of February in each year.

The Board of County Commissioners of said Niobrara County will on Tuesday, the 4th day of February, A. D. 1919, at the hour of two o'clock P.M., receive sealed bids for said bonds at the office of said Board in Lusk, Wyoming.

All bids must be accompanied by a certified check, payable to the order of the County Treasurer, equal in amount to ten per cent. (10%) of the face value of the bonds bid for. Bidders shall state the rate of interest, (not exceeding six per cent. (6%) per annum) on which their bids are based.

After ascertaining the best terms upon and the lowest interest at which said bonds can be negotiated, the bonds will be sold, but in no case for less than their full or par value and the accrued interest thereon at the time of their delivery.

THE BOARD OF COUNTY COMMISSIONERS OF NIOBRARA COUNTY, WYOMING
By E. G. JONES,
Chairman.

ATTEST:
A. L. MILLER,
Clerk.
(SEAL)

Bids' Feb. 20.

Road Improvements

Hamlin, W. Va.

Sealed proposals will be received by the County Court of Lincoln County, at Hamlin, West Virginia, until 12 o'clock noon, February 20th, 1919, for the improvement of the following roads:

1. Hard surfacing of a portion of the Hamlin-West Hamlin road, beginning at the upper school house on Two Mile Creek or Station 196, plus 50 and extending to the East end of the West Hamlin bridge or Station 292 plus 93. Width 14 ft.

2. Hard surfacing of a portion of the Hamlin-Griffithsville road, beginning at the intersection of Main and Lynn streets in the town of Hamlin, or station 0 plus 00 and extending toward Griffithsville 6½ miles or to station 343 plus 20. Width 14 ft.

3. Hard surfacing of a portion of the Mud River road, beginning at the intersection of the Hamlin-West Hamlin road or 0 plus 00 and extending up main Mud River three miles or to station 158 plus 40. Width 14 ft.

4. Grading of a portion of the main Mud River road, beginning at the end of Adkins & Adkins contract and extending to the east end of the Palermo Bridge, approximately three miles.

5. Grading a portion of the Valley Fork road beginning at the Oil Field National aBnk in the town of Griffithsville or at Station 0 plus 00 and extending up Valley Fork, a distance of three miles or to station 158 plus 40.

6. Grading of a portion of the Alum Creek-Griffithsville road, beginning at the South end of the Alum Creek bridge over Coal River, or at station 0 plus 00 and extending up Fuquays Creek a distance of four miles or to station 211 plus 20.

7. Grading of a portion of the Hamlin-Huntington road, beginning at the intersection of the Hamlin-West Hamlin road near West Hamlin or at station 0 plus 00 and extending toward Huntington to the intersection of the Lincoln-Cabell county line, a distance of 3 miles or to station 158 plus 50.

8. Grading of a portion of the Guyan River road, beginning at the intersection of the Hager & Hager contract at the mouth of [illegible]den Mile Creek and extending to Ranger, approximately three miles.

Plans and specifications can be seen in the office of T. J. Bartrug, Engineer, Hamlin, W. Va.

Check of $100.00 per mile on grading will be required as a guarantee of good faith: $500 per mile on hard surface.

All bids to be made upon blank forms furnished T. J. Bartrug, Engineer.

The County Court reserves the right to reject any and all bids.

ALBERT F. BLACK,
Clerk County Court Lincoln, West Virginia.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA

Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY,
President.
R. J. STEGALL,
Clerk.

Bids: Feb. 11.

Concrete and Steel Bridge

Oglethorpe, Ga.

Proposals will be received by Commissioners of Macon County, Ga., at Oglethorpe, on February 11, 1919, for furnishing material and erecting a bridge over Flint River. The work is divided into three contracts. Bids will be received on any or all of the contracts.

Contract No. 1 consists of 4 reinforced concrete piers, approx. 3600 lin.ft. of wood piling; 3 steel spans, 120 ft. center to center of pins with concrete floor.

Contract No. 2 consists of 1540 lin.ft. of reinforced concrete approach, 4 concrete abutments and approx. 4000 lin.ft. of wood piling.

Contract No. 3 consists of 54,000 cu.yd. of earth fill and 10 acres of clearing and grubbing.

Plans and specifications may be obtained from Garrett & Slack, engineers, Montgomery, Ala., for price of blue printing.

Certified check of $8000 for each contract.

(By) A. H. PERRY,
Clerk, County Commissioners Macon County, Ga.

GARRETT & SLACK,
Engineers.

Pier and Harbor Improvements

Proposals are asked by a foreign city for harbor construction estimated at $20,000,000. Contractors' experienced in actual important works of this character are invited to address the advertiser, an American trading company having an established branch at the foreign city, with a view to coöperating to mutual advantage in obtaining the contract. CL-515, Eng. News-Record.

DEPARTMENT OF THE INTERIOR, United States Reclamation Service, Denver, Colo., January 15, 1919. Sealed proposals will be received at the office of the United States Reclamation Service, Tramway Building, Denver, Colorado, until 2 o'clock p.m., Feb. 10, 1919, and will at that hour be opened, for furnishing 50,000 barrels of Portland cement, f.o.b. cars at the works of the bidder. For particulars address the U. S. Reclamation Service, Washington, D. C., or Denver, Colo. F. E. Weyomuth, Chief of Construction.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

Proposals for Jetty Work.—U. S. Engineer Office, Dallas, Tex.—Sealed proposals will be received here until 11 a.m., Feb. 25, 1919, and then opened, for jetty work at Sabine Pass, Tex. Further information on application.

CONTRACTORS!
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BOND
promptly—no delays—I present your case fully —no extra charge.
Engineering Insurance Service
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Federal Government Work (Continued)

★Idaho, Boise—Irrigation—U. S. Recl. Serv., Boise, let contract building 9 mi earth canal on Black Canyon extension of Boise project, to S. C. Comerford Constr. Co., Boise. About $67,682. Plans include 190,000 cu.yd. excav., 178,000 cu.yd. dry earth excav., 5000 loose dry rock excav., 7000 solid dry rock excav., etc. Noted Jan. 9.

Cal., Bakersfield—Post Office—J. A. Wetmore superv. archt., Treas. Dept., Wash., D. C., received bids Jan. 6 (work complete using limestone) from McLeran & Peterson, Sharon Bldg., San Francisco, $149,604; Campbell Bldg. Co., Newhouse Bldg., Salt Lake City, Utah, $149,906; F. Gallagher, San Francisco $158,100. Noted Dec. 5.

★Cal., Inglewood—Cottages and Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building double cottages, one 4 room cottage and sewer system to connect with Los Angeles city sewer, to Barrell Condler Co., 520 March Strong Bldg., San Francisco, $18,320 (60 days). Noted Jan. 23.

★Cal., Mare Island (Vallejo P. O.)—Repairing Radio Station, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract painting towers, replacing present power house by building combination operating and power house, building cottage, installing concrete cesspool and sewerage ejector, to C. J. W. Koenig, 520 Church St., San Francisco, $13,753, (60 days). Noted Jan. 16.

★Cal., South San Francisco—Repairing Radio Station, etc. — Mare Island Navy Yard let contract clipping and painting towers and repairing 1 broken tower, minor repairs to operating house, building 2 double cottages for operators, building 4 room cottage and providing suitable sewer system and connecting same to city sewer, to C. J. W. Koenig, 520 Church St., San Francisco, $15,992, (60 days). Noted Jan. 16.

Miscellaneous

PROPOSED WORK

Dock and Harbor Improvements—Portland Me.—City having preliminary plans prepared building dock and improving harbor. Fay, Spofford & Thorndike, 308 Boylston St., Boston, engrs.

Ventilation—Boston, Mass.—State Legislature asked to appropriate $42,000 to improve ventilation of Senate and House Chambers, on Beacon St.

Dam—Quincy, Mass., (Boston P. O.)—A. Nelson, representative, petitioned State Legislature, to direct Metropolitan Park Comn., 18 Tremont St., Boston, to build dam across Black's Creek, with or without tide gate. Cost will exceed $10,000.

Heating Lines, etc.—Albion, N. Y.—Bd. Dirs., State Home of Refuge for Women, applied to State Legislature, Albany, for appropriation of $10,000 for new heating line and equipment and $10,000 for covering steam and mains.

Electric and Heating Systems, etc.—Bath, N. Y.—Bd. Dirs. New York State Soldiers and Sailors Home, applied to State Legislature, Albany, for appropriation of $24,000 for installing electric system including a. c. generator engine, switchboard, voltage regulator, etc., and $89,200 for heating system consisting of 4 boilers, underground heating line, hot water plant and underground connections to buildings.

Laundry Equipment, etc.—Binghamton, N. Y.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $15,000 for laundry equipment and $30,000 for coal and ash conveyor, to be installed in State Hospital here.

Docking Facilities — Carthage, N. Y. — Chamber of Commerce plans to expend about $30,000 for docking facilities on Black River Canal as soon as repairs are completed.

Boilers, Piping, etc.—Central Islip, N. Y. —State Hospital Comn., Albany, applied to State Legislature, for appropriation of $100,000 for new boilers and piping and $30,000 for laundry machinery, at Central Islip State Hospital.

Fence and Gate House—Hudson, N. Y.—Bd. Dirs. New York State Training School for Girls, applied to State Legislature, Albany, for appropriation of $25,000 for fence and entrance gate house.

Improving Heating System—Industry, N. Y.—Bd. Dirs. New York State Industrial School applied to State Legislature, Albany, for appropriation of $20,000 to improve heating system here.

Heating Mains—Newark, N. Y.—Bd. Dirs. New York State Custodial Asylum for Women applied to State Legislature, Albany, for appropriation of $10,000 to install low pressure heating main through tunnel.

Increasing Boiler Capacity—Ogdensburg, N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $65,000 to increase boiler capacity at St. Lawrence State Hospital here.

Refrigerating Apparatus—Ossining, N. Y. —State Prison Comn., Albany, applied to State Legislature for appropriation of $20,000 for new refrigerating apparatus to be installed in Sing Sing prison here.

Automatic Sprinkler System—Rochester, N. Y.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $35,000 to install an automatic sprinkler system in Rochester State Hospital.

Mechanical Stoker and Weighing Outfit—Rome, N. Y.—Bd. Dirs. New York State Custodial Asylum, applied to State Legislature, Albany, for appropriation of $10,000 to install mechanical stoker and weighing outfit for coal here.

Retaining Wall—Sonyea N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $15,000 to build retaining wall on west side of Kishaqua Creek for Craig Colony for Epileptics.

Laundry Machinery—Wards Island, N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $50,000 to install laundry machinery in Manhatten State Hospital here.

Dam, etc.—Watertown, N. Y.—City had plans and estimates prepared by T. Tomlines, engr., City Bank Bldg., Syracuse, for development of power at Diamond Island site, Black River. Plans include construction of concrete dam, power house and tailrace. Total cost $600 000. About $170,000 available.

Grandstand and Stadium—Johnstown, Pa.—City Planning Comn. having plans prepared, rein-con. About $100,000. L. J. Buettrier, secy. C. H. Stroup, supt. parks and pub. impvts.

Park Improvements — Ft. Lauderdale, Fla.—City plans election to vote on $20,000 bonds for park improvements. H. C. Davis, city engr.

Sea Walls—Ft. Lauderdale, Fla.—City plans election to vote on $20,000 bonds to build sea walls along river front. H. C. Davis, city engr.

Wharf and Docks—Pascagoula, Miss.—City plans to build 800 ft. wharf, with warehouses and railroad tracks and loading and unloading facilities, for exports and imports by water and rail. About $75,000. F. H. Lewis, mayor.

Underpasses — Cincinnati, O. — Comrs. Hamilton Co. plan to build 2 concrete and steel underpasses at Red Bank and Linwood and viaduct over yards at Cleveland, Cincinnati, Chicago & St. Louis R.R. at Sharonville, provided half of expense be borne by railroads. About $500,000. W Boeh, co engr.

Dam—Chippewa Falls, Wis.—Wisconsin Minnesota Light & Power Co. plans to build dam. About $400,000.

Dam—Elkhorn, Wis.—Consumers Ice Co., 111 West Washington St., Chicago, plans to build concrete and steel dam at Lake Como here. S. W. Streeter, supt.

Road Machinery—Kenosha, Wis.—Comrs. Kenosha Co. plan to purchase road machinery. About $10,000. J. J. Barrows, Somers, chn.

Dike—Kansas City, Mo.—City had plans prepared for diking Missouri River from Grand Ave. to Blue River. About $500,000. R. W. Waddell, city engr.

Removing Telephone and Telegraph Wires—St. Louis, Mo.—Southwestern Bell Telephone Co., 4th and Locust Sts. and Kinloch Telephone Co., 10th and Locust Sts., soon receive bids removing 4 mi. overhead telephone and telegraph wires and putting same underground. Work involves excavating Page Blvd. from Whittier to Pendleton Ave. and from Newstead to Taylor Aves., Kings Highway from Easton to Natural Bridge Aves., Magnolia Ave. from Grand Ave. to Kings Highway, De Tonty St. from Grand to Spring Aves. and from Klemm St. to Tower Grove Ave., West Pine Blvd. from Grand to Spring Aves., Shenandoah Ave. from Grand to Spring Aves. and De Baliviere Ave. from Delmar Blvd. to Lindell Blvd. About $100,000.

Machinery—Snyder, Tex.—Comrs. Scurry Co. plan to purchase 13 graders and 100 plows for road work.

Cemetery Improvements—Salt Lake City, Utah—City plans to improve cemetery including main drive. About $30,000. S. Q. Cannon, engr.

Park—Salt Lake City, Utah—City plans to build new park on west side. About $25,000. S. Q. Cannon, city engr.

Dam—Bakersfield, Cal.—See "Industrial Works."

Dam—Modesto, Cal.—A. J. Wiley, consult. engr., Boise, Idaho, submitted reports, estimates and recommendations on Don Pedro dam project to Bd. Dirs. Modesto and Turlock Irrigation Dists. Plans include construction of concrete arch dam, 279 ft. high, 177 ft. wide at base, 16 ft. wide at top, 4 mi. above La Grande dam cost, $2,787,000; 8 mi. railway from Rosasco to dam site, $93,000; building hydro-electric plant to develop 16,000 h.p. or 12,000 k.w. below dam, $609,000. Modesto Irrigation Dist. plan to vote $1,000,000 bonds and Turlock Irrigation Dist., $2,000,000.

Harbor Improvements—Newport Beach, Cal.—City election Feb. 25, to vote on $65,000 bonds for additional harbor work including dredging 200 x 1000 ft. turning basin in addition to channel now being dredged. P. Kressly, city engr.

Harbor Improvements—Newport Beach, Cal.—Orange Co. Harbor Comn., Santa Ana, will petition Bd. Supervs. to call election to vote on $500,000 bonds for improving Newport Beach harbor.

Dam—San Diego, Cal.—City directed H. N. Savage, city hydraulic engr., to prepare estimate of cost of building Barrett dam. Mayor recommended that $100,000 be appropriated for preliminary work. Total cost, $300,000.

Transmission Lines—Tulare, Cal.—Mt. Whitney Power & Electric Co., 215 West Main St., Visalia, plans to extend lines to farmers pumping plants here, cost, $60,000; convert lines, from 2 phase, 6000 volts, into 3 phase, 11,000 volts, $1700; installing one 500 kw., 11,000 volt transformer and one 300 kw., 200 volt transformer in substation, $5000. F. G. Hamilton, Visalia, supt. west. div.

BIDS DESIRED

Refrigeration Equipment — Iroquois, N. Y.—Until Feb. 13, by W. Hunt, pres. bd. mgrs., Thomas Indian School, installing refrigeration equipment in school here. About $10,000.

Chlorine, etc.—New York, N. Y.—Until Feb. 5, by N. J. Hayes, comr. water supply, gas and electricity, furnishing and delivering liquid chlorine and chloride of lime.

Refined Asphalt, Etc.—Montclair, N. J. —Until Feb. 13, by Town, furnishing refined asphalt and tar for use on macadam pavements; also for road oil asphaltic, nonasphaltic and refined tar. H. Trippett, clk.; advertised in this issue.

Crib—Casper, Wyo.—Until Feb. 3, by C. B. Bryan, city clk., building timber and stone crib to protect east bank of Platte River pumping station. A. W. Wheeler, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Dry Dock—Pensacola, Fla.—Bruce Dry Dock Co., South Coyle St., will build 5,000,000 ton steel and timber floating dry dock. Work will be done by day labor. Noted Jan. 16.

★Levee—Sandy Hook, Mo.—Moniteau Co. let contract building 250,000 cu.yd. levee, to Pope Constr. Co., Jefferson City, $52,188.

★Shipping Gallery—St. Louis, Mo.—J. H. Teasdale Com. Co., Merchants Exchange Bldg., let contract building 12 x 35 x 362 ft. timber shipping gallery encased in sheet iron supported by concrete piers at 917 South Wharf St., to J. Stewart & Co., Boatmen's Bank Bldg. About $12,000.

Fill—Seattle, Wash.—Bd. Pub. Wks. received bids Jan. 17, filling and bulkheading land in Elliott Ave., Sanitary Fill No. 1, from Swennson & Co., Arcade Bldg., $134,536; Florito Bros., Arcade Bldg., $143,222; Tacoma Dredging Co., Natl. Bank of Tacoma Bldg., Tacoma, $149,217.

★Wharf, etc. — Seattle, Wash. — See "Streets & Roads".

★Pavilion—Kitchener, Ont.—Dept. Pub. Wks. Ottawa, let contract building pavilion, to W. H. Dunker, Louisa St. About $12,000.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Feb. 18 & 19.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, February 18, 1919, at which place and hour they will be publicly opened and read, for the improvement of the State canals as authorized by Chapter 147 of the Laws of 1903 and amendatory laws, and Chapter 391 of the Laws of 1909; and for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, as follows:

TERMINAL CONTRACT NO. 57

For constructing certain parts of an approach from Court Street and South Avenue to the Barge canal terminal at Rochester. Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 69

For protecting the shore of Erie Basin between Lake Street and Slip No. 1, at Buffalo.

Contract plans, sheets 1 and 2.

TERMINAL CONTRACT NO. 107

For installing electric wiring, lighting, power and battery charging equipment for the canal terminal at Erie Basin, Buffalo. Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 223

For constructing a Barge canal terminal freight-shed at Greenpoint, Brooklyn, New York City.

Contract plans, sheets 1 to 11 inclusive.

And until twelve o'clock noon of Wednesday, February 19, 1919, for the following pieces of work:

CONTRACT NO. 200

Erie Canal—Sections 9 and 10

For driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

CONTRACT NO. 201

Erie Canal—Section 9

For completing the concrete prism lining at Cartersville and constructing a stream entrance near Knapp's bridge.

Sheets 1 to 3 inclusive.

CONTRACT Q

Cayuga and Seneca Canal—Section 1

For constructing pile dolphins for aids to navigation on Cayuga and Seneca lakes.

Sheets 1 to 5 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at the office of the State Engineer and Surveyor.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20%) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

OFFICIAL PROPOSALS

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

January 15, 1919.

Bids: Feb. 14.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS
AND FERRIES
550 Bourse Building, Philadelphia.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Kenilworth Street Pier, No. 30 South Delaware Wharves," will be received until 12 o'clock noon, Friday, February 14, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of twenty five dollars ($25.00), to cover the cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition, and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Ace of June 18, 1917, relative to workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance requiring proposal bonds on all bids exceeding in amount $500, approved May 25, 1860, have been complied with.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

January 18, 1919.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Baltimore, Md., at 2 o'clock P.M., March 1, 1919, for construction of concrete foundation and placing of rip rap at Tangier Sound Light Station, Va. Information upon application to the above office.

Bids: Feb. 25.

Water Purification Plant

East Chicago, Ind.

1. Sealed proposals for the construction of a Water Purification Plant in the City of East Chicago, Indiana, addressed to C. L. Kirk, Vice-President of the East Chicago & Indiana Harbor Water Company, and endorsed proposal for Water Purification Plant, will be received at the office of the Indianapolis Water Company, 113 Monument Circle, Indianapolis, Indiana, until 12 o'clock noon, Tuesday, February 25, 1919, at which place and time said proposals will be publicly opened and read.

2. All bids must be upon blank forms furnished by the East Chicago & Indiana Harbor Water Company, hereinafter referred to as the owner, and should give a price for each item of work proposed, both in words and figures, and be signed by the bidder with his business address and place of residence.

3. Each bid must be accompanied by a certified check of two thousand five hundred dollars ($2500), payable to the order of the East Chicago & Indiana Harbor Water Company, inclosed in the sealed envelope containing the bid. All checks of unsuccessful bidders will be returned within three days after bids have been received. If all bids are rejected, all checks will be returned forthwith.

4. A bond in the sum of fifty thousand dollars ($50,000) with a surety company satisfactory to the owner as surety, will be required for the faithful performance of the contract, the name of the company to be offered to be designated in the proposal.

5. The successful bidder to whom the contract shall be awarded by the owner shall within fifteen days, not including Sundays and holidays, after the awarding of the contract enter into a contract and furnish bond duly executed with a satisfactory surety company. Should the bidder to whom the contract is awarded fail to enter into the contract and to furnish bond within the time specified, the proposal and acceptance shall be null and void and the certified check accompanying the proposal shall be forfeited to and shall be retained by the owner as liquidated damages for such failure and neglect and to indemnify the owner for any loss which may be sustained by failure of the bidder to execute the contract and to furnish the bond as aforesaid.

6. The specifications for the work provide that the owner will pay monthly estimates of eighty-five (85) per cent of the contract price of such part of the work completed during the previous month.

7. The specifications for the purification plant covers the construction of a chemical house, filter house, boiler house and pumping plant addition, sedimentation basins and filtered water reservoir. In order to give any one desiring to bid an idea as to the scope of the work, the following approximate quantities of the principal items entering into the construction of the purification plant are given:

Excavation	16,000 cu.yd.
Concrete	6,600 cu.yd.
Loam furnished	2,300 cu.yd.
Reinforcing steel	140 tons

The handling and setting of 218 tons of cast iron pipe.

The handling and setting of 72 tons of gate valves and sluice gates. In the above items the material entering into the construction of the super-structure of the chemical house, filter house, boiler house addition and pumping station addition are not included.

8. Bids will be received on all items mentioned in the Specifications as per plans and specifications prepared by Metcalf & Eddy, Consulting Engineers, and on alternate plans for the sedimentation basin and filtered water basins prepared by the engineer of the East Chicago & Indiana Harbor Water Company. The owner reserves the right to let a contract for the entire work covered by the plans and specifications or for only a part of the work, which part will include the construction of the sedimentation and filtered water basins, the foundations of the chemical house and filter house, the construction complete of the boiler house and pumping station additions, and the construction of sewers and drains, but will exclude the construction of the super-structure of the chemical house and filter house, the handling and setting of cast iron pipe, gate valves and sluice gates, and other work more specifically enumerated in the specifications.

9. Detail contract drawings, form of contract and specifications may be examined at the office of the East Chicago & Indiana Harbor Water Company, 4735 Olcott Avenue, East Chicago, Indiana, and at the office of the Indianapolis Water Company, 113 Monument Circle, Indianapolis, Indiana. Plans and specifications may be obtained from B. J. T. Jeup, Chief Engineer Indianapolis Water Company, provided a deposit of fifty dollars ($50) is made. The said deposit will be returned upon return of plans and specifications. The bidder must return the said plans and specifications to the owner on or before February 25, 1919.

10. The owner reserves the right to reject any or all bids or to accept a bid deemed to be for the best interests of the owner.

C. L. KIRK,
Vice-President.

113 Monument Circle,
Indianapolis, Indiana,
January 25, 1919.

Bids: Feb. 28.

Addition to Mechanical Filtration Plant

Clarksburg, W. Va.

Sealed proposals for the construction of an addition of 3 m.g.d. capacity to the existing mechanical filtration plant of the City of Clarksburg, W. Va., will be received by the Clarksburg Water Board at their offices until 12 o'clock noon, Feb. 28, 1919.

Proposals shall be made on blank forms to be obtained from the Secretary or the Engineer.

Plans and specifications can be seen at the office of the Water Board, Clarksburg, W. Va., and Fuller & McClintock, Engineers, 170 Broadway, New York City. Copies may be obtained from the latter on deposit of Ten ($10) Dollars.

Each proposal must be accompanied by a certified check payable to the Clarksburg Water Board for One Thousand ($1000) Dollars.

The Board reserves the right to reject any or all bids.

SCOTLAND G. HIGHLAND,
Secretary and General Manager,
Clarksburg Water Board.

FULLER & McCLINTOCK,
170 Broadway,
New York City,
Engineers.

Bids: Feb. 11.

Boilers and Heating Work

Utica, N. Y.

Sealed proposals for new boilers and heating work, boilers and changes to central heating plant, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February 11, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3142 and 3143. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: January 22, 1919.

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Bids: Feb. 17.

Road Work

Tulsa, Okla.

Notice is hereby given that on the 17th day of February, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider the following Tulsa County State Roads.

Miles 1 To 6 Inclusive of Section "Y"

Miles 1 To 2 Inclusive of Section "I"

Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before Two (2) o'clock P.M., of the date above set out. Proposals to be accompanied with a certified check to an amount equal to approximately Ten (10%) per cent. of the sum total of the bid, drawn on a bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 20th day of January, 1919.

BOARD OF COUNTY COMMISSIONERS
OF TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed "Proposal for Water Main Under Hackensack and Passaic Rivers," directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: City Clerk's Office,
Jersey City, January 24, 1919.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

Bids: Feb. 13.

Refined Asphalt and Refined Tar

Montclair, N. J.

Sealed bids will be received by the Board of Commissioners of the Town of Montclair, in the County of Essex, for the furnishing and delivery to the Town of Montclair of refined asphalt and refined tar for use in the construction of macadam pavements during the year 1919, in accordance with specifications of the Town Engineer.

Each bidder will be required to use the form of bid on file in the office of the Town Engineer and all bids not made on such form will be rejected.

Each bid must be accompanied by a forfeit of five hundred ($500) dollars to insure the signing of the contract and bond by the successful bidder within two weeks after the award shall have been made.

Approximate quantity of refined asphalt and refined tar required is 100,000 gallons.

The right is reserved to reject all bids.

All bids must be filed with the undersigned not later than four o'clock in the afternoon of Thursday, February 13, 1919, at which time the said Board of Commissioners will meet in the Council Chamber of the Municipal Building to consider the same.

By order of the Board of Commissioners,

HARRY TRIPPETT,
Town Clerk.

Bids: Feb. 20.

Road Improvements

Hamlin, W. Va.

Sealed proposals will be received by the County Court of Lincoln County, at Hamlin, West Virginia, until 12 o'clock noon, February 20th, 1919, for the improvement of the following roads:

1. Hard surfacing of a portion of the Hamlin-West Hamlin road, beginning at the upper school house on Two Mile Creek or Station 196, plus 50 and extending to the East end of the West Hamlin bridge or Station 292 plus 93. Width 14 ft.

2. Hard surfacing of a portion of the Hamlin-Griffithsville road, beginning at the intersection of Main and Lynn streets in the town of Hamlin, or station 0 plus 00 and extending toward Griffithsville 6½ miles or to station 343 plus 20. Width 14 ft.

3. Hard surfacing of a portion of the Mud River road, beginning at the intersection of the Hamlin-West Hamlin road or 0 plus 00 and extending up main Mud River three miles or to station 158 plus 40. Width 14 ft.

4. Grading of a portion of the main Mud River road, beginning at the end of Adkins & Adkins contract and extending to the east end of the Palermo Bridge, approximately three miles.

5. Grading a portion of the Valley Fork road beginning at the Oil Field National aBnk in the town of Griffithsville or at Station 0 plus 00 and extending up Valley Fork, a distance of three miles or to station 158 plus 40.

6. Grading of a portion of the Alum Creek-Griffithsville road, beginning at the South end of the Alum Creek bridge over Coal River, or at station 0 plus 00 and extending up Fuquays Creek a distance of four miles or to station 211 plus 20.

7. Grading of a portion of the Hamlin-Huntington road, beginning at the intersection of the Hamlin-West Hamlin road near West Hamlin or at station 0 plus 00 and extending toward Huntington to the intersection of the Lincoln-Cabell county line, a distance of 3 miles or to station 158 plus 50.

8. Grading of a portion of the Guyan River road, beginning at the intersection of the Hager & Hager contract at the mouth of Ten Mile Creek and extending to Ranger, approximately three miles.

Plans and specifications can be seen in the office of T. J. Bartrug, Engineer, Hamlin, W. Va.

Check of $100.00 per mile on grading will be required as a guarantee of good faith; $500 per mile on hard surface.

All bids to be made upon blank forms furnished T. J. Bartrug, Engineer.

The County Court reserves the right to reject any and all bids.

ALBERT F. BLACK,
Clerk County Court Lincoln, West Virginia.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA

Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY,
President.
R. J. STEGALL,
Clerk.

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 12.

Furnishing Valves

Baltimore, Md.

Sealed proposals, in duplicate, addressed to the "Board of Awards" of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon Wednesday, February 12th, 1919, for furnisihng and delivering valves to the Water Department, Baltimore, Maryland.

Specifications and Proposal Forms may be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after February 1, 1919. A charge of $5.00 will be made for each set of specifications. This amount will be refunded upon their return on or before February 19th, 1919, in good condition. Specifications used in making a bid will be considered as returned.

All bids must be accompanied by a certified check of the bidder upon a clearing house bank, in the amount recited in the specifications, drawn to the order of the Mayor and City Council of Baltimore, Md. The successful bidder will be requested to give satisfactory bond for the faithful per formance of the agreement, equal in amount to the value of the contract.

The Board of Awards reserves the right to reject any or all bids.

WALTER E. LEE,
ater Engineer.W

Approved:
JAMES H. PRESTON,
Pres. Board of Awards.

Bids: Feb. 14.

Sanitary Trunk Sewer

Canton, Ohio

Sealed proposals will be received by the Director of Public Service, Canton, Ohio, until 12 o'clock noon Central Standard Time, February 14, 1919, for furnishing labor and materials required for the construction of three sections of the East Side Intercepting Sewer, according to plans and specifications on file in the Director's office.

Length of Section No. 1, 7965 feet—brick, segment block or reinforced concrete pipe.

Length of Section No. 2 5193 feet—brick, segment block or reinforced concrete pipe.

Length of Section No. 3 1050 feet—Vitrified Pipe, segment block or reinforced concrete pipe.

Copies of plans and specifications can be had from the Director by depositing $10, which deposits will be returned on return of same in good condition, or upon filing of bids.

Bids must be made upon the forms included in said specifications. Each bid must be accompanied by a certified check or a bond satisfactory to the Director in the sum of 5% of the total amount of bid. The Director reserves the right to reject any or all bids received and to accept any of which he may deem most favorable to the interests of the City of Canton, Ohio.

FRANK L. DE CORPS,
Director of Public Service.
W. E. SARVER,
City Civil Engineer.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 13.

Road Oils

Montclair, N. J.

Sealed bids will be received by the Board of Commissioners of the Town of Montclair, in the County of Essex, for the furnishing of the necessary road oil asphaltic, non-asphaltic and refined tar for use of the Town of Montclair during the year 1919, in accordance with the specifications of the Town Engineer.

Each bidder will be required to use the form of bid on file in the office of the Town Engineer and all bids not made on such form will be rejected.

Each bid must be accompanied by a forfeit of three hundred ($300) dollars to insure the signing of the contract and bond by the successful bidder within two weeks after the award shall have been made.

Approximate quantity of road oil required is 50,000 gallons.

The right is reserved to reject all bids.

All bids must be filed with the undersigned not later than four o'clock in the afternoon of Thursday, February 13, 1919, at which time the said Board of Commissioners will meet in the Council Chamber of the Municipal Building to consider the same.

By order of the Board of Commissioners,

HARRY TRIPPETT,
Town Clerk.

Bids: Feb. 24.

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Norfolk, Va.—Sealed proposals will be received here until 12 o'clock, noon, February 21, 1919, and then opened, for dredging anchorage and 40-foot channel, and constructing bulkhead. Further information on application.

OFFICIAL PROPOSALS

Farm Grading and Drainage

South Carolina.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

Bids: Feb. 5.

Construction of Dam.

City of Winston-Salem, N. C.

Sealed proposals for the construction of a concrete dam across Salem Creek containing approximately 8000 cu.yd. of concrete will be received by the City of Winston-Salem up to four o'clock P.M. of the 5th day of February, 1919. Proposals to be addressed to Commissioner of Public Works, and endorsed "Proposals for Dam."

Plans may be seen and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any or all bids.

JOSEPH FIRTH,
Com. Pub. Works.

SALE OF GOVERNMENT OWNED BAGS. The Surplus Property Division, Munitions Building, 19th & B Streets, Washington, D. C., will receive bids on Nose Bags also known as Feed Bags, that were manufactured for the Government as army equipment. No bids will be accepted for less than a bale lot which contains 50 bags each. Bids will be made in triplicate form and must be mailed in time to reach Washington for the opening at 2:00 P.M., March 3rd, 1919. Full particulars and form for submitting bids may be obtained upon application to Surplus Property Division, Munitions Building, Washington, D. C., Ref. S. P. D. No 320, C & E.

Contractors!

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promptly—no delays—I present your case fully—no extra charge.

Engineering Insurance Service

Phone or Wire HARMON V. SWART
19 Liberty Street, New York

POSITIONS VACANT

A GROWING construction company looking for an exceptional young man who is not an experiment but a successful timekeeper, material man, paymaster and field office manager, will find this man available in 30 days. Prefer young company. Location of job no consideration. Address E., Adams Apts., Rock Island, Ill.

BRIDGE designer, experienced in both steel and concrete highway design. Salary $150 per month. Submit sample of work, statement of education, experience, age and date can report. Wyoming State Highway Dept., Cheyenne, Wyo.

CIVIL engineer wanted, technically educated, with practical experience in general city engineering. State age, experience, and salary expected. Massachusetts Civil Service certificate required. Superintendent Public Works, Attleboro, Mass.

DISTRICT engineers wanted with pleasing personality and experience in supervising general construction. Small investment. Address Engineer, 1301-4 Conover Bldg., Dayton, Ohio.

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

DRAFTSMAN and estimator wanted in office of large firm of building contractors. Man who can detail reinforced work and make careful estimates of quantities from plans. State age, education, experience, salary and when available. P-516, Eng. News-Record, Phila.

ENGINEER with operating experience in central station steam heating plants. Must be a technical graduate and qualified to make valuations and determinations of operating costs. P-549, Eng. News-Record, Chicago.

ENGINEER wanted by Eastern construction company, for estimating, laying out, supervising, etc. State experience and what you think you can do and earn. Communications absolutely confidential. P-484, Eng. News-Record.

EXPERIENCED superintendent wanted for construction of concrete roads. Must be competent, able to furnish reference. If not experienced need not apply. State salary expected. Apply to T. J. Bartrug, Engineer, Hamlin, W. Va.

FIRST-CLASS bridge builder wanted. Man experienced in reading plans. To take charge of small but difficult work. Sutton & Corson Co., Ocean City, N. J.

FIRST-CLASS assistant superintendent wanted for water and sewer construction, grading and road building, who is a practical engineer. Sutton & Corson Co., Ocean City, N. J.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

MECHANICAL engineer and estimator wanted, high grade, preferably on steel products, experienced in layout and details of combined tank and structural work. By established manufacturing concern located in city near Texas oil fields. State salary expected and full particulars in first letter. P-413, Eng. News-Record, Chicago.

REINFORCED concrete engineer wanted in office of large firm of building contractors. Man to take charge of the designing, detailing and estimating. Must be familiar with all the modern methods of design. State age, education, salary and when available; give complete account of experience with description of buildings handled. P-517, Eng. News-Record, Philadelphia.

REINFORCED concrete designers and draftsmen for office of engineering contract concern, located in New York City. State qualifications, age, salary etc. P-588, Eng. News-Record

POSITIONS VACANT

SUPERINTENDENT of streets wanted in town near New York, experienced in the construction and maintenance of bituminous macadam streets and with ability to handle work, under the direct supervision of the town engineer. First-class equipment to work with. Salary $150 per month. P-572, Eng. News-Record.

SUPERINTENDENT wanted, small structural shop in Western New York. Must be thoroughly experienced in all branches of this work and capable of handling men to get 100% efficiency. Age, between 30 and 40 years preferred. No application will be considered without detail information as to experience and past record. Reference required. P-557, Eng. News-Record.

STRUCTURAL and plate draftsmen wanted. Must have experience in modern structural and plate shop drafting and practice. P-487, Eng. News-Record.

TECHNICAL engineer-draftsman wanted for mining department of large corporation. Young married man with mechanical mining qualifications preferred. Maintenance and efficiency work with mill experimentation and machine design. Parmanent location northeast. State briefly education, experience and initial salary expected. P-583, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age, nationality and salary expected. P-565, Eng. News-Record, Chicago.

WANTED on survey and street work, rodman pays $90.00 per month and chainman $75.00. This is on allotment work. Address Goodyear Heights Engineer, 1426 Sprague Street, Akron, Ohio, stating age, experience, references, etc.

YOUNG civil engineers, preferably college graduates, by large new structural steel fabricating plant. These men starting in at the bottom will be advanced as rapidly as the services they render will warrant. A splendid opportunity. Salary to start $100 per month. State age, whether married, education, and past experience, and give references. Birmingham Steel Corporation, Birmingham, Alabama.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

SALES MANAGER
FOR
CONCRETE MIXERS

having broad experience in organizing territory. Must be good correspondent. Desirable position for a man who can fill these requirements. References that will stand the most rigid investigation will be required. State age, experience, salary and references. Address

F. C. AUSTIN COMPANY, INC.
Railway Exchange Bldg., Chicago, Ill

District Manager

We want a high-grade man capable of taking charge of our Chicago District Office on either salary or commission or both. We have a very attractive proposition for the right man who must thoroughly understand the Contractors' Machinery business and come with a clear record and a reputation of having produced the business in whatever locality he has been or is now located.

We invite correspondence.

OSHKOSH MFG. COMPANY
Oshkosh, Wis.

OFFICIAL PROPOSALS

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA
Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.

Bids: March 6.

Road Improvements

Fairmont, W. Va.

Sealed bids will be received until 12:00 o'clock noon, Thursday, March 6, 1919, by the County Court of Marion County, West Virginia, for the construction of approximately six (6) miles of improved roads and streets in Grant District of said Marion County.

A certified check in the sum of Four Hundred Dollars must accompany each bid.

Successful bidders will be required to furnish a bond satisfactory to the County Court.

Plans and specifications for this work are on file in the County Clerk's office, Fairmont, West Virginia.

The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of Marion County.

OFFICIAL PROPOSALS

Bids: Feb. 11.

Boilers and Heating Work

Utica, N. Y.

Sealed proposals for new boilers and heating work, boilers and changes to central heating plant, Utica State Hospital, Utica, N. Y., will be reecived by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February 11, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3142 and 3143. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: January 22, 1919.

Bids: Feb. 24.

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough ofRumson for the permanent improvement of the Rumson Road, in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P. M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

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HARMON V. SWART
19 Liberty Street, New York

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of 30-in. cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.
MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: Feb 1..

Road Work

Tulsa, Okla.

Notice is hereby given that on the 17th day of February, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider the following Tulsa County State Roads.

Miles 1 To 6 Inclusive of Section "Y"
Miles 1 To 2 Inclusive of Section "I"

Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before Two (2) o'clock P.M., of the date above set out. Proposals to be accompanied with a certified check to an amount equal to approximately Ten (10%) per cent. of the sum total of the bid, drawn on a bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 20th day of January, 1919.
BOARD OF COUNTY COMMISSIONERS
OF TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: Feb. 11.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter, Changing Water Main and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February 11, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 2923, 2924 and 2925, and Addenda No. 1 dated January 20, 1919. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated
January 25, 1919.

Bids: Feb. 14.

Addition to State Armory

Malone, New York.

Sealed proposals for Addition to State Armory—Construction, Heating, Sanitary and Electric Work, Malone, N. Y., will be received by Capt. John A. Coffey, Secretary, State Board of Armory Commissioners, at No. 158 State St., Albany, N. Y., ntil 3 o'clock P.M. on Friday, February 14, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of contract, within thirty days (30) after official notice of award of contract, and in accordance with the terms of Specifications Nos. 3013, 3036, 3037 and 3038, and Addenda No. 1, dated January 27, 1919. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the State Armory, Malone, N. Y., at the Office of the State Board of Armory Commissioners, No. 158 State St., Albany, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 29, 1919.

OFFICIAL PROPOSALS

Bids: Feb. 21.

Furnishing Cast Iron Pipe and Special Castings

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS
IMPROVEMENT
City of Akron, Ohio.
CONTRACT NO. 130

Sealed proposals for Furnishing Cast Iron Pipe and Special Castings will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard time of Friday the twenty-first day of February, 1919, at which time and place they will be publicly opened and read.

The contract includes approximately 210 tons of 16" Class "C" pipe, 65 tons of 12" Class "C" pipe, 5 tons of 12" Class "B" pipe, 80 tons of 10" Class "B" pipe, 70 tons of 8" Class "C" pipe, 10 tons of 8" Class "B" pipe, 55 tons of 6" Class "C" pipe, and 75 tons of 6" Class "B" pipe, with about 15 tons of special castings.

All proposals must be made on the forms furnished by the City.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of Three Thousand Dollars ($3000.00). A surety bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill Street, Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: Feb. 20

Oiling

STATE OF MARYLAND, STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for oiling six sections of State Highways requiring approximately 1,270,664 gallons of oil, as follows:

Division	Miles	Gallons
No. 1—Dorchester, Somerset, Wicomico & Worcester Counties	37.95	69,103
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties	81.61	165,796
No. 3—Montgomery, (Part), Harford (Part), Pr. George & Charles Cos..	53.30	109,183
No. 4—Baltimore (Part), Harford & Anne Arundel (Part) Counties....	147.33	299,376
No. 5—Carroll, Frederick (Part), Howard (Part), Montgomery (Part) and Baltimore (Part) Counties.	147.89	300,939
No. 6—Garrett, Allegheny, Washington & Frederick (Part) Counties.......	161.65	326,262
	629.73	1,270,664

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of February, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications.

OFFICIAL PROPOSALS

Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 4th day of February, 1919.

CLYDE H. WILSON, Secretary.
FRANK H. ZOUCK, Chairman.

The right is reserved to increase or diminish the above quantities 10%.

Bids: Feb. 19.

Pipe and Appurtenant Works

Brunswick, Maryland.

Bids received at the office of the mayor and council, Brunswick, Maryland, until 4:30 P.M. February 19, 1919, for furnishing and placing about 26,000 feet of 4 inch to 10 inch wood stave pipe and 8 inch to 10 inch cast iron pipe, including the making of a river crossing and appurtenant work. Plans and specifications can be had at the office of Norton, Bird and Whitman, engineers, 1320 Munsey Building, Baltimore, Maryland, at a charge of $2.50 per set. EUGENE L. HARRISON, Mayor.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 noon, March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

POSITIONS VACANT

A CAPABLE ENGINEER, experienced in the design of reinforced concrete grain elevators and circular grain bins, is wanted at once by firm of architects and engineers in the West. State experience and salary desired. P-631, Eng. News-Record, Chicago.

CONTRACTOR'S superintendent — Must have broad experience in all branches of contracting. Write experience in detail. P-632, Eng. News-Record, Chicago.

POSITIONS VACANT

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

EXPERIENCED superintendent wanted for construction of concrete roads. Must be competent, able to furnish reference. If not experienced need not apply. State salary expected. Apply to T. J. Bartrug, Engineer, Hamlin, W. Va.

GENERAL contractor's office man—Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully. P-616, Eng. News-Record, Chicago.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

MECHANICAL engineer and estimator wanted, high grade, preferably on steel products, experienced in layout and details of combined tank and structural work. By established manufacturing concern located in city near Texas oil fields. State salary expected and full particulars in first letter. P-413, Eng. News-Record, Chicago.

SUPERINTENDENT of streets wanted in town near New York, experienced in the construction and maintenance of bituminous macadam streets and with ability to handle work, under the direct supervision of the town engineer. First-class equipment to work with. Salary $150 per month. P-572, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age nationality and salary expected. P-565, Eng. News-Record, Chicago.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

Applications Wanted for Highway Workers for Spring Work

We expect to need about March 1st men to fill the following positions:

- **Plant Asphalt Foremen.**
- **Grade Highway Foremen.**
- **Timekeeper for Highway Costs.**
- **High Grade Mechanical Repairmen.**
- **Concrete Foremen.**
- **Highway Road Work Superintendents.**
- **Cooks for Camps.**
- **Street Asphalt Foremen.**
- **Form setters.**
- **Bookkeepers for Highway costs.**
- **Truck Drivers for sand and gravel haul.**
- **Pump engineers for gas and steam.**
- **Sand and Gravel Bunker Foremen.**
- **Concrete Mixer engineers.**
- **Highway Concrete Finishers.**

Make applications to

KAISER PAVING COMPANY,
923 Joshua Green Building, Seattle, Wash.

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

- Positions Wanted
- Evening Work Wanted
- Vacation Work Wanted
- Tutoring
- Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

- Agencies Wanted
- Agents Wanted
- Business Opportunities
- Desk Room for Rent
- Educational
- Employment Agencies
- Desk Room Wanted
- Foreign Business
- Positions Vacant
- Partner Wanted
- Representations Wanted
- Salesmen Wanted
- Patents for Sale
- Plants for Sale
- Sub-Contracts Wanted
- Work Wanted

Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ad Set in Display Type

(Individual space, within border rules)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space in 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS. do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
935 Real Estate Trust Bldg.,	Philadelphia
657 Leader-News Bldg.,	Cleveland
1570 Old Colony Bldg.,	Chicago
519 Newhouse Bldg.,	Salt Lake City
501 Rialto Bldg.,	San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

POSITIONS VACANT

YOUNG civil engineers, preferably college graduates, by large new structural steel fabricating plant. These men starting in at the bottom will be advanced as rapidly as the services they render will warrant. A splendid opportunity. Salary to start $100 per month. State age, whether married, education, and past experience, and give references. Birmingham Steel Corporation, Birmingham, Alabama.

REINFORCED-CONCRETE contractor in Rocky Mountains wants executive head for construction department; following duties: Daily comparison between actual and estimated costs, development of cost datas, estimating new work, laying out time schedule for labor and material, laying out constructions, plans, keeping Records of tools and equipment. P-688, Eng. News-Record, 519 Newhouse Bldg., Salt Lake City.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

NATIONAL TEACHERS' AGENCY, 6017 Jenkins Arcade, Pittsburgh, Pa. Coöperates with subscribers seeking connections with schools colleges and universities, or with a view of finding some key position in special industries.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

NOW IS THE TIME

to arrange for a course in lettering. Unexampled opportunities for draftsmen. Best equipped man will get to top. Make a success of it by studying with me by mail.

C. W. Reinhardt, Arlington, N. J.
Perspectives, Maps, Commercial Drafting

Freehand Lettering

POSITIONS WANTED

Mechanical and Electrical

MECHANICAL engineer, graduate of a leading university, desires affiliation as a representative of an American company in England or France. Experience in England prior to the war; in France since September, 1917 as artillery officer. Familiar with status in these countries, and compatible with the people. Attended English and French schools; speaks French; 7 years' industrial experience. Age, 28 years. PW-570, Eng. News-Record, Chicago.

ELECTRICAL and mechanical engineer, specialized on industrial plant work; 25 years' experience installing, operating and repairing motors, generators, traveling cranes, elevators, air compressors, pyrometers and lighting; central station and blast-furnace experience; used to handling men and purchasing material; present salary, $2100. Open for position March 1 or earlier. PW-617, Eng. News-Record, Chicago.

POSITIONS WANTED

ARMY officer (captain), 1½ years' foreign service, Coast Artillery, discharged. Graduate M. E. Cornell. 7 years' experience mechanical and industrial engineering. Age, 28. Desires to locate in Chicago or Middle West. PW-569, Eng. News-Record, Chicago.

MECHANICAL engineer, 33, technical education; six years in manufacture and installation of fireproof and safety appliances; one year reinforced concrete; three years manufacturing cranes, derricks and hoisting machinery, chief engineer two years. Thirteen years' concurrent experience in care of automobile, marine and stationary gas engines. Desires responsible position with modern plant in South or Middle West. PW-509, Eng. News-Record.

STRUCTURAL and reinforced concrete engineer desires responsible position. 17 years' experience. Now assistant bridge engineer for large railroad. Salary $300 per month. PW-507, Eng. News-Record.

STUDY BY MAIL

Reinforced Concrete Engineering
Structural Steel Designing
Structural Drafting

Are you able to design and estimate the cost of any and all types of structures in Reinforced Concrete, Steel or Wood? And are your designs safe, economical and up to the minute? If not, WHY NOT?

Special courses of HOME STUDY have been arranged by well known engineer with 30 years' experience in this country and abroad; they are meeting a long felt want.

Men with a High School education are as qualified to take up these courses of work as are technical graduates. Ideal work for the man who wants to "brush up" after being away.

These are courses in experience. You learn to do the work by *actually doing it.* A chance for the ambitious man to get ahead.

Descriptive literature sent free upon request. Write for it today.

M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of 30-in. cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.

MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: March 6.

Road Improvements

Fairmont, W. Va.

Sealed bids will be received until 12:00 o'clock noon, Thursday, March 6, 1919, by the County Court of Marion County, West Virginia, for the construction of approximately six (6) miles of improved roads and streets in Grant District of said Marion County.

A certified check in the sum of Four Hundred Dollars must accompany each bid.

Successful bidders will be required to furnish a bond satisfactory to the County Court.

Plans and specifications for this work are on file in the County Clerk's office, Fairmont, West Virginia.

The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of Marion
County.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

Bids: Feb. 20

Oiling

STATE OF MARYLAND, STATE ROADS
COMMISSION

Baltimore, Maryland.

Sealed proposals for oiling six sections of State Highways requiring approximately 1,270,664 gallons of oil, as follows:

Division	Miles	Gallons
No. 1—Dorchester, Somerset, Wicomico & Worcester Counties	37.95	69,103
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties	81.61	165,796
No. 3—Montgomery, (Part), Howard (Part), Pr. George & Charles Cos..	53.30	109,188
No. 4—Baltimore (Part), Harford & Anne Arundel (Part) Counties....	147.33	239,376
No. 5—Carroll, Frederick (Part), Howard (Part), Montgomery (Part) and Baltimore (Part) Counties.	147.89	300,939
No. 6—Garrett, Allegheny, Washington & Frederick (Part) Counties.......	161.65	326,262
	629.73	1,270,664

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of February, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 4th day of February, 1919.

CLYDE H. WILSON, Secretary.
FRANK H. ZOUCK, Chairman.

The right is reserved to increase or diminish the above quantities 10%.

Bids: Feb. 24

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Water Works Extensions

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m. on the 18th day of February, A. D. 1919, for the furnishing of all labor and material and constructing water works extensions in the City of Bayard, in accordance with plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

Engineer's estimate of cost, $22,750.

Some of the approximate quantities are as follows:

7540 lin.ft. of 4-in., Class "B," cast iron water mains.

2800 lin.ft. of 6-in., Class "B," cast iron water mains.

155 lin.ft. of 8-in., Class "B," cast iron water mains.

2810 lb. of cast iron specials.

Eleven fire hydrants.

Thirteen 4-in. double gate valves and boxes.

Seven 6-in. double gate valves and boxes.

One 8-in. double gate valve and boxes.

One 14-in. well, cased, approximate depth, 72 feet.

One centrifugal pump direct connected to motor, including fittings, wiring, piping and all appliances and appurtenances, concrete pump pit for installation of pumping machinery.

Plans and specifications and form of proposal and contract may be had at the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Scottsbluff, Nebraska, by depositing five dollars ($5), which will be refunded upon the receipt of a bona fide bid, accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for $1200, made payable to the City of Bayard, the same to be retained by the City as liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, A. D. 1919, at the office of the City Clerk, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

ORIN J. LATHROP,
City Clerk, Bayard, Neb.

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.

Feb. 7, 1919.

OFFICIAL PROPOSALS

Bids: March 4.

Heating, Plumbing and Electric Work

Thiells, N. Y.

Sealed proposals for addition to Central Heating plant; construction work; chimney; boiler and stoker equipment; steam and heating plant equipment; heating work (extension of Underground distributing piping); plumbing and drainage, and electric work, at Letchworth Village, Thiells, N. Y., will be received by Hon. Frank A. Vanderlip, President Board of Managers of Letchworth Village, No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3169, 3170, 3112, 3113, 3114, 3165 and 3166. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at Letchworth Village, Thiells, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blanks forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

February 4, 1919.

Bids: Feb. 18.

Sewer Main

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m., on the 18th day of February, 1919, for the furnishing of all labor and material and constructing a sewer main in the City of Bayard, in accordance with plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

Engineer's estimate of cost, $7901.

The approximate quantities are as follows:

2798 lin.ft. of 15 in. V. C. pipe sewer.

Twenty 6-in. "Y's" on 15 in. sewer.

Ten manholes averaging 5.14 vertical feet.

6.73 cu.yd. of concrete.

Plans and specifications, form of contract, and proposal blanks may be had in the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska, by depositing five dollars for same; said sum will be returned upon the receipt of a bona fide bid accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for $500, made payable to the City of Bayard, the same to be retained by the City as liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, 1919, at the City Hall, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

O. J. LATHROP,
City Clerk, Bayard, Neb.

OFFICIAL PROPOSALS

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough ofRumson for the permanent improvement of the Rumson Road in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P. M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 19.

Pipe and Appurtenant Works

Brunswick, Maryland.

Bids received at the office of the mayor and council, Brunswick, Maryland, until 4:30 P.M. February 19, 1919, for furnishing and placing about 26,000 feet of 4 inch to 10 inch wood stave pipe and 8 inch to 10 inch cast iron pipe, including the making of a river crossing and appurtenant work. Plans and specifications can be had at the office of Norton, Bird and Whitman, engineers, 1320 Munsey Building, Baltimore, Maryland, at a charge of $2.50 per set. EUGENE L. HARRISON, Mayor.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 noon, March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSAL FOR DREDGING. U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Lateral Sewers

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m. on the 18th day of February, 1919, for the furnishing of all labor and material and constructing of lateral sewers in the City of Bayard, in accordance with the plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

The approximate quantities are as follows:

4418 lin.ft. of 10 in. pipe sewer.
15,935 lin.ft. of 8 in. pipe sewer.
167 6-in. "Y's" on 10 in. sewer.
468 6-in. "Y's" on 8 in. sewer.
Fifty-one manholes averaging 7 vertical feet.
Six flush tanks ageraging 6.63 vertical feet.
388 lin.ft. of ½-in. water pipe for flush tank connections.

Plans and specifications, form of contract and proposal blanks may be had at the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska, by depositing five dollars ($5) for same; said sum will be returned upon the receipt of a bona fide bid accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for fifteen hundred dollars ($1500), made payable to the City of Bayard the same to be retained by the City of Bayardas liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, 1919, at the City Hall, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

O. J. LATHROP,
City Clerk, Bayard, Neb.

Bids: March 7.

Concrete Paving

Eldorado, Ill.

Bids will be received by the City Clerk until 2 P.M., Friday, March 7, 1919, for approximately 11,429 sq.yd. of concrete paving, together with the necessary grading, storm sewers, pipe inlets, brick manholes, etc.

Plans and specifications may be seen at the office of the City Clerk, and obtained from the engineer upon receipt of $5, which will be returned upon return of plans and specifications.

PERCY T. CHOISSER, City Clerk,
Eldorado, Ill.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg.,
St. Louis, Mo.

PROPOSALS will be received by the Navy Department at U. S. Coast Guard Headquarters, Washington, D. C., until 2 P.M., Wednesday, March 12, 1919, and publicly opened immediately thereafter, for the construction of a boathouse and accessories at Coast Guard Station No. 233, (Charlotte), Charlotte, New York. Blank proposals, specifications, and other information will be furnished upon application to the Superintendent, Tenth District, Coast Guard, Buffalo, New York; Keeper, Coast Guard Station No. 233, Charlotte, New York, or to U. S. Coast Guard Headquarters, Washington, D. C. Proposals should be inclosed in sealed envelope and marked "Proposal for boathouse and accessories U. S. Coast Guard Station No. 233, Charlotte, New York, to be opened 2 P.M., March 12, 1919." Addressed to the Commodore Commandant, U. S. Coast Guard Headquarters, Bond Building, Washington, D. C. E. P. BERTHOLF, Commodore Commandant.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Turbo-Centrifugal Feed Water Pumps

DEPARTMENT OF PUBLIC SERVICE,
BUREAU OF WATER WORKS
IMPROVEMENT,
CITY OF AKRON, OHIO
Contract No. 129.

Akron, Ohio.

Sealed bids for furnishing Turbo-centrifugal Feed Water Pumps will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock Noon, Central Standard time of Friday, the twenty-eighth day of February, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of two horizontal steam turbine driven, direct connected, centrifugal boiler feed water pumps, normal capacity 65 to 75 G. P. M. against a total head of 462 ft. Steam to be supplied at approximately 175 lb. pressure and 100 degrees F. superheat.

All proposals must be made on the blank forms furnished by the city; each proposal must be accompanied by a certified check on some solvent bank in the amount of $200.

A satisfactory bond in the sum of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

The specifications and the proposal, contract and bond forms may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 East Mill Street, Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: Feb. 25.

Tile Floor Construction

Albany, N. Y.

Sealed proposals for tile floors and base—The Pines Building (new floor construction), Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 12 M., Tuesday, February 25, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of Specification No. 3154. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

January 14, 1919.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Norfolk, Va.—Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging anchorage and 40-foot channel, and constructing bulkhead. Further information on application.

OFFICIAL PROPOSALS

Bids: March 3.

Annual City Supplies

Hamilton, Ont.

Sealed tenders will be received by the undersigned, addressed to Charles G. Booker, Esq., Mayor; Chairman Board of Control, City Hall, Hamilton, Ont., up to 5 o'clock P.M. on Monday, March 3, 1919, for supplying the Corporation of the City of Hamilton with the following:

Broken stone and screenings, limestone dust, asphalt, asphalt sand, sand and gravel, vitrified brick, creosoted wooden blocks, lumber, sewer pipe, sewer brick, lime, castings (ordinary and special), iron pipe, hydrants, valves, extension boxes, hardware, lead pipe, pig lead, road oil, lubricating oil, flux, fuel oil, gasoline, concrete and garbage duck covers, rubber boots, rubber hose, bass brooms, sectional sweepers, brass work, including ordinary and special brass and bronze castings for water department.

Tenders to be on forms supplied, and plainly marked on the outside "Tender for Asphalt," or as the case may be.

Specifications and form of tender for all of the above can be obtained at the office of the City Engineer, Hamilton, Ontario.

A marked check for 10% of the amount of the tender (unless otherwise stated in Specifications), payable to W. R. Leckie, City Treasurer, must accompany each tender, which will be forfeited should the tenderer and his sureties fail to execute contract within four days after notice of

The lowest or any tender not necessarily acceptance by the City.
accepted.

S. H. KENT,
City Clerk.

Hamilton, January 30, 1919.

Bids: Feb. 26.

Electric Distribution Systems

South Boston, Mass.

Sealed bids or proposals for electric distribution systems, at Dry Dock, South Boston, will be received by the Commission on Waterways and Public Lands at its office, Room 473, State House, Boston, until 12 o'clock noon on Wednesday, February 26, 1919. The work to be done is the furnishing and installing complete and ready for operation electric distribution systems for electric power and lighting (including large lead sheathed copper cables and junction boxes for power, and small transformers, conduits, wiring, fixtures, etc., for interior lighting in the pump house) at the Dry Dock which the Commonwealth is constructing at South Boston.

All proposals must be made upon blank forms which may be obtained at the office of the Commission, where plans and specifications and other information relating to the work may be secured. Each bidder will be required to give to the Commission satisfactory assurance of his competency, experience and responsibility. The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Commission.

JOHN N. COLE, Chairman.
JESSE B. BAXTER, Commissioners.
WILLIAM S. McNARY,
FRANK W. HODGDON,
Engineer.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS
NOTICE TO CONTRACTORS
Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

OFFICIAL PROPOSALS

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

POSITIONS VACANT

AN engineer or architect wanted, preferably with acquaintance in New York and Boston, who is experienced in concrete design and testing, to take charge of and develop this branch of the office of a firm of consulting engineers of national reputation. Income to be entirely dependent on ability to obtain and hold clientage. -711, Eng. News-Record.

CONTRACTOR'S superintendent — Must have broad experience in all branches of contracting. Write experience in detail. P-632, Eng. News-Record, Chicago.

DRAFTSMAN wanted for map work, good at plain lettering. One who can do computing preferred. Near New York. State particulars and salary considered. P-701, Eng. News-Record.

EXPERIENCED men for road work wanted. Superintendent; foremen; time-keepers; roller men and crusher men; good wages assured; men must have not less than five years' experience. Rosoff Engineering Co., Park Row Building, N. Y. C.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

POSITIONS VACANT

GENERAL contractor's office man—Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully. P-616, Eng. News-Record, Chicago.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age, nationality and salary expected. P-565, Eng. News-Record, Chicago.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ARMY officer (captain), 1½ years' foreign service, Coast Artillery, discharged. Graduate M. E. Cornell. 7 years' experience mechanical and industrial engineering. Age, 28. Desires to locate in Chicago or Middle West. PW-569, Eng. News-Record, Chicago.

ELECTRICAL and mechanical engineer, specialized on industrial plant work; 25 years' experience installing, operating and repairing motors, generators, traveling cranes, elevators, air compressors, pyrometers and lighting; central station and blast-furnace experience; used to handling men and purchasing material; present salary, $2100. Open for position March 1 or earlier. PW-617, Eng. News-Record, Chicago.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

Contractors!

New construction work is about to start up. Establish your bonding connections on a firm basis—NOW.

"IT CAN BE DONE"

I offer you a highly specialized *"Engineering Insurance Service"* in securing

Your Contract Bonds

No Extra Charge ***Try Me Out***

HARMON V. SWART, 19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS
Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON.
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA. February 8th, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Monday, March 3rd, 1919, for grading and improving streets, roads, and avenues in the District of Columbia. Blank forms of proposals, specifications, and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA. February 8th, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511 District Building, until 2 o'clock P.M., Monday, March 3rd. 1919, for laying cement sidewalks in the District of Columbia. Forms of proposals. specifications, together with necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

OFFICIAL PROPOSALS

Bids: March 4.

Heating, Plumbing and Electric Work

Thiells, N. Y.

Sealed proposals for addition to Central Heating plant; construction work; chimney; boiler and stoker equipment; steam and heating plant equipment; heating work (extension of Underground distributing piping); plumbing and drainage, and electric work, at Letchworth Village, Thiells, N. Y., will be received by Hon. Frank A. Vanderlip, President Board of Managers of Letchworth Village, No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3169, 3170, 3112, 3113, 3114, 3165 and 3166. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at Letchworth Village, Thiells, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blanks forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

February 4, 1919.

Bids: March 1.

Sewerage System

Phillipsburg, N. J.

Sealed proposals for the construction of the sewerage system will be received by the Board of Commissioners of the Town of Phillipsburg, New Jersey, until 1 P.M., Monday, March 3, 1919.

The work consists of Contract III—Collecting Trunk Sewer:

1287 ft. 20-in. vitrified pipe sewer.
3014 ft. 24-in. vitrified pipe sewer.
351 ft. 27-in. vitrified pipe sewer.
24 manholes.

Contract V—South Main Street Storm Sewer:

171 ft. 18-in. vitrified pipe sewer.
963 ft. 22-in. vitrified pipe sewer.
409 ft. 24-in. vitrified pipe sewer.
8 manholes.

A certified check drawn to the order of James L. Lomerson, Treasurer, in the sum of one thousand dollars ($1000), must accompany each proposal, to be held as liquidated damages. Plans, profiles, specifications, blank forms of proposals, and all other information may be obtained at the office of the Town Engineer. The Board reserves the right to reject any part of any proposal, or any and all proposals.

C. E. TILTON, Town Engineer.

February 10, 1919.

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of 30-in. cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.
MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA

Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 9.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.
J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 4.

Dining Room Accommodations

Ward's Island, N. Y.

Sealed proposals for dining room accomodations for patients in main building, construction work; heating, sanitary and electric work, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3124, 3132, 3133 and 3134. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: February 4, 1919.

Bids: Feb. 24.

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va

PROPOSALS will be received by the Navy Department at U. S. Coast Guard Headquarters, Washington, D. C., until 2 P.M., Wednesday, March 12, 1919, and publicly opened immediately thereafter, for the construction of a boathouse and accessories at Coast Guard Station No. 233, (Charlotte), Charlotte, New York. Blank proposals, specifications, and other information will be furnished upon application to the Superintendent, Tenth District, Coast Guard, Buffalo, New York; Keeper, Coast Guard Station No. 233, Charlotte, New York, or to U. S. Coast Guard Headquarters, Washington, D. C. Proposals should be inclosed in sealed envelope and marked "Proposal for boathouse and accessories U. S. Coast Guard Station No. 233, Charlotte, New York, to be opened 2 P.M., March 12, 1919." Addressed to the Commodore Commandant, U. S. Coast Guard Headquarters, Bond Building, Washington, D. C. E. P. BERTHOLF, Commodore Commandant.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed **"Proposal for Water Main** Under Hackensack and Passaic Rivers," directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

Dated: City Clerk's Office,
FRANK A. DOLAN, City Clerk.
Jersey City, January 24, 1919.

Bids: March 6.

City Supplies

City of London, Ontario.

Sealed tenders addressed to the "Chairman and Members, No. 2 Committee" will be received at the office of the City Clerk up to 12 Noon on Thursday, the 6th day of March, 1919, for the following supplies:

Refined asphalt,
Road oil,
Portland cement,
Limestone dust filler,
Broken stone,
Vitrified and land tile,
Concrete tile,
Iron castings,
Lumber,
Gravel and screenings.

Specifications and form of tender may be obtained at the office of the City Engineer.

Tenders to be accompanied by a marked check or a cash deposit as stated in the Specification.

Lowest or any tender not necessarily accepted.

C. R. SOMERVILLE,
Mayor.
H. A. BRAZIER,
City Engineer.
O. G. KEENE,
Chairman No. 2 Committee.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 25.

Tile Floor Construction

Albany, N. Y.

Sealed proposals for tile floors and base—The Pines Building (new floor construction), Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 12 M., Tuesday, February 25, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of Specification No. 3154. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

January 14, 1919.

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.
Feb. 7, 1919.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

OFFICIAL PROPOSALS

Bids: March 7.

Furnishing Cutting-in Sleeves and Valves

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS
IMPROVEMENT
CITY OF AKRON, OHIO
CONTRACT NO. 133

Akron, Ohio.

Sealed bids or proposals for furnishing Cutting-in Sleeves and Valves will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time, of Friday, the seventh day of March, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of about 138 tee sleeves and valves varying in size from 4 in. x 4 in. to 30 in. x 24 in.; also one tapping machine complete with cutters for making 10 in., 12 in., 16 in. and 20 in. taps into water mains under pressure.

All proposals must be made on the forms furnished by the city.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of one thousand dollars ($1000). A surety bond in the sum of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: March 20.

Wooden Bridge

Springfield, Mass.

Sealed proposals will be received by the Board of Supervisors of the Department of Streets and Engineering, Springfield, Mass., at the office of the City Clerk until 12 M., March 20, 1919, for furnishing falsework and labor for removing three 180-ft. spans of the Old Toll Bridge, a timber structure across the Connecticut River between Springfield and West Springfield and for erecting the superstructure of a new bridge with six 90-ft. wooden lattice truss spans in place thereof.

Plans, specifications, proposal and contract forms may be obtained from the Superintendent of Streets and Engineering, Springfield, Mass.

ROBERT P. MARSH,
Supt. of Streets and Engineering.
Feb. 17, 1919.

Bids: March 7.

Concrete Paving

Eldorado, Ill.

Bids will be received by the City Clerk until 2 P.M., Friday, March 7, 1919, for approximately 11,429 sq.yd. of concrete paving, together with the necessary grading, storm sewers, pipe inlets, brick manholes, etc.

Plans and specifications may be seen at the office of the City Clerk, and obtained from the engineer upon receipt of $5, which will be returned upon return of plans and specifications.

PERCY T. CHOISSER, City Clerk,
Eldorado, Ill.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg.,
St. Louis, Mo.

OFFICIAL PROPOSALS

Bids: March 4.

Construction, Heating, Etc.

Utica, N. Y.

Sealed proposals for mortuary and laboratory, construction, heating, plumbing and electric work, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3153, 3155, 3156 and 3157. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 10, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

OFFICIAL PROPOSALS

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE
Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amount equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART,
County Auditor.

Dated: February 11, 1919.

Bids: March 22.

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

Bids: March 10.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

WHICH GETS THE BEST PRICE?

ONE BID OR MANY

One bidder
usually
buys
at a sale price.

:

A number of bidders
enables the seller
to get
full market value.

When you have Second Hand Equipment to sell you want *all the bidders possible.*

Advertising secures more bidders.

An advertisement in *one* issue may make a sale possible but—to sell at the *best* price you must have a choice among a *number* of buyers.

A *number* of insertions will get them for you.

***BE SURE**—advertise your equipment until it is sold. Advertise it in the SEARCHLIGHT SECTION to get the **most** bidders.*

0010

OFFICIAL PROPOSALS

Bids: March 15.

Steel Deck Plate Girder Railroad Bridge

Charleston, Miss.

Bids will be received until March 15, 1919, for furnishing all labor, construction plant and all equipment for the complete erection of the sub- and super-structure of a steel railroad bridge for the Lamb-Fish Lumber Company, Charleston, Miss., across the Tallahatchie River, seven miles westerly of Charleston, Tallahatchie County, Mississippi.

The bridge will consist of three deck plate girder spans, forty, seventy-four and sixty-one feet in length, the central 74-ft. span being a vertical lift span of the "Waddell" type. The spans will be carried on four concrete piers, pedestals of which will rest on wooden piles. Approximate quantities are as follows:

Concrete in piers bases	420 cu.yd.
Piles below bases of piers	2750 lin.ft.
Concrete in piers shafts	500 cu.yd.
Structural steel	130 tons
Machinery	14 tons
Rails and fastenings	8000 lb.
Timber in deck	37 M.ft.

All materials will be delivered to the contractor f.o.b. cars at the bridge site. The bridge approaches will not be included in the contract.

The present contract form and specifications are prepared on a fixed cost plus fixed profit basis, wherein the bidder states his estimated cost and profit, and if he under runs his estimate of cost he receives bonus, where as if he over runs he loses part of his profit, but proposals and bids based on a "lump sum contract" will be also carefully considered.

Each bid is to be accompanied by a certified check for one thousand dollars payable to the Lamb-Fish Lumber Company. The right is reserved to reject any and all bids.

Plans and specifications can be obtained from

LAMB-FISH LUMBER COMPANY,
VICTOR K. WAGNER, Civil Engineer,
Charleston, Mississippi.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

S. S. Johnson & Bro.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: March 5.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of state highway 2.04 miles in length located upon the Boston Neck Road in the towns of North Kingstown and Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. on Wednesday, March 5, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation	7000 cu.yds.
Stone Fill Foundation	1450 cu.yds.
Gravel Foundation	7875 cu.yds.
Crushed Stone	7000 tons
Hauling, heating and applying bituminous binder (Penetration Method)	60000 gallons

Bids msut be made upon blank forms to be furnished by the Board. No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, February 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUEREN
J. HENRY WOODARD

Sink Well

Illinois.

Desire to sink well about 18 ft. diameter through top soil, sand and gravel with streaks of blue clay to depth of 45 ft. to water bearing strata.

Correspondence invited from contractors with experience along this line. Address FW-751, Engineering News-Record.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 28.

State Road Work

Connecticut.

SEALED PROPOSALS will be received by the State Highway Commissioner, Fourth Floor, West End, State Capitol, Hartford, Connecticut, until 2 P.M., Friday, February 28, 1919 for the following sections of State work in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWNS OF AVON AND FARMINGTON: About 9938 linear feet of Native Stone on the River Road. Plans and specifications with R. W. Stevens, Division Engineer, 408 Main Street, Hartford, Conn.

TOWN OF GROTON: About 13,933 linear feet of Concrete Road(native stone to be used) on the Groton-Poquonoc Bridge Road Ulans and specifications at office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF NORTH CANAAN: A three span reinforced concrete "T" Beam Bridge over Blackberry River on the Canaan-Lakeville Road. Plans and specifications at office of R. S. Hulbert, Division Engineer, Station A, Winsted, Conn.

TOWN OF NORTH HAVEN: About 2930 linear feet of Native stone Macadam on the Clintonville-Northford Road. Plans and specifications at Town Clerk's office.

TOWN OF STRATFORD: About 7300 linear feet of Hassam, Concrete, Warrentite Topeka, or Asphalt on Barnum Ave. No plans. Specifications at office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

TOWNS OF THOMASTON AND WATERTOWN: A reinforced concrete "T" Beam Bridge over Branch of Naugatuck River on the Morris Road. Plans and specifications at office of Thomaston Selectmen and at office of Watertown Selectment.

TOWNS OF WATERBURY AND THOMASTON: About 7258 linear feet of concrete or Topeka over 6" concrete base on the Waterbury-Thomaston Road. Specifications at office of E. C. Welden, Division Engineer, Chember of Commerce Bldg., New Haven Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one- third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut,
February 17, 1919.

C. J. BENNETT,
STATE HIGHWAY COMMISSIONER,
FOURTH FLOOR, WEST END, CAPITOL,
HARTFORD, CONN.

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., Feb. 12, 1919.—Sealed proposals will be received at the office of the Secretary of Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Thursday, March 6, 1919, for paving various streets and avenues in the District of Columbia with sheet asphalt. Forms of Proposal, Specifications, together with necessary information, may be obtained from the Chief Clerk, of the Engineer Department, Room 427, District Building. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners, D. C.

U. S. ENGINEER OFFICE, SEATTLE, WASH.—Sealed proposals for construction of bank revetment and jetties, and for dredging Nome Harbor, Alaska, will be received at this office and at the office of the District Judge, Nome, Alaska, until noon on March 15, 1919, and then opened. Information on application.

Contractors—this is for you!
What is Engineering Contract Bond Service?
Why is it a better service for you?
Find out—Get in touch with me
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Swart Service Really Serves
Phone, Wire or Write
HARMON V. SWART
19 Liberty Street, New York City

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

Over 4,000 Official Proposals

have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

One Dominant Paper

This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

0052

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS

Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON.
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: March 22.

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

U. S. ENGINEER OFFICE, SEATTLE, WASH.—Sealed proposals for construction of bank revetment and jetties, and for dredging Nome Harbor, Alaska, will be received at this office and at the office of the District Judge, Nome, Alaska, until noon on March 15, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: March 15.

Steel Deck Plate Girder Railroad Bridge

Charleston, Miss.

Bids will be received until March 15, 1919, for furnishing all labor, construction plant and all equipment for the complete erection of the sub- and super-structure of a steel railroad bridge for the Lamb-Fish Lumber Company, Charleston, Miss., across the Tallahatchie River, seven miles westerly of Charleston, Tallahatchie County, Mississippi.

The bridge will consist of three deck plate girder spans, forty, seventy-four and sixty-one feet in length, the central 74-ft. span being a vertical lift span of the "Waddell" type. The spans will be carried on four concrete piers, pedestals of which will rest on wooden piles. Approximate quantities are as follows:

Concrete in piers bases	420 cu.yd.
Piles below bases of piers	2750 lin.ft.
Concrete in piers shafts	500 cu.yd.
Structural steel	130 tons
Machinery	14 tons
Rails and fastenings	8000 lb.
Timber in deck	37 M.ft.

All materials will be delivered to the contractor f.o.b. cars at the bridge site. The bridge approaches will not be included in the contract.

The present contract form and specifications are prepared on a fixed cost plus fixed profit basis, wherein the bidder states his estimated cost and profit, and if he under runs his estimate of cost he receives bonus, where as if he over runs he loses part of his profit, but proposals and bids based on a "lump sum contract" will be also carefully considered.

Each bid is to be accompanied by a certified check for one thousand dollars payable to the Lamb-Fish Lumber Company. The right is reserved to reject any and all bids.

Plans and specifications can be obtained from

LAMB-FISH LUMBER COMPANY.
VICTOR K. WAGNER, Civil Engineer,
Charleston, Mississippi.

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE
Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amount equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART, County Auditor.
Dated: February 11, 1919.

OFFICIAL PROPOSALS

Bids: March 5.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of state highway 2.04 miles in length located upon the Boston Neck Road in the towns of North Kingstown and Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. on Wednesday, March 5, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation	7000 cu.yds.
Stone Fill Foundation	1450 cu.yds.
Gravel Foundation	7875 cu.yds.
Crushed Stone	7000 tons
Hauling, heating and applying bituminous binder (Penetration Method)	60000 gallons

Bids msut be made upon blank forms to be furnished by the Board. No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, February 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUEREN
J. HENRY WOODARD

Bids: March 20.

Wooden Bridge

Springfield, Mass.

Sealed proposals will be received by the Board of Supervisors of the Department of Streets and Engineering, Springfield, Mass., at the office of the City Clerk until 12 M., March 20, 1919, for furnishing falsework and labor for removing three 180-ft. spans of the Old Toll Bridge, a timber structure across the Connecticut River between Springfield and West Springfield and for erecting the superstructure of a new bridge with six 90-ft. wooden lattice truss spans in place thereof.

Plans, specifications, proposal and contract forms may be obtained from the Superintendent of Streets and Engineering, Springfield, Mass.

ROBERT P. MARSH,
Supt. of Streets and Engineering.
Feb. 17, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

OFFICIAL PROPOSALS

Bids: March 25.

Steel Pipe and Appurtenances

Jersey City, N. J.

Sealed proposals for furnishing and laying, complete, 34,590 ft. of 72-in. rivetted steel pipe and appurtenances, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, March 25, 1919, at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal forms, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

he Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: Feb. 18, 1919.

Bids: March 5.

Gravity Water Line

City of Winston-Salem, N. C.

Sealed proposals for the ditching and laying of 10,400 ft. of 30-in. wood stave pipe will be received by the City of Winston-Salem up to 4 o'clock P.M., of the fifth day of March, 1919. Proposals to be addressed to Commissioner of Public Works, and endorsed "Proposals for Water Line."

Plans may be seen and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any and all bids.

JOSEPH FIRTH,
Commissioner of Public Works.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: March 4.

Construction, Heating, Etc.

Utica, N. Y.

Sealed proposals for mortuary and laboratory, construction, heating, plumbing and electric work, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany N. Y., until 3 o'clock P.M. on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3153, 3155, 3156 and 3157. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 10, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: March 1.

Sewerage System

Phillipsburg, N. J.

Sealed proposals for the construction of the sewerage system will be received by the Board of Commissioners of the Town of Phillipsburg, New Jersey, until 1 P.M., Monday, March 3, 1919.

The work consists of Contract III—Collecting Trunk Sewer:

1287 ft. 20-in. vitrified pipe sewer.
3014 ft. 24-in. vitrified pipe sewer.
351 ft. 27-in. vitrified pipe sewer.
24 manholes.

Contract V—South Main Street Storm Sewer:

171 ft. 18-in. vitrified pipe sewer.
963 ft. 22-in. vitrified pipe sewer.
409 ft. 24-in. vitrified pipe sewer.
8 manholes.

A certified check drawn to the order of James L. Lomerson, Treasurer, in the sum of one thousand dollars ($1000), must accompany each proposal, to be held as liquidated damages. Plans, profiles, specifications, blank forms of proposals, and all other information may be obtained at the office of the Town Engineer. The Board reserves the right to reject any part of any proposal, or any and all proposals.

C. E. TILTON, Town Engineer.
February 10, 1919.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, anl then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: March 10.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road, in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

Bids: March 4.

Road Improvement

West Virginia.

Sealed proposals for the improvement of the following roads addressed to the county court of Hancock county, West Virginia, will be received by the undersigned until 1 P.M., March 4, 1919:

Section A—Of Federal Aid Project. No. 22, $\frac{3}{10}$ mile.

Section B—Of Federal Aid Project. No. 22, 75/100 mile. To be paved with brick on concrete base 9 ft. wide.

Section 2—Lawrenceville Road. Grant district, 1 mile.

Section 3—Chester-Pughtown Road. Grant district, 1 mile.

Section 2—Harden's Run Road. Clay district, ½ mile.

Section 3—Ewing Run Road. Clay district, ½ mile.

To be paved with brick or concrete 9 ft. wide.

Plans and specifications may be seen at the office of the County Clerk and of the Federal Aid Project at the office of the State Road Commission, Charleston, W. Va. Proposals shall be submitted on blank forms to be provided by the undersigned and shall be accompanied by a certified check for $500 for each proposal. The right is reserved to reject any or all bids.

R. R. HOBBS,
County Clerk,
New Cumberland, W. Va.

OFFICIAL PROPOSALS

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.

Feb. 7, 1919.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

Bids: March 18.

Grading Boulevard

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners of Kansas City, Missouri, up to 2 o'clock March 18th, 1919, at their office, for the grading of Van Brunt Boulevard from the north line of Van Brunt Boulevard along 12th Street, to the north line of Linwood Boulevard. Deposit in the sum of $1500.00, cash or certified check made payable to the City Comptroller, will be required with each bid. Plans, specifications and form of contract can be seen at the office of the Board. The Board reserves the right to reject any or all proposals, and contract may be let to the lowest and best bidder. Additional information furnished upon application to T. C. Harrington, Secretary.

OFFICIAL PROPOSALS

Bids: March 19.

Filtration Plant

CONTRACT 27

Hartford, Conn.

Sealed proposals, addressed to the Board of Water Commissioners of the City of Hartford, will be received at the office of the Board, Municipal Building, Hartford, until 12 M., Wednesday, March 19, 1919, for the construction of eight concrete-covered filter beds an aerator and connecting pipe lines.

Plans and specifications may be obtained after March 5 at the office of the Manager and Chief Engineer, on deposit of $10 which will be refunded on the return, in good condition, of both plans and specifications. Specifications used in making a bid will be considered as returned. Prior to March 5 plans may be seen at the office of the Manager and Chief Engineer and the site of the work visited.

A certified check or cashier's check for $25,000 must accompany each bid and the successful bidder will be required to furnish bonds in the sum of $400,000.

The right is reserved to reject any and all bids.

BOARD OF WATER COMMISSIONERS
FRANK E. HOWARD, President.
FRED D. BERRY, Secretary.
CALEB MILLS SAVILLE,
Manager and Chief Engineer,
Pilgard Building, 1026 Main Street,
Hartford, Conn.

Bids: March 10.

Sanitary Sewers

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, N. C., for the construction of vitrified pipe sanitary sewers, until 3:00 o'clock P.M., March 10, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

The work consists of the following:

Alston Ave. Outfall....	11,159 feet—	12 inch
Alston Ave. Outfall....	936 feet—	8 inch
Main, Morris, Watkins and Spring Streets...	2,760 feet—	8 inch
Main Street House Connections	8,400 feet—	6 inch
Neuse River Outfall...	12,100 feet—	24 inch

Plans and specifications of the proposed work may be had at the office of the City Engineer between the hours of 9:00 A.M. and 5:00 P.M., from February 18th, 1919, to March 10th, 1919.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODARD, City Clerk.
J. L. MOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

Bids: March 14.

Electric Fixtures

Hudson, N. Y.

Sealed proposals for electric work—additional lights, cottages 5, 7 and 10—installing electric fixtures, New York State Training School for Girls, Hudson, N. Y., will be received by Mrs. Annie Winsor Allen, President of the Board of Managers, New York State Training School for Girls, Hudson, N. Y., until 5 o'clock P.M., on Friday, March 14, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3171. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State Training School for Girls, Hudson, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 17, 1919.

Bids: March 12.

Paving

OFFICE OF THE PAVING COMMISSION

Baltimore, Maryland.

SEPARATE SEALED PROPOSALS, executed in duplicate, addressed to the Board of Awards, care of the City Register, will be received by him in his office, in the City Hall, until 12:00 M. Wednesday, March 12th, to grade curb and pave with Sheet Asphalt, Vitrified Block, Wood Block, and Granite Block Redressed, all on concrete base, and Cement Concrete, the streets and alleys listed in the following contracts:

CONTRACT NO. 152

	From	To
McElderry St.,	Milton Ave.,	Linwood Ave.
McElderry St.,	Wolfe St.,	Chester St.
Madison St.,	Patt'n. Park Ave.,	Luzerne St.
Collington Ave.,	Ashland Ave.,	Biddle St.
Lakewood Ave.,	Baltimore St.,	Monument St.
Jefferson St.,	Milton Ave.,	Lakewood Ave.
Orleans St.,	Milton Ave.,	Lakewood Ave.

Sheet Asphalt	37,250 sq.yds.
Vitrified Block	2,685 sq.yds.
Granite Block Redressed	105 sq.yds.
Certified Check ...	$2000.00

CONTRACT NO. 153

Lanvale St.,	Pulaski St.,	Druid Hill Ave.
Payson St.,	Lanvale St.,	Mosher St.
Lafayette Ave.,	Payson St.,	Fulton Ave.

Sheet Asphalt	28,900 sq.yds.
Vitrified Block....	2,570 sq.yds.
Granite Block Redressed	400 sq.yds.
Wood Block	2,200 sq.yds.
Certified Check ...	$2000.00

CONTRACT NO. 154

Randall St.,	Hanover St.,	Covington St.
William St.,	Randall St.,	Clement St.
Battery Ave.,	Randall St.,	Gittings St.
Covington St.,	Gittings St.,	Fort Ave.
Covington St.,	Gittings St.,	Falsom St.
Clement St.,	Light St.,	William St.
Grindall St.,	William St.,	Covington St.
Clement St.,	Riverside Ave.,	Key Highway.
Poultney St.,	Patapsco St.,	Light St.

Sheet Asphalt	31,100 sq.yds.
Vitrified Block.....	2,370 sq.yds.
Certified Check ...	$2000.00

CONTRACT NO. 155

Barclay St.,	Chase St.,	Biddle St.
Brentwood Ave.,	Eager St.,	Biddle St.
Forrest St.,	Monument St.,	Eager St.
Forrest St.	Chase St.,	Biddle St.
Ashland Ave.,	McKim St.,	Aisquith St.
Somerset St.,	Madison St.,	Biddle St.

Sheet Asphalt	16,570 sq.yds.
Granite Block Redressed	120 sq.yds.
Vitrified Block	1,620 sq.yds.
Certified Check ..	$1200.00

CONTRACT NO. 156

Edmondson Ave.,	Fremont Ave.,	Clinton Ave.
Brune St.,	Franklin St.,	Harlem Ave.
Clinton Ave.,	Franklin St.,	Myrtle Ave.
Argyle Ave.,	Lanvale St.,	Sewell St.

Sheet Asphalt	14,000 sq.yds.
Vitrified Block.....	1,060 sq.yds.
Certified Check...	$1000.00

CONTRACT NO. 157

Jordan Alley,	Biddle St.,	Lafayette Ave.
Jordan Alley	Mosher St.,	Wilson St.
Jordan Alley,	Robert St.,	North Ave.
Camel Alley,	Madison St.,	Cathedral St.
Brexton St.,	Cathedral St.,	Eager St.

Cement Concrete .	7,930 sq.yds.
Vitrified Block....	20 sq.yds.
Wood Block	40 sq.yds.
Certified Check ...	$400.00

The figures above represent the approximate quantities of the principal items appearing in the contracts.

Specifications and proposal sheets and all other information can be obtained at the office of the Paving Commission, 214 E. Lexington St. A deposit of $5.00 will be reqiured for specifications covering each contract. This will not be refunded unless a bid is filed.

The Board of Awards reserves the right to reject any and all bids. A certified check of the bidder on a clearing-house bank, drawn to the order of the Mayor and City Council of Baltimore to the amount as recited above, must accompany each bid.

The successful bidder will be required to furnish bond and to comply with the City Charter respecting contracts.

By order of the Paving Commission.

S. C. ROWLAND, Chairman.
J. MYERS HEDIAN, Secretary.
APPROVED:
J. BARRY MAHOOL,
Acting Pres. Board of Awards.
FRANK DRISCOLL, Asst. City Solicitor.

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA

Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 19.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.
J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 26, 1919.—Sealed proposals will be opened in this office at 3 p.m., April 15, 1919, for the installation complete of three electric triplex elevator pumps, etc., in the United States courthouse, customhouse, and post office at Omaha, Nebr., in accordance with the drawing and specification, copies of which may be had at this office in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

N. B.—Bidders are required to return the drawing and specification without marks, notes, or other mutilations.

The Government frank sent to inteding bidders is to be used for the return of the drawing and specification and for no other purpose.

OFFICIAL PROPOSALS

Bids: March 5.

Road Improvement

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the improvement of Section No. 1 Burlington-Florence Road in the Townships of Burlington and Florence, in the County of Burlington, with a macadam surface upon a macadam foundation; estimated amount of surface pavement required is 15,870 square yards, of foundation 15,870 square yards; and opened and read in public at the Court House, Mount Holly, N. J., on March 5th, 1919, at 12 noon.

Drawing, specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, Burlington County Engineer and approved by the State Highway Commission have been filed in the office of the said engineer at No. 11 Main Street, Mount Holly, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board and must be accompanied by a certified check or cash for not less than $1000.00 and be delivered at the place and on the hours above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Burlington.

HARRY HAWKINS, Jr.

Bids: March 10.

Sanitary Sewer

Carlisle, Pa.

Sealed bids will be received by the Town Council of the Borough of Carlisle, Pa., until 12 o'clock noon, March 10th, 1919, for the construction of about 4000 feet of Sanitary Sewer with necessary Manholes, Lampholes and Flushtanks, said sewer to consist of eight and ten inch Terra Cotta pipe of first quality.

Specifications, plans and estimates can be seen at the Engineer's Office in Municipal Building, or can be had by communicating with the Borough Secretary.

The Council reserves the right to reject any or all bids.

Bids should be marked "bids for sewer" and addressed to

W. W. DARON, Borough Secretary.
Carlisle, Pa.

OFFICIAL PROPOSALS

Bids: March 20.

Engine Generator Unit

Macon, Missouri.

Sealed bids addressed to City Clerk, Macon, Missouri, and endorsed proposals for power plant improvements will be received until 8 P.M., March 20th, at which time they will be publicly opened and read. The work consists of furnishing and erecting complete 1—400 to 450 KVA Generating Unit Direct Connected to a Uniflow or Compound Corliss Engine, Condensing equipment, Spray Pond equipment, and Switchboard for same. Certified check for $1500. The City reserves the right to reject any or all bids. Specifications may be obtained from Engineer upon receipt of deposit of $10. $8 will be refunded upon return of specifications.

NAT M. LACY, Mayor.
W. H. MARTIN, City Clerk.
FRANK L. WILCOX, Engineer.
Syndicate Trust Bldg.
St. Louis, Mo.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 M., March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

POSITIONS VACANT

ACCOUNTANT wanted, by contracting company, experienced in engineering and construction work. State fully experience with salaries received. P-811, Eng. News-Record.

ASSISTANT to superintendent. Wanted, young mechanical engineer as assistant to superintendent of structural steel shop. Must have had some experience in structural work. either in drafting office or shop, and be a man of strong personality and one who can be trained to handle men. Splendid opportunity for advancement for man with lots of "pep," not afraid of work, and who can develop executive ability for scientific management. Will have opportunity to study under noted efficiency engineers. State training, experience and salary in first letter, also give references. P-804, Eng News-Record, Cleveland.

A STEAM engineer wanted; capable of taking full charge of electric light plant and pumping station; one 500 kilowatt and one 1000 kilowatt Allis-Chalmers turbine. City 7000 population, located in the middle west. Salary to start, $1800. P-834, Eng. News-Record, Chicago.

Experienced in taking off and estimating steel for large buildings, bridges, etc. Address stating experience. references and salary expected. The Case Crane & Engineering Company, Columbus, Ohio.

POSITIONS VACANT

CARPENTER foreman wanted on large bridge construction. Write, giving age. nationality, experience and salary expected. P-810, Eng. News-Record, Chicago.

CIVIL engineer wanted, of practical experience in building concrete and brick State roads. Requirements: Ability to estimate costs, make bids, purchase machinery and assume active general management of such an enterprise. A splendid opportunity for the right man. No one not capable of earning a large salary need answer. Reply in own handwriting stating experience, salary expected and other particulars. Lock Box 395, Erie, Pa.

DESIGNER and draftsman with waterworks experience. C. E. graduate who can make detailed designs for waterworks structures in Ohio city. P-803, Eng. News-Record, Cleveland.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop, employing about fifty (50) men, fabricating stairs, fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men. in conection with ornamental work given preference. P-736, Eng. News-Record.

PRACTICAL quarry man wanted, capable taking full charge: one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL steel draftsman wanted for building work. Apply Hay Foundry & Iron Works, Newark, N. J.

SUPERINTENDENT, foremen, wanted, able to get results, for grading and concrete mixer gangs. Rollermen, pumpmen, cranemen, Keystone men. Dinky engineer and trainmen, auto truck operators, commissary man, cook, etc., for early start. State age, experience, references, wages in first letter. Also camp complete for 75 to 100 men. P-807, Eng. News-Record.

SUPERINTENDENT wanted for highway construction in mountains. Steam shovel work; state experience and salary expected. P-799, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO municipal engineers wanted by April 1st., 1919, on construction of over 50,000 sq.yd. sheet asphalt and other paving, extension of sewer system, water plant, etc., etc. One experienced and reliable engineer capable of handling job as resident engineer. Also one assistant engineer, accurate instrument-man, with several years' experience in paving and municipal work. State fully education, experience and salary wanted. Consulting Engineer, Box 117, Covington, Va.

WANTED—By Eastern railroad, land appraisers experienced in Federal valuation work. State fully education, experience and salary desired. P-735, Eng. News-Record, Philadelphia.

WANTED for structural steel fabricating shop in South, several competent draftsmen and checkers, experienced in making shop detail plans for mill building work; state age, nationality, experience, salary desired and date could start; transportation paid. P-764, Eng. News-Record.

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WANTED

Several Young College Graduates

for positions in drawing room of large eastern structural fabricating company. Must have some experience. Excellent opportunity for advancement according to ability. Give full particulars and references. *Address*

P795—Engineering News-Record
10th Ave. at 36th St., New York City

POSITIONS VACANT

YOUNG man as assistant to engineer in general practice and superintendent of two water plants in central Connecticut. Man with some experience or training in engineering preferred. Work is miscellaneous surveying, drafting and general work about water plants. Wanted—someone who will be willing to be on the work at seven o'clock in the morning when required and will not expect the Superintendent to do all the over-time work. Reply stating experience and pay or salary desired, also give references. P-819, Eng. News-Record.

CIVIL SERVICE OPPORTUNITIES

Assistant engineer, Light, Heat & Power—Public Service Comm. (1st. dist.)—March 29. Salary $3000. Junior Engineer, (Grade 8)—Public Service Comm. (1st dist.)—March 29. Salary $1500-$1800. Lock Operator, Dept. of Public Works, March 29. Salary $1100-$1800. State Civil Service Commission, Albany, New York.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

WESTERN C. E. openings. Instrumentmen and draftsmen desiring western locations, on highway and irrigation work, at $125 to $150 a month, communicate with the Business Men's Clearing House, Denver, Colorado.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ENGINEERING executive; mechanical, electrical; married; technical graduate; 12 years' experience, office and field; executive, purchasing, maintenance, construction, operating and erection of steam, fuel oil, rotary and reciprocating engines, auxiliaries, electrical machinery and allied work. Desires position with manufacturing plant, engineering corporation or contractor. Locate anywhere. Best of references. At present in charge of power, refrigerating and water works plants, plumbing, painting, carpenter work and maintenance of al mechanical and electrical equipment. Address stating salary, Capt. J. Lucas Jr., Engineering Quartermaster, Marine Barracks, Quantico, Va.

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

MECHANICAL engineer, 33, technical education; six years' in manufacture and installation of fireproof and safety appliances; one year reinforced concrete; three years manufacturing cranes, derricks and hoisting machinery, chief engineer two years. Thirteen years' concurrent experience in care of automobile, marine and stationary gas engines. Desires responsible position with modern plant in South or Middle West. PW-738, Eng. News-Record.

Get your Wants into the Searchlight

POSITIONS WANTED

MECHANICAL engineer with broad education and nine years' experience, largely steam power plant testing and reports, desires change to permanent, responsible position, regardless of location. Minimum salary considered, $2400. PW-710, Eng. News-Record.

MECHANICAL engineering executive who can supervise designs, organize and handle men invites eastern interview. Twelve years' experience. A1. New York credentials. PW-669 Eng. News-Record.

Civil Engineers

CIVIL mechanical engineer open for an engagement March 15th. Technical graduate; 35; thirteen years' experience field and office. designing and supervising construction. Five years with engineering department, Pennsplvania Railroad. Past eight years designing and constructing industrial and power plants. months. Highest references. Would consider engagement for South America, Cuba, or Mexico. Personal interview sought. PW-812, Eng. News-Record.

CIVIL engineer (degree); five years' field and office experience on construction and design of buildings, subways, highways; location, N. Y. City. PW-838, Eng. News-Record.

CIVIL engineer, 26; graduate; married; 3 years construction; 2 years railway and industrial valuations; good estimator and draftsman. Available immediately. PW-839, Eng. News-Record.

CIVIL engineer, technical graduate, 2 years subway construction, 1 year structural design. Recently with building department, just released from active service United States Navy. desires position affording advancement. Available immediately. PW-800, Eng. News-Record.

CIVIL engineer, graduate; with 14 years' field and office experience, surveying, drafting, estimating, inspecting, desires position with builder or contractor. Moderate salary to start. PW-844, Eng. News-Record.

CIVIL engineer, 30; Columbia graduate; drafting, designing, estimating; experience on steel and concrete structures, desires position with engineers or contractors. PW-843, Eng. News-Record.

POSITIONS WANTED

CIVIL engineer, technical education; 4 years' experience drafting, highway work, checking estimates; discharged as sergeant. F. F. B., Malone, N. Y.

CIVIL engineer, 15 years' experience; piers, docks, highways, railroads, hydro-electric development. Now employed on Government work; available on short notice. PW-678, Eng. News-Record, Philadelphia.

CIVIL engineer, graduate, experienced in highway design, construction and maintenance; sewer design, construction and maintenance; water works construction, general design, and general city engineering. Available at once. PW-614, Eng. News-Record.

CIVIL engineer—Technical graduate, 10 years broad field and office experience—railroad, subway, construction, municipal work. Available immediately. Highway or municipal work preferred. PW-611, Eng. News-Record.

CIVIL engineer, 22, released from service, desires any kind of work where technical training may be used to advantage. Two years' general construction experience. PW-622, Eng. News-Record.

CIVIL engineering graduate, 31; married; wishes Philadelphia location. Last 6 years as inspecting engineer on asphalt plant and road work. Thoroughly familiar with the various asphalt mixers and testing of asphalts, tars, oils, etc. Engineer, 1848, N. 11th St., Philadelphia, Pa.

CIVIL engineer, ex-soldier, 26, technical education, 5½ years field and office. Two years in charge of contract work, subways. Experienced in steel dredge and chemical plant construction. Capable surveyor, estimator, draftsman ,superintendent. Construction or sales work desired, location immaterial. PW-717, Eng. News-Record.

CIVIL engineer, Mem. Am. Soc. Civil Engineers; 44; experience hydraulics, water power, shafts, tunnels, foundations, locks, dams, surveys; over 20 years responsible charge; past year Major Engineers; Chicago interview; salary, $4000. PW-689, Eng. News-Record, Chicago.

CIVIL engineer, ten years' surveys, investigations, development of mines, water power, lands and timber projects in northern Canada, wishes connection with development or construction company with interests there. PW-741, Eng. News-Record.

STUDY BY MAIL

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M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: March 11.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS

Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: March 18.

Grading Boulevard

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners of Kansas City, Missouri, up to 2 o'clock March 18th, 1919, at their office, for the grading of Van Brunt Boulevard from the north line of Van Brunt Boulevard along 12th Street, to the north line of Linwood Boulevard. Deposit in the sum of $1500.00, cash or certified check made payable to the City Comptroller, will be required with each bid. Plans, specifications and form of contract can be seen at the office of the Board. The Board reserves the right to reject any or all proposals, and contract may be let to the lowest and best bidder. Additional information furnished upon application to T. C. Harrington, Secretary.

OFFICIAL PROPOSALS

Bids: March 25.

Steel Pipe and Appurtenances

Jersey City, N. J.

Sealed proposals for furnishing and laying, complete, 34,590 ft. of 72-in. rivetted steel pipe and appurtenances, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, March 25, 1919, at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal forms, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

he Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: Feb. 18, 1919.

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE

Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amqunt equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART, County Auditor.
Dated: February 11, 1919.

OFFICIAL PROPOSALS

Bids: March 10.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road, in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA

Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 19.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.
J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 M., March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

OFFICIAL PROPOSALS

Bids: March 19.

Filtration Plant

CONTRACT 27

Hartford, Conn.

Sealed proposals, addressed to the Board of Water Commissioners of the City of Hartford, will be received at the office of the Board, Municipal Building, Hartford, until 12 M., Wednesday, March 19, 1919, for the construction of eight concrete-covered filter beds an aerator and connecting pipe lines.

Plans and specifications may be obtained after March 5 at the office of the Manager and Chief Engineer, on deposit of $10 which will be refunded on the return, in good condition, of both plans and specifications. Specifications used in making a bid will be considered as returned. Prior to March 5 plans may be seen at the office of the Manager and Chief Engineer and the site of the work visited.

A certified check or cashier's check for $25,000 must accompany each bid and the successful bidder will be required to furnish bonds in the sum of $400,000.

The right is reserved to reject any and all bids.

BOARD OF WATER COMMISSIONERS
FRANK E. HOWARD, President.
FRED D. BERRY, Secretary.
CALEB MILLS SAVILLE
Manager and Chief Engineer,
Pilgard Building, 1026 Main Street,
Hartford, Conn.

Bids: March 10.

Sanitary Sewers

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, N. C., for the construction of vitrified pipe sanitary sewers, until 3:00 o'clock P.M., March 10, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

The work consists of the following:

Alston Ave. Outfall....	11,159 feet—	12 inch
Alston Ave. Outfall....	936 feet—	8 inch
Main, Morris, Watkins and Spring Streets...	2,760 feet—	8 inch
Main Street House Connections	8,400 feet—	6 inch
Neuse River Outfall...	12,100 feet—	24 inch

Plans and specifications of the proposed work may be had at the office of the City Engineer between the hours of 9:00 A.M. and 5:00 P.M., from February 18th, 1919, to March 10th, 1919.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODARD, City Clerk.
J. L. MOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 26, 1919.—Sealed proposals will be opened in this office at 3 p.m., April 15, 1919, for the installation complete of three electric triplex elevator pumps, etc., in the United States courthouse, customhouse, and post office at Omaha, Nebr., in accordance with the drawing and specification, copies of which may be had at this office in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

N. B.—Bidders are required to return the drawing and specification without marks, notes, or other mutilations.

The Government frank sent to inteding bidders is to be used for the return of the drawing and specification and for no other purpose.

OFFICIAL PROPOSALS

Bids: March 20.

Water-Works Tunnel

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS

Milwaukee, February 28, 1919.

Sealed proposals will be received at this office until March 20th, 1919, at 10:30 A.M. for furnishing all materials and doing all the work necessary and required for constructing the Water Pipe Tunnel under Menomonee River, West Water Street to Reed Street, and two shafts, and for laying a connecting Water Pipe Line at locations as shown on the plans.

This contract requires the construction of approximately one hundred eighty-one (181)' lineal feet of steel encased concrete shafts, ten (10) feet in internal diameter, two hundred sixty eight (268) lineal feet of reinforced concrete lined tunnel under the bed of the Menomonee River, seven (7) feet by nine (9) feet in internal dimensions. It also requires the placing of about four hundred forty (440) lineal feet of twenty-four (24) inch diameter cast iron water pipe in the shafts and tunnel, and about seven hundred sixty-five (765) lineal feet of twenty-four (24) and twenty (20) inch diameter cast iron water pipe laid in trenches from the shafts to the connecting water mains in Reed Street and Third Street extended, all as shown on the plans and described in the specifications now on file in the Office of the City Engineer.

The time allowed for the completion of this contract shall be seven (7) months from the date of the Engineer's notice to begin work.

Bidders are required to furnish bid bonds in the penal sum of $24,000.00 or in lieu thereof, the bidder may deposit with the Commissioner of Public Works the sum of $12,000.00 in money or certified bank check, payable to the Commissioner of Public Works, failing in which his bid will be rejected.

The Commissioner of Public Works reserves the right to reject any or all bids.

Full sets of plans will be sent to any Contractor desiring to bid, upon the receipt of Ten Dollars ($10.00). Said sum shall be returned by the City after the set of plans are returned in good condition to the City Engineer.

PERCY BRAMAN,
Dep. Commissioner of Public Works.
Countersigned.
L. M. KOTECKI,
Comptroller.

Bids: March 27.

Concrete Bridge

OFFICE OF BOARD OF PUBLIC WORKS
City of Janesville, Wis.

Sealed proposals will be received at this office until March 27th, 1919, for the construction of a reinforced Concrete Bridge over Rock River on Jackson Street consisting of six 54 foot spans 55 feet wide in accordance with plans and specifications. Plans and details on file in this office. A certified check for 5% of bid required. Copies of official notice, specifications and form of contract and bond furnished on application.

C. L. VALENTINE, Chairman.
C. V. KERCH, City Engr.
Feb. 24. 1919.

PROPOSALS FOR SOUTH WING SOUTH CADET Barracks and Guard House. Office Qaurtermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., March 27, 1919, and then opened, for construction of South Wing South Cadet Barracks and Guard House. Information on application.

OFFICIAL PROPOSALS

Bids: March 19.

Furnishing and Erecting Thirty Million Gallon Turbo-Centrifugal Pump and Auxiliary Equipment for Mount Royal Pumping Station

Baltimore, Md.

Sealed proposals in duplicate endorsed bids for furnishing and erecting 30,000,000 gallon turbo-centrifugal pump for Mt. Royal Pumping Station will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, Wednesday, March 19, 1919.

Plans and specifications can be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after March 1, 1919. A charge of five dollars ($5) will be made for each set of plans and specifications; this amount will be refunded upon the return of these plans and specifications in good condition before March 26, 1919. Specifications used in making a bid will be considered as returned.

A certified check of the bidder on a clearing-house bank made payable to the Mayor and City Council of Baltimore, for the sum of five thousand dollars ($5000) will be required with each bid.

The extent of the work is approximately as follows:

For furnishing and erecting one 30,000,000 gallon turbine driven centrifugal pump; reduction gearing; condenser and auxiliaries, including condensate and air removal pumps.

The successful bidder will be required to give bond to comply with the City Charter respecting contracts.

While bids are asked for on the various items the contract will be let as a whole.

The Board of Awards reserves the right to reject any or all bids and to waive technical defects if in its judgment it is to the best interest of the city to do so.

WALTER E. LEE,
Water Engineer.

Approved:
J. BARRY MAHOOL,
Acting Pres. Board of Awards.

Bids: March 20.

Pavement Construction

Logan, Iowa.

Sealed proposals will be received by the undersigned until 8 o'clock, P.M., March 20, 1919, for the work of constructing approximately 60,000 square yards of concrete or monolithic brick pavement, 40,000 linear feet of concrete curb and gutter, and a storm sewer system, etc.

Plans, profiles, specifications and form of proposal, contract and bond may be seen at the office of the undersigned, and may be obtained from the engineer upon receipt of $10.00, which will be returned upon return of plans, etc., in good condition.

HERBERT WESSELS, Clerk.
Logan, Iowa.
C. L. HUFF, Engineer,
Logan, Iowa.
March 3, 1919.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: March 15.

Laboratory Construction Work

Albany, N. Y.

Sealed proposals for Construction Work —Sterile Rooms, Media Hood, Refrigerator, Cupboards and Shelvings, Electric Dumb Waiters and Electric Clock System, Laboratory Building, Division of Laboratories, State Department of Health, Albany, N. Y., will be received by Dr. H. M. Biggs, Commissioner of Health, State Department of Health, Albany, N. Y., until 11 o'clock A.M. on Saturday, March 15, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3195, 3173 and 3175. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 24. 1919.

Dam Construction

Gilboa, N. Y.

Plans and specifications for the Gilboa dam are in course of preparation and a contract for this work will be advertised as soon as conditions warrant.

This dam, which will form the Schoharie Reservoir of the Catskill Water Supply, will be a cyclopean masonry overfall structure wit han earth wing, spillway channel and appurtenances. It will be built across Schoharie Creek, in the Town of Gilboa, about 4 miles northeast from the Town of Grand Gorge on the Ulster & Delaware Railroad.

Interested contractors may obtain preliminary information at the office of the Chief Engineer of the Board of Water Supply, 22d floor, Municipal Building, New York City.

Bids: March 17

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

Bids: March 18.

Bituminous Materials

State of New York.

State of New York, Office of the State Commission of Highways, Albany, N. Y.—Pursuant to the provisions of Chapter 30, Laws of 1909, as amended by Chapter 646, Laws of 1911, and Chapter 80, Laws of 1913, sealed proposals will be received by the undersigned for furnishing and delivering bituminous materials f.o.b. cars at destination, for use by the State Highway Department in the maintenance and repair of improved State and County Highways in all of the counties of the State unless otherwise specified, at the office of the State Commission of Highways, 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Tuesday, the 18th day of March, 1919, for the following contracts:

B. M. Contract No. 1—Bituminous Material Cold Patch Asphaltic Emulsion in Divisions Nos. 1, 2, 3, 4 and 5.

B M. Contract No. 2—Bituminous Material Cold Patch Asphaltic Emulsion in Divisions Nos. 6, 7, 8 and 9.

B. M. Contract No. 3—Bituminous Material Asphaltic Cut-Back.

B. M. Contract No. 4—Bituminous Material A. Binder.

B. M. Contract No. 5—Bituminous Material A. Light Cold Oil and Light Hot Oil.

B. M. Contract No. 6—Bituminous Material T. Cold Patch.

B. M. Contract No. 7—Bituminous Material T. Binder and Cold Application.

All proposals except Contracts Nos. 1 and 2 will be for furnishing the specified material at any railroad delivery point within this state. Proposals for Contracts 1 and 2 will be for furnishing that specified material at any railroad point within the nties comprising the divisions named in the proposal.

Tables showing approximate quantities and railroad delivery point specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Each proposal must be accompanied by cash or certified check payable to the order of the State Commission of Highways for an amount equal to at least five per centum of the amount of the proposal which such cash or check accompanies. This cash or check will be held by the Commission until the contract is executed and the bond is filed. The successful bidder on each proposal will be required to give a bond for fifty per centum of the amount of the contract, such bond to be executed by a surety company to be approved by the Commission. The bond is for the purpose of insuring the delivery of the bituminous material as called for by the Commission. The right is reserved to reject any or all bids.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

Bids: March 18.

Concrete Viaduct Construction

Knoxville, Tenn.

Sealed bids will be received until March 18, 1919, 10:00 A.M. by the Board of Commissioners of Knoxville, Tennessee, for the construction of a reinforced concrete viaduct over the Southern Railway tracks on Gay Street; approximate cost, $200,000. Plans and specifications on file in City Engineers office. Right reserved to reject any and all bids.

ROBERT P. WILLIAMS,
City Recorder.

JOHN W. FLENNIKEN,
Com'r. Sts. & Pb. Imp.
J. B. M. McCALLA,
City Engineer.

Bids: March 21.

Sewers

Granite City, Ill.

Bids will be received by the Board of Local Improvements of the City of Granite City, Illinois, at the hour of two o'clock p.m., March 21, 1919, at the City Hall in Granite City, Ill.

Estimated 18,000 lin.ft. of concrete sewer from nine (9) feet diameter to three feet six inches (3' 6") diameter.

Specifications, plans and estimate may be seen at the office of EDMUND HALL, Engineer, First National Bank Building, Granite City, Ill.

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.: 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforced Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick, also 32,100 feet of Reinforced Concrete and Hillside Vitrified Brick in Centre Co.: 13,740 feet of Reinforced Concrete in Clinton Co.: 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.: 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 25.

Paving

Mt. Olive, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Mt. Olive, N. C., at the Town Hall in Mt. Olive, N. C., until 5 P.M., March 25, 1919, for street improvements.

The work will consist of about:

25,000	sq.yd. of brick, asphalt, bitulithic, or other pavement.
15,000	lin.ft. of granite or concrete curb.
15,000	lin.ft. of concrete gutter.
20,000	sq.yd. of sidewalk.

And the necessary drainage, etc.

It is expected that considerable additional work will be done later.

Proposals must be marked, "Proposal for Street Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2000 as evidence of good faith.

Plans and specifications will be on file at the clerk's office in Mt. Olive and at the office of the engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the engineer at Durham, N. C.

The right is reserved to reject any or all bids.

Specifications will be ready about March 10.

S. J. ROBERTS, Mayor.
M. T. BREAZEALE, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

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Engineering News-Record

OFFICIAL PROPOSALS

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

5 miles State Highway No. 3
11 miles State Highway No. 8

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

W. M. CARROLL,
County Judge,
Beaumont, Texas.

Bids: March 20.

Plant Operation

Springfield, Massachusetts.

The Board of Supervisors of the Department of Streets and Engineering will receive at room 326, Administration Building, until 12 M., March 20th, 1919, proposals for the operation of the Logan Street plant for the salvage of waste materials. The City collects about 8 tons per day and delivers it to the plant without expense to the contracor. The plan is modern in every respect with belt conveyor for sorting, ample storage space, and spur track for loading cars. Further information may be obtained from the S uperintendent of the Department of Streets and Engineers, Administration Building, Springfield, Massachusetts.

ROBERT P. MARSH,
Supt. Dept. Sts. & Engineering.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

OFFICIAL PROPOSALS

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

POSITIONS VACANT

A STEAM engineer wanted; capable of taking full charge of electric light plant and pumping station; one 500 kilowatt and one 1000 kilowatt Allis-Chalmers turbine. City 7000 population, located in the middle west. Salary to start, $1800. P-834, Eng. News-Record, Chicago.

ASPHALT plant inspector wanted, capable of making chemical and physical tests on materials, to work in the South. Give in detail training, experience, references and salary, in first letter. P-873, Eng. News-Record.

CIVIL engineer wanted, of practical experience in building concrete and brick State roads. Requirements: Ability to estimate costs, make bids, purchase machinery and assume active general management of such an enterprise. A splendid opportunity for the right man. No one not capable of earning a large salary need answer. Reply in own handwriting stating experience, salary expected and other particulars. Lock Box 395, Erie, Pa.

CONTRACTOR'S superintendent. — Must have broad experience in all branches of contracting. Write experience in detail and state salary. P-853, Eng. News-Record, Chicago.

DEPARTMENTAL sales manager wanted for prominent established company located in Ohio, and manufacturing steel sash and steel doors. Men with experience in handling selling organization, and preferably with a knowledge of structural and ornamental iron. Good salary paid to right party. P-857, Eng. News-Record.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

SALES ENGINEER, thoroughly trained in estimating and designing reinforced concrete. P-887, Eng. News-Record.

POSITIONS VACANT

GRADUATE engineer wanted, experienced in reinforced concrete design, by large distributors of reinforcing steel. Permanent position and good chance for advancement, depending on ability. P-905, Eng. News-Record.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop, employing about fifty (50) men, fabricating stairs, fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men in conection with ornamental work given preference. P-736, Eng. News-Record.

MAP draftsman and instrument men wanted for land and irrigation development in southwest Texas. Reply stating age, education, experience and salary expected; address Construction Engineer, American Rio Grande Land & Irrigation Company, Mercedes, Texas.

PRACTICAL quarry man wanted, capable taking full charge: one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL estimator wanted. Require a first class experienced man who knows this work and can design, estimate and obtain contracts for fabricated, structural and plain material. Mostly in the building line and on medium size contracts. An excellent position is offered to one who can qualify with a large organization on a salary and commission basis. Kindly give us a record of your experience and salary required. Location, Cleveland, Ohio. All replies confidential. P-861, Eng. News-Record, Cleveland.

SUPERINTENDENT, foremen, wanted, able to get results, for grading and concrete mixer gangs. Rollermen, pumpmen, cranemen, Keystone men. Dinky engineer and trainmen, auto truck operators, commissary man, cook, etc., for early start. State age, experience, references, wages in first letter. Also camp complete for 75 to 100 men. P-807, Eng. News-Record.

THEW shovel operator required for permanent position in Latin-American country; to also oversee operation of stone crushers and road rollers. Salary $200 and traveling expenses to job. Knowledge of Spanish not essential but desirable. Opportunity to become Master Mechanic. P-904, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO engineers wanted for work in South, capable of taking charge of municipal paving program, including extension water and sewers. Give in first letter experience in detail, references and salary. Graduate engineers only. P-868, Eng. News-Record.

WANTED in Minneapolis, engineer to estimate, design and sell reinforcing bars for building construction; salary and percentage to right party. P-888, Eng. News-Record, Chicago.

GENERAL contractor's office man.—Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully and state salary. P-854, Eng. News-Record, Chicago.

HYDRAULIC DREDGING
WANTED

Prices for contract to dredge 250,000 meters of sand on coast near Havana, Cuba; for further particulars apply

Compania Urbanizadora del Parque y Playa de Marianao
E. Beato Fowler, Chief Eng.
Playa de Marianao, Habana, Cuba

Contractors—this is for you!
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Phone, Wire or Write
HARMON V. SWART
19 Liberty Street, New York City

Bids: April 3.

Flood Protection Work

Newport, Arkansas.

Sealed proposals will be received by the Board of Directors of the Newport Levee District, Jackson County, Arkansas, at Newport, Arkansas, until 2 o'clock P.M., April 10, 1919, for the construction of flood protection works, involving approximately the following principal quantities:

Earth embankment	297,500 cu.yd.
Concrete	2,150 cu.yd.
Reinforcing steel	65 tons
Miscellaneous cast iron and steel	5 tons
Wood sheet piling	116 M. ft. B.M.
Tile, 4 in. and 10 in. diameters	8,270 lin.ft.
Corrugated iron pipe—18 in. and 24 in. diameters	550 lin.ft.
Cast iron or concrete pipe, 24 in. and 36 in. diameters	290 lin.ft.
Sluice gates, 24 in. diam.	4
36 in. diam.	4
48 in. diam.	2
Sodding embankments	162,800 sq.yd.

The work is divided into three sections and proposals will be received for the entire work or for any section or combination of sections. Proposals must be submitted on the form furnished by the Board and must be accompanied by a certified check, payable to the Treasurer of the Newport Levee District, for not less than 5 per cent of the total amount of the bid, but in no case need the certified check exceed $5000.

Payments for the work will be made in cash.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF DIRECTORS NEWPORT LEVEE DISTRICT.
By C. R. HITE, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: March 25.

Concrete Pavement

Longmont, Colo.

Sealed proposals for the construction of approximately 15,300 sq.yd. of concrete pavement with 3300 cu.yd. of grading and 6400 lin.ft. of concrete curb, in the Longmont Paving District Number 3, will be received by the City Clerk at his office at the City Hall, Longmont, Colorado, until 5 o'clock P.M., Tuesday, March 25, 1919.

Plans, specifications, proposal and contract may be obtained at the office of the City Clerk or the City Engineer.

The City Council reserves the right to reject any or all bids.

GEO. H. STONEX,
City Clerk.
E. S. BICE,
City Engineer.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

Bids: March 21.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of State highway 1.15 miles in length and located upon the Boston Neck Road in the Town of Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M., on Friday, March 21, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth excavation	3,400 cu.yd.
Crushed stone	4,000 tons
Hauling, heating and applying asphalt	30,000 gallons
Gravel foundations	2,800 cu.yd.

Bids must be made upon blank forms to be furnished by the board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 10, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 noon.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bids: March 26.

River Improvements

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 3 P.M., on March 26, 1919, for the work of improvement of the Cottonwood River and its tributaries.

Approximate estimate of work to be done:

New channel excavation (cu.yd.)	968,000
Exacavation from present channels (cu.yd.)	160,000
Levee embankment (cu.yd.)	130,000
Removal of obstructions other than earth from present channels (lin. ft.)	56,000

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division ocvered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Building, Kansas City, Mo.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.; 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforced Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick in Centre Co.; 13,740 feet of Reinforced Concrete in Clinton Co.; 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.; 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northhampton Co., 2834 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

Bids: March 18.

Concrete Viaduct Construction

Knoxville, Tenn.

Sealed bids will be received until March 18, 1919, 10:00 A.M. by the Board of Commissioners of Knoxville, Tennessee, for the construction of a reinforced concrete viaduct over the Southern Railway tracks on Gay Street; approximate cost, $200,000. Plans and specifications on file in City Engineers office. Right reserved to reject any and all bids.

ROBERT P. WILLIAMS,
City Recorder.
JOHN W. FLENNIKEN,
Com'r. Sts. & Pb. Imp.
J. B. M. McCALLA,
City Engineer.

OFFICIAL PROPOSALS

Bids: March 20.

Water-Works Tunnel

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS

Milwaukee, February 28, 1919.

Sealed proposals will be received at this office until March 20th, 1919, at 10:30 A.M. for furnishing all materials and doing all the work necessary and required for constructing the Water Pipe Tunnel under Menomonee River, West Water Street to Reed Street, and two shafts, and for laying a connecting Water Pipe Line at locations as shown on the plans.

This contract requires the construction of approximately one hundred eighty-one (181)' lineal feet of steel encased concrete shafts, ten (10) feet in internal diameter, two hundred sixty eight (268) lineal feet of reinforced concrete lined tunnel under the bed of the Menomonee River, seven (7) feet by nine (9) feet in internal dimensions. It also requires the placing of about four hundred forty (440) lineal feet of twenty-four (24) inch diameter cast iron water pipe in the shafts and tunnel, and about seven hundred sixty-five (765) lineal feet of twenty-four (24) and twenty (20) inch diameter cast iron water pipe laid in trenches from the shafts to the connecting water mains in Reed Street and Third Street extended, all as shown on the plans and described in the specifications now on file in the Office of the City Engineer.

The time allowed for the completion of this contract shall be seven (7) months from the date of the Engineer's notice to begin work.

Bidders are required to furnish bid bonds in the penal sum of $24,000.00 or in lieu thereof, the bidder may deposit with the Commissioner of Public Works the sum of $12,000.00 in money or certified bank check, payable to the Commissioner of Public Works, failing in which his bid will be rejected.

The Commissioner of Public Works reserves the right to reject any or all bids.

Full sets of plans will be sent to any Contractor desiring to bid, upon the receipt of Ten Dollars ($10.00). Said sum shall be returned by the City after the set of plans are returned in good condition to the City Engineer.

PERCY BRAMAN,
Dep. Commissioner of Public Works.
Countersigned.
L. M. KOTECKI,
Comptroller.

Bids: March 20.

Plant Operation

Springfield, Massachusetts.

The Board of Supervisors of the Department of Streets and Engineering will receive at room 326, Administration Building, until 12 M., March 20th, 1919, proposals for the operation of the Logan Street plant for the salvage of waste materials. The City collects about 8 tons per day and delivers it to the plant without expense to the contracor. The plan is modern in every respect with belt conveyor for sorting, ample storage space, and spur track for loading cars. Further information may be obtained from the S uperintendent of the Department of Streets and Engineers, Administration Building, Springfield, Massachusetts.

ROBERT P. MARSH,
Supt. Dept. Sts. & Engineering.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: March 25.

Paving

Mt. Olive, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Mt. Olive, N. C., at the Town Hall in Mt. Olive, N. C., until 5 P.M., March 25, 1919, for street improvements.

The work will consist of about:

25,000 sq.yd. of brick, asphalt, bitulithic, or other pavement.
15,000 lin.ft. of granite or concrete curb.
15,000 lin.ft. of concrete gutter.
20,000 sq.yd. of sidewalk.
And the necessary drainage, etc.

It is expected that considerable additional work will be done later.

Proposals must be marked, "Proposal for Street Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2000 as evidence of good faith.

Plans and specifications will be on file at the clerk's office in Mt. Olive and at the office of the engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the engineer at Durham, N. C.

The right is reserved to reject any or all bids.

Specifications will be ready about March 10.

S. J. ROBERTS, Mayor.
M. T. BREAZEALE, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

OFFICIAL PROPOSALS

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

5 miles State Highway No. 3
11 miles State Highway No. 8

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

W. M. CARROLL,
County Judge,
Beaumont, Texas.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: March 26.

Highway Construction

THE STATE OF DELAWARE
Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock P. M., March 26, 1919, and at that place and time publicly opened, for the construction of 0.5 miles of State Highway (Vitrified Brick) in New Castle County, Delaware, involving the following approximate quantities:

3400 cu.yd. grading.
800 lin.ft. pipe underdrain.
5000 lin.ft. concrete curb.
1800 cu.yd. concrete foundation.
11,500 cu.yd. vitrified brick pavement.
4 bounds.
10 catch basins.
[illegible] drop inlets.
1880 tons stone ballast for street railway.
990 lin.ft. 12 in. vitrified pipe sewer.
1250 lin.ft. 18 in. vitrified pipe sewer.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before November 1, 1919.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) percentum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 9."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after March 5, 1919, upon deposit of ($10) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

CHAS. M. UPHAM, Chief Engineer,
State Highway Department,
Dover, Delaware,

NOTE—Lettings for the construction of State Highways will be advertised every two weeks until approximately 75 miles are under contract.

Bids: March 20.

Pavement Construction

Logan, Iowa.

Sealed proposals will be received by the undersigned until 8 o'clock, P.M., March 20, 1919, for the work of constructing approximately 60,000 square yards of concrete or monolithic brick pavement, 40,000 linear feet of concrete curb and gutter, and a storm sewer system; etc.

Plans, profiles, specifications and form of proposal, contract and bond may be seen at the office of the undersigned, and may be obtained from the engineer upon receipt of $10.00, which will be returned upon return of plans, etc., in good condition.

HERBERT WESSELS, Clerk.
Logan, Iowa.
C. L. HUFF, Engineer,
Logan, Iowa.
March 3, 1919.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: March 27.

Pier Construction

Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Wolf Street Pier, No. 82 South, and Orter Street Pier, No. 84 South," will be received until 12 o'clock noon, Thursday, March 27, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of $25 to cover cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition and **unmarked.** The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation and insured his liability thereunder or secured exemption therefrom.

No bids will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500, have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A.M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457 miles
Broken stone	2250 tons
Filler	700 tons
Dustless screenings...	400 tons
Tarvia B	15135 gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

Bids: April 1.

Road Materials

Columbus, Ohio.

Bids will be received up until 2:00 P.M., April 1, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for stone, gravel, slag and sand to be used in maintaining and repairing state roads during 1919. Quotations will be placed on file and material ordered from time to time during the season as needed. Price at quarry and freight rates to various railroad stations are requested. Bidding blanks will be furnished upon request.

CLINTON COWEN,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 9.

Road Improvement

Bergen County, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation: estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: March 25.

Air Compressor

Marion, Indiana.

Bids for an Air Compressor, according to plans and specifications on file, will be received at Marion, Indiana, on Tuesday, March 25, 1919, at 10 o'clock A.M., by the Board of Public Works.

Further information will be furnished upon request.

T. E. PETRIE, President.
BOARD OF PUBLIC WORKS.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

OFFICE OF THE COMMISSIONERS, D. C., Washington, March 3, 1919.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., Wednesday, March 26, 1919, for grading certain streets, aggregating about thirty thousand cubic yards of grading. Blank forms of proposals, specifications, and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. LOUIS BROWNLOW W. GWYNN GARDINER, CHARLES W. KUTZ, COMMISSIONERS, D. C.

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 8.

Bridge Letting

Greenbrier County, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Buffalo N. Y., April 1, 1919, 2 o'clock p.m., for 500 bbls. American Portland Cement delivered at Conneaut Harbor, Ohio. Information upon application to the above office.

Bids: April 11.

Deck Steel Girder Bridge

Holyoke, Mass.

The Board of Public Works of Holyoke, Mass., will receive at its office in Holyoke until 10 o'clock in the morning of Friday, April 11, 1919, sealed proposals for the construction of a deck steel girder bridge, the steel work to be encased or covered with reinforced concrete, the bridge to be erected across the first level canal on Appleton Street in said Holyoke. As soon as may be after the above time and at the office of the Board the proposals so received will be publicly opened and read. The bidder will be expected to submit his own specifications and plans covering the work which is to be done in accordance with "General Specifications for Bridge over the First Level Canal Appleton Street, Holyoke, Mass.," prepared by the City Engineer. Full information may be had upon application to the City Engineer, City Hall Annex and Police Building, Holyoke, Mass. A general form of the proposed contract may be seen at the office of the Board. Proposals must be accompanied by a certified bank check in the sum of Five Hundred Dollars ($500) or by lawful money in the same sum. Bids must be addressed to the Chairman marked "Proposals for Appleton Street Bridge," and left at the office of the Board before the time hereinbefore specified. The Board reserves the right to reject any or all bids or to accept any bid that in its opinion may be for the best interests of the City of Holyoke. Oscar C. Ferry, Asst. Clerk, Holyoke, Mass., March 10, 1919.

Bids: April 2.

Sewer Construction

Hamilton, Ont.

Sealed tenders will be received by the undersigned, addressed to Chas. G. Booker, Esq., Mayor; Chairman Board of Control, City Hall, Hamilton, up to 5 o'clock P.M. on Wednesday, April 2, 1919, for the construction of the following work:

A sewer constructed of brick or concrete (alternative tenders for which will be received), 1750 ft. in length, on King Street, Macklin Street and Dundas Street, Hamilton, Ontario.

Tenders must be on forms supplied and plainly marked on the outside as to contents.

Specifications and form of tender for the above can be obtained at the office of the City Engineer, where any other information may be secured.

The lowest or any tender not necessarily accepted.

S. H. KENT,
City Clerk.

Dated March 8, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 10, 1919.—Sealed proposals will be received at this office until 3 P.M., March 26, 1919, and then opened for miscellaneous alterations in work room and basement of the United States Post Office in Meridian, Miss., in accordance with drawing RHP-701, and the specification, copies of which may be had at the office of the Custodian or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 49.5 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

	Miles
Greenville to head of Lake Washington	[illegible]
Greenville to Metcalfe	[illegible]
Leland to Sunflower County line	10.2
Hollandale to Murphy Bayou	5.0
Arcola to Trail Lake	4.7

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD,
Chairman.

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 20,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODWARD, City Clerk.
J. L. MOOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer.

Bids: April 1.

Single Light Lamp Poles

Loveland, Colo.

Sealed proposals for the furnishing of approximately 109 ornamental single light lamp poles and 10,000 ft. of three conductor, 600 volt under-ground wire for the City of Loveland, will be received by the City Clerk of the City of Loveland, at its office in the City Hall, until 7:30 o'clock P.M., Thursday, April 1, 1919.

All bids must be on forms provided for the same by the city, and must be accompanied by a certified check in the sum of $250, payable to the Treasurer of the City of Loveland.

Proposal and specifications may be examined at the office of the City Clerk, or will be forwarded upon receipt of application.

The City Council reserves the right to reject any or all bids.

Put Public Buying on an Efficiency Basis

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Engineering News-Record

0052

OFFICIAL PROPOSALS

Bids: March 21.

Bridge Construction

City of Trenton, N. J.

Pursuant to a resolution adopted March 7, 1919, the City Commission will receive at its meeting to be held on March 21, 1919, at 2 o'clock p.m., sealed proposals for the construction of a steel and concrete bridge across the Assanpink Creek, each of Olden Avenue, Trenton, N. J.

Plans and specifications with a draft of the contract and of the bonds required to be given may be obtained at the ocffie of John W. Thompson, Consulting Engineer, Broad Street Bank Building, Trenton, N. J., on payment of ten dollars ($10) which amount will be returned to actual bidders and those returning plans and specifications at or before opening of bids.

The bridge is approximately 14 feet wide with 64 feet span carried on girders, and 20 feet approaches. The work to be completed in three months.

Each proposal must be made on a blank form which will be furnished by the Engineer, and must be accompanied by a certified check to the amount of $500, conditioned that if the proposal be accepted the person or persons making it will execute the contract required to be executed and furnish the bond required to be furnished, within five days after the acceptance of the proposal.

The proposal must not be filed with any city official, but must be delivered by the bidder or his agent to the City Clerk, at the meeting above mentioned, when the same shall be called for by the President of the City Commission.

Said City Commission reserves the right to reject any or all proposals. Contract will be made subject to Chapter 253, laws of New Jersey, 1913.

LEON D. HIRSCH,
City Clerk.

Dated March 10, 1919.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

HYDRAULIC DREDGING
WANTED

Prices for contract to dredge 250,000 meters of sand on coast near Havana, Cuba; for further particulars apply

Compania Urbanizadora del Parque y Playa de Marianao
E. Beato Fowler, Chief Eng.
Playa de Marianao, Habana, Cuba

OFFICIAL PROPOSALS

Bids: April 2nd.

Generating Unit

Macon, Mo.

Sealed bids addressed t oCity Clerk, Macon, Mo., and endorsed Proposals for Power Plant Improvements will be received until 8 P.M., April 2nd, at which time they will be publicly opened and read. The work consists of furnishing and erecting one 400 to 500 KVA Generator Direct connected to Steam Engine or Turbine with condensing equipment, Spray pond or Cooling Tower equipment and Switchboard. Certified check $1500. City reserves the right to reject any or all bids. Specifications may be obtained from Engineer upon receipt of a deposit of $10 of which $8 will be refunded upon return of the specifications.

NAT M. LACY, Mayor.
W. H. MARTIN, City Clerk.
FRANK L. WILCOX, Engineer.
Syndicate Trust Bldg.,
St. Louis, Mo.

POSITIONS VACANT

AN experienced man wanted for resident engineer on road construction in Arkansas. State experience, age, salary expected and references. Address Room 410, Citizens Bank Bldg., Pine Bluff, Ark.

ARCHITECTURAL and engineering specification writer, estimator and checker. Permanent. State age, experience, salary and when available. Address The Mills & Millspaugh, Architects and Engineers, Columbus, Ohio.

BY general contracting firm located in Southwest, young technical graduate wanted. Must be experienced and accurate building estimator, and able to do reinforced concrete designing work. State fully, age, experience, and salary expected. P-957, Eng. News-Record, Chicago.

CONTRACTOR'S superintendent. — Must have broad experience in all branches of contracting. Write experience in detail and state salary. P-853, Eng. News-Record, Chicago.

EXPERIENCED structural steel draftsmen wanted. State experience and salary expected. Address P. O. Box 381, Cleveland, Ohio.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

FOREMAN wanted to take charge of lining tunnels; salary open. Pittsburgh & West Virginia Railroad, H. H. Temple, Chief Engineer, Pittsburgh, Pa.

POSITIONS VACANT

GRADUATE engineer wanted, experienced in reinforced concrete design, by large distributors of reinforcing steel. Permanent position and good chance for advancement, depending on ability. P-905, Eng. News-Record.

LARGE fabricating shop in the South desires services of experienced shop inspectors on ship fabrication. State fully past experience and salary desired. P-934, Eng. News-Record, Leader-News Bldg., Cleveland.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop, employing about fifty (50) men, fabricating stairs, fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men in conection with ornamental work given preference. P-736, Eng. News-Record.

MAP draftsman and instrument men wanted for land and irrigation development in southwest Texas. Reply stating age, education, experience and salary expected; address Construction Engineer, American Rio Grande Land & Irrigation Company, Mercedes, Texas.

MECHANICAL engineer and draftsman experienced on elevators and hoisting machinery design. Give reference, experience and salary expected. J. G. Speidel, Reading, Pa.

OFFICE assistant on levee and drainage construction job. Must be competent to check reports and payrolls. Position permanent. State age, experience, education, nationality, and salary desired. No replies to rejected applicants. Morgan Engineering Company, 622 Goodwyn Institute, Memphis, Tennessee.

OPERATING and mechanical engineer wanted, with technical education and practical experience, to take charge of our power plant—B. & W. boilers, Corliss compound and turbo engines, surface, condenser, pumps, etc.; $200 per month. Give age, references, and when could report. Good schools and surroundings. Burton-Swartz Cypress Company of Florida, Perry, Fla.

GENERAL contractor's office man. — Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully and state salary. P-854, Eng. News-Record, Chicago.

PRACTICAL quarry man wanted, capable taking full charge: one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL estimator wanted. Require a first class experienced man who knows this work and can design, estimate and obtain contracts for fabricated, structural and plain material. Mostly in the building line and on medium size contracts. An excellent position is offered to one who can qualify with a large organization on a salary and commission basis. Kindly give us a record of your experience and salary required. Location, Cleveland, Ohio. All replies confidential. P-861, Eng. News-Record, Cleveland.

SUPERINTENDENT wanted for highway construction in mountains of Tennessee. Steam shovel work; state experience and salary expected. P-933, Eng. News-Record, Philadelphia.

TRUCK body or trailer designer wanted: Watson, Canastota, N. Y.

WANTED first-class highway engineer on sand-clay and gravel-clay roads in Florida. Must be young and active, come well recommended, and furnish transit and a light car. Party will be required to pay present incumbent of the place $350 for placing him and taking the time to initiate the applicant into the job. Salary, $300 per month. Address P-958, Eng. News-Record, Philadelphia.

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OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 3.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Thursday, the 3rd day of April, 1919, for the repair of highways in the following counties:

Albany: One contract, reconstruction.
Broome: One contract, resurfacing.
Delaware: One contract, resurfacing.
Erie: two contracts, resurfacing and reconstruction.
Genesee: One contract, reconstruction.
Hamilton: One contract, resurfacing.
Herkimer: One contract, surface treatment.
Monroe: Two contracts, resurfacing and surface treatment.
Oneida: One contract, resurfacing.
Onondaga: Four contracts, resurfacing.
Saratoga: One contract, reconstruction.

Sealed proposals will also be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Friday, the 4th day of April, 1919, for the repair of highways in the following counties:

Allegany: One contract, surface treatment.
Cayuga: One contract, resurfacing.
Fulton: One contract, surface treatment.
Livingston: Three contracts, surface treatment and reconstruction.
Monroe: One contract, surface treatment.
Montgomery: One contract, surface treatment.
Ontario: Two contracts, reconstruction and surface treatment.
Orleans: One contract, surface treatment.
Otsego: One contract, reconstruction.
Schenectady: One contract, reconstruction.
Schuyler: One contract, surface treatment.
Steuben: Three contracts, resurfacing.
Sullivan: One contract, resurfacing.
Tioga: One contract, surface treatment.
Tompkins: One contract, surface treatment.
Ulster: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: April 11.

Deck Steel Girder Bridge

Holyoke, Mass.

The Board of Public Works of Holyoke, Mass., will receive at its office in Holyoke until 10 o'clock in the morning of Friday, April 11, 1919, sealed proposals for the construction of a deck steel girder bridge, the steel work to be encased or covered with reinforced concrete, the bridge to be erected across the first level canal on Appleton Street in said Holyoke. As soon as may be after the above time and at the office of the Board the proposals so received will be publicly opened and read. The bidder will be expected to submit his own specifications and plans covering the work which is to be done in accordance with "General Specifications for Bridge over the First Level Canal Appleton Street, Holyoke, Mass.," prepared by the City Engineer. Full information may be had upon application to the City Engineer, City Hall Annex and Police Building, Holyoke, Mass. A general form of the proposed contract may be seen at the office of the Board. Proposals must be accompanied by a certified bank check in the sum of Five Hundred Dollars ($500) or by lawful money in the same sum. Bids must be addressed to the Chairman marked "Proposals for Appleton Street Bridge," and left at the office of the Board before the time hereinbefore specified. The Board reserves the right to reject any or all bids or to accept any bid that in its opinion may be for the best interests of the City of Holyoke. Oscar C. Ferry, Asst. Clerk, Holyoke, Mass., March 10, 1919.

Bids: April 1.

Road Materials

Columbus, Ohio.

Bids will be received up until 2:00 P.M., April 1, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for stone, gravel, slag and sand to be used in maintaining and repairing state roads during 1919. Quotations will be placed on file and material ordered from time to time during the season as needed. Price at quarry and freight rates to various railroad stations are requested. Bidding blanks will be furnished upon request.

CLINTON COWEN,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

5 miles State Highway No. 3
11 miles State Highway No. 8

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

W. M. CARROLL,
County Judge,
Beaumont, Texas.

OFFICIAL PROPOSALS

Bids: April 9.

Reservoir Completion

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M., on Wednesday, April 9, 1919, for the construction and completion of a 15 million gallon storage basin at Wabash and St. John Avenue, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the approximate estimate of quantities, and the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Contract for the excavation of the above basin has been let and work is now proceeding on same. The proposals requested in this advertisement are to cover all other work as shown in the plans and specifications to fully complete the basin.

Proposals shall be made upon the forms attached to specifications and inclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside: "Proposal for 15 Million Gallon Storage Basin."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or Trust Company, made payable to the City Comptroller, in the amount of $1,500, which deposit shall be forfeited to the city in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5
March 3, 1919.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.
(Countersigned) WILLIAM WINGERT,
Chairman.

OFFICIAL PROPOSALS

Bids: March 27.

Pier Construction

Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Wolf Street Pier, No. 82 South, and Orter Street Pier, No. 84 South," will be received until 12 o'clock noon, Thursday, March 27, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of $25 to cover cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition and -marked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation and insured his liability thereunder or secured exemption therefrom.

No bids will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500, have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 49.5 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

	Miles
Greenville to head of Lake Washington	25.2
Greenville to Metcalfe	4.4
Leland to Sunflower County line	10.2
Hollandale to Murphy Bayou	5.0
Arcola to Trail Lake	4.7

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD,
Chairman.

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

OFFICIAL PROPOSALS

Bids: March 26.

River Improvements

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 3 P.M., on March 26, 1919, for the work of improvement of the Cottonwood River and its tributaries.

Approximate estimate of work to be done:

New channel excavation (cu.yd.)	968,000
Exacavation from present channels (cu.yd.)	160,000
Levee embankment (cu.yd.)	130,000
Removal of obstructions other than earth from present channels (lin. ft.)	56,000

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division ocvered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Building, Kansas City, Mo.

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY
DEPARTMENT, HARRISBURG, PA.
Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.; 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforoed Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick in Centre Co.; 13,740 feet of Reinforced Concrete in Clinton Co.; 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.; 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northhampton Co., 2834 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

OFFICE OF THE COMMISSIONERS, DISTRICT OF COLUMBIA, March 10, 1919.—Sealed proposals will be received at the office of the Secretary of the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., March 24, 1919, for constructing swimming pools at the Cardozo Playground, at First and H Streets, Southwest, and at Reservation 126, located at Virginia Avenue and 10th Street, Southeast. Blank forms of proposals, plans, specifications and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. A deposit of five dollars will be required from bidders to insure the return of the plans and specifications. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, COMMISSIONERS, D. C.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 10, 1919.—Sealed proposals will be received at this office until 3 P.M., March 26, 1919, and then opened for miscellaneous alterations in work room and basement of the United States Post Office in Meridian, Miss., in accordance with drawing RHP-701, and the specification, copies of which may be had at the office of the Custodian or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: April 9.

Road Improvement

Bergen County, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation; estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 30,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor,
GEO. W. WOODWARD, City Clerk,
J. L. MOOREHEAD, City Attorney,
H. W. KUEFFNER, City Engineer.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 3, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

OFFICIAL PROPOSALS

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

Bids: March 27.

Concrete Bridge

OFFICE OF BOARD OF PUBLIC WORKS
City of Janesville, Wis.

Sealed proposals will be received at this office until March 27th, 1919, for the construction of a reinforced Concrete Bridge over Rock River on Jackson Street consisting of six 54 foot spans 55 feet wide in accordance with plans and specifications, plans and details on file in this office. A certified check for 5% of bid required. Copies of official notice, specifications and form of contract and bond furnished on application.

C. L. VALENTINE, Chairman.
C. V. KERCH, City Engr.
Feb. 24, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

PROPOSALS FOR SOUTH WING SOUTH CADET Barracks and Guard House. Office Qaurtermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., March 27, 1919, and then opened, for construction of South Wing South Cadet Barracks and Guard House. Information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer Lock Box 1017, Memphis, Tenn.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

Bids: March 26.

Paving

Baltimore, Md.

Separate sealed proposals, executed in duplicate, addressed to the Board of Awards, care of City Register, will be received by him in his office, in the City Hall, until 12 M., Wednesday, March 26, to grade, curb, and pave with Sheet Asphalt, Vitrified Block, Wood Block, and Granite Block Redressed, all on concrete base, the streets listed in the following contracts:

CONTRACT NO. 158

	From	To
Franklin St.	Howard St.	Charles St.
St. Paul St. Improvement	Lexington St.	Hamilton St.

Sheet asphalt	13,590 sq.yd.
Vitrified block	800 sq.yd.
Granite block redressed	480 sq.yd.
Certified check	$800

CONTRACT NO. 159

	From	To
Pratt St.	Carey St.	Parkin St.
Fayette St.	Smallwood St.	Gilmor St.
McHenry St.	Bentalou St.	Carey St.
Cole St.	Wilkens Ave.	Stricker St.
Eagle St.	Bentalou St.	Fulton Ave.
Bentalou St.	Eagle St.	Wilkens Ave.

Sheet asphalt	47,950 sq.yd.
Vitrified block	3,550 sq.yd.
Granite block redressed	180 sq.yd.
Certified check	$3,000

CONTRACT NO. 160

	From	To
Fairmount Ave.	Brodway	Kenwood Ave.
Lexington St.	Calvert St.	Guilford Ave.
St. Matthews St.	Aisquith St.	Lexington St.

Sheet asphalt	19,485 sq.yd.
Vitrified block	1,865 sq.yd.
Granite block redressed	2,405 sq.yd.
Certified check	$1,600

The figures above represent the approximate quantities of the principal items appearing in the contracts.

Specifications and proposal sheets and all other information can be obtained at the office of the Paving Commission, 214 E. Lexington St. A deposit of $5 will be required for specifications covering each contract. This will not be refunded unless a bid is filed.

The Board of Awards reserves the right to reject any and all bids. A certified check of the bidder on a clearing-house bank, drawn to the order of the Mayor and City Council of Baltimore to the amount as recited above, must accompany each bid.

The successful bidder will be required to furnish bond and to comply with the City Charter respecting contracts.

By order of the Paving Commission.

S. C. ROWLAND,
Chairman.

J. MYERS HEDIAN,
Secretary.

Approved: J. BARRY MAHOOL,
Acting Pres. Board of Awards.

O. K.: FRANK DRISCOLL,
Asst. City Solicitor.

Bids: March 27.

Road Construction

Danville, Ill.

1. Notice is hereby given that sealed proposals for the construction of roads in Vermilion County will be received at the office of the County Clerk, Court House, City of Danville, Illinois, until 2 o'clock P.M., March 27, 1919, at which time and place during the meeting of the Board of Supervisors, the proposals will be publicly opened and read.

2. The proposed work comprises the construction of concrete and brick roads ten (10) feet wide with three (3) feet of macadam or gravel shoulders together with all grading, shaping earth shoulders, reinforced concrete work, ditching, drainage and other incidental work as shown in detail on plans and specifications, on file in the office of the County Clerk, and Superintending Engineer.

3. Proposals shall be made on forms furnished by the County of Vermilion.

3a. Proposal blanks and also the forms of contract and bonds that the successful bidders will be required to execute are now on file in the offices of said County Clerk and said Superintending Engineer.

4. The Board of Supervisors reserves the right to reject any and all proposals, and to waive technicalities in any proposal.

4a. The Board of Supervisors reserves the right to withdraw from said opening of bids, at any time on or before March 25, 1919, any Subdivision or Subdivisions of said unfinished work, in case the bondsmen who are responsible to said County for the completion of such Subdivision or Subdivisions shall have taken over and undertaken the completion of such Subdivision or Subdivisions, and shall have made arrangements, satisfactory to this Board, to complete said work not later than said November 15, 1919; and that said Board reserves the right to reject bids on any part or parts of said work, if such bids seem to this Board to be too high, and to do any part or parts of said work under its own management and direction.

5. Bidders may furnish proposals on one or more of the fourteen Subdivisions of approximately four miles each, into which the work is divided.

6. All proposals must be accompanied by a certified check in the sum of two (2) per cent of the total bid and made payable to the order of Robert H. Mater, County Treasurer of said County; said check to be returned unless in case of the acceptance of his proposal, the bidder should fail to execute a contract and file a bond in a sum equal to the amount of the bid within ten (10) days of the date of the acceptance of this proposal, in which case the check is to become the property of Vermilion County, and is to be considered as payment of damages due to delay and other causes suffered by the county from neglect of the bidder to execute a contract.

7. Proposals must be addressed or delivered to said County Clerk, Court House, Danville, Illinois; marked plainly on the outside, "Proposal for the Construction of Vermilion County Bond Roads Subdivision, Number————."

Dated this 12th day of March, A.D. 1919.

JOHN R. MOORE,
County Clerk of the County
of Vermilion in the State of Illinois.

Bids: April 1.

Grading Trafficway

Kansas City, Mo.

Bids for grading Chestnut Avenue trafficway in Kansas City, Mo., will be received by the Board of Park Commissioners up to 2 P.M., Tuesday, April 1, 1919, for the construction of Chestnut Avenue trafficway through North Terrace Park, the approximate amount of excavation, 65,500 cu.yd.; rubble masonry, 250 cu.yd.; drain pipe, 12 in. and 24 in., 1500 lin.ft.; catch basins and manholes, 19; cut-stone coping, 440 lin.ft.; cut-stone caps 3. Certified check or cash deposit in the sum of $1500 must accompany bid. Contracts will be awarded to the lowest and best bidders, but the right is reserved to reject any or all proposals.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A. M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457 miles
Broken stone	2250 tons
Filler	700 tons
Dustless screenings	400 tons
Tarvia B	15135 gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

Bids: April 18.

Constructing 48-Inch Force Main

CITY OF AKRON, OHIO
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CONTRACT NO. 121

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works
G. G. DIXON, Engineer.

Bids: April 9.

Road Work

CITY OF PROVIDENCE WATER SUPPLY BOARD

Providence, R. I.

Sealed proposals for building two sections of Earth Road, one (Contract 4) about 1.8 miles in length in the Town of Scituate, R. I., and one (Contract 7) about 3.4 miles in length in the Town of Foster, R. I., as parts of the Road Relocation in connection with the proposed Scituate Reservoir, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M. on Wednesday, April 9, 1919, at which time and place they will be publicly opened and read.

The quantities, in cubic yards, of the main items of work are as follows:

	Contract No. 4	Contract No. 7
Earth excavation	12,000	20,000
Rock excavation	2,000	2,000
Borrow	5,000	10,000
Concrete masonry	250	190

Contracts 4 and 7 are located, respectively, about 9 miles and 16 miles westerly from the City of Providence.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.

B. THOMAS POTTER, Chairman,
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

PRELIMINARY NOTICE

Plans and specifications for the construction of other earth roads in connection with the proposed Scituate Reservoir, and for the construction during 1919 of portions of the main dam of the Scituate Reservoir are in preparation, and contracts for this work will probably be advertised during April.

Plans and specifications for the main dam and dike of the Scituate Reservoir are also in preparation and this work will, it is expected, be advertised during the late summer or early fall, if conditions then warrant. The main dam and dike will be built mainly of earth and will involve the handling of about 2,500,000 cu.yd.; the work will include gate chambers, masonry spillway, spillway channel, a reinforced concrete bridge, and other appurtenant structures.

Preliminary information may be obtained by interested contractors at the office of the Chief Engineer, 661 Westminster St., Providence, R. I.

Bids: April 1.

Concrete Bridge Construction

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners, Kansas City, Mo., until 2 P.M., Tuesday, April 1, 1919, for the construction of reinforced concrete bridge carrying Cliff Drive over Chestnut Avenue Trafficway in Kansas City, Mo. Approximate quantities reinforcing metal, 100,000 lb.; concrete in abutments, 1850 cu.yd.; concrete in arch, 846 cu.yd.; concrete in stairway, 30 cu.yd.; handrail, 433 lin.ft.; surface finish, 3700 sq.ft.; stone veneer, 258 sq.yd. Deposit of $750 required with each bid.

Contracts will be awarded to the lowest and best bidders, but the right is reserved to reject any and all proposals.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 22.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard time), April 22, 1919, for the construction of the Sewage Treatment Works at the westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden Piling	15,000	lin.ft.
Excavation	30,000	cu.yds.
Concrete	15,000	cu.yds.
Steel Reinforcement	850	tons
C. I. Piping	60	tons
Buildings	125,000	cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after March 31, 1919. A deposit of Fifteen Dollars ($15.00) will be required for each set of plans and Three Dollars $3.00) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety copmany authorized to do business in the State of Ohio or by a certified check on a solvent bank for Ten Thousand Dollars ($10,000.00) made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases and Supplies.

Bids: March 31.

Highway Work

Maryland.

SEALED PROPOSALS for building one section of State Highway, as follows:

Contract No. A-13, Allegany County.—One section of State Highway from Green Ridge to the West side of Polish Mountains, for a distance of 1.4 miles, oilbound macadam will be received by the State Roads Commission, at its offices, 601 Garrett Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of March, 1919.

FRANK H. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 9.

Paving

Ithaca, N. Y.

Bids will be received until April 9, 1919, for paving various streets:

5,600	sq.yd. brick pavement with concrete foundation.
20,000	sq.yd. brick pavement over old macadam.
5,600	sq.yd. bitulithic surface on bituminous concrete foundation.
5,600	sq.yd. bitulithic surface on cement concrete foundation.
20,000	sq.yd. bitulithic surface on old macadam.
10,200	lin.ft. cement concrete curb.

HENRY L. STEWART,
City Engineer.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvement

Camden, N. J.

Notice is hereby given that sealed bids will be received by Chas. F. Wise, Chairman of Road Committee for the widening and resurfacing of a portion of the Camden, Ellisburg and Marlton Turnpike Road, in the County of Camden, with a bituminous surface upon an old Telford and new Telford foundation; estimated amount of surface pavement required is 5640.19 tons of bituminous concrete, of foundation 9471.9 tons of new stone; and opened and read in public at public meeting in the Court House in Camden, N. J., on Monday, April 7, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by J. J. Albertson, Camden County Engineer, and approved by the State Highway Department, have been filed in the office of the said engineer at the Court House in Camden, and of said State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Chas. F. Wise, Chairman, Road Committee, Court House, Camden, N. J., and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Board of Chosen Freeholders of the County of Camden, N. J.

FRED W. GEORGE, Clerk.

March 17, 1919.

Bids: April 1.

Sanitary Sewer

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on Centre St. from Washington Ave. to Franklin Ave., will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., April 1, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are: 8572 ft. of trench of various depths; 3200 ft. of 6 in. vitrified pipe; 5000 ft. of 6 in. vitrified pipe; 22 manholes. The time of completion is limited to ninety calendar days.

Pamphlets containing information for bidders, form of proposal, agreement and specifications, also set of blue prints, can be obtained from the Town Engineer or Town Clerk on payment of $5, which will be refunded on the return of the pamphlet and drawings in good order.

A certified check for $1000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

SIMON BLUM, Town Clerk.

Bids: March 25.

Air Compressor

Marion, Indiana.

Bids for an Air Compressor, according to plans and specifications on file, will be received at Marion, Indiana, on Tuesday, March 25, 1919, at 10 o'clock A.M., by the Board of Public Works.

Further information will be furnished upon request.

T. E. PETRIE, President.
BOARD OF PUBLIC WORKS.

Bids: April 8.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET

Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 8, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 32,200 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 2.

Road Work

Paragould, Arkansas.

Notice is hereby given that the Board of Commissioners of Road Improvement, District No. 4, of Poinsett County, Arkansas, at the office of W. R. Heagler & Sons, in the city of Harrisburg, Arkansas, will until 2 P. M. on Wednesday, April 2, receive proposals for the performance of the following work:

Clearing, 43.4 acres; grubbing, 39 acres; furnishing and placing 797 lin.ft. 12-in. vitrified clay pipe, 491 lin.ft. 18-in. vitrified clay pipe; reinforced concrete abutments, 7 cu.yd.; reinforced concrete culverts, 75 cu.yd.; plain concrete end walls for pipe, 71.5 cu.yd.; 742 lin.ft. wood and pile bridges; 6840 ft. B.M. reflooring old steel bridges; moving one 25-ft. steel span about twenty-five feet to line; 97,000 cu.yd. excavation for roadway and ditches; furnish gravel and clay binder, haul and roll and finish hard surface on 16.38 miles road. The preceding quantities are approximate only.

All proposals must be made on blanks furnished by the engineers or may be had on application to the secretary of the Board of Commissioners, and must be accompanied by either a certified check or a proper and good proposal bond in the amount of one thousand dollars.

All proposals will be opened in public promptly at 2 P.M. on Wednesday, April 2, 1919, at the office of the Board of Commissioners.

The Board of Commissioners reserve the right to accept any or to reject any or all of the bids or proposals offered.

Plans, specifications and estimates may be had from the engineers, W. R. Heagler & Sons, Paragould, Arkansas, upon deposit of ten dollars, or may be seen at the office of the County Court of Poinsett County, in the City of Harrisburg, Arkansas.

L. B. STONE, President,
L. N. LANDERS, Secretary.
W. R. HEAGLER & SONS, Engineers,
Paragould, Arkansas.
March 10, 1919.

Bids: March 31.

Water-Works Improvement

Philadelphia, Pa., March 18, 1919.

Notice is hereby given that sealed proposals will be received by the Bakerton Water Company, at their office in Bakerton (Elmora P. O.), Cambria County, Penn., until 12 o'clock noon, on Monday, March 31st, 1919, for the construction complete of a

(1) STORAGE WATER RESERVOIR

One and one-fourth miles east of Bakerton, Cambria County, Penn., with all its accessories, in which the Embankment Item is about Seventeen Thousand Cubic Yards, and the Concrete Masonry Item about Twelve Hundred Cubic Yards; and

(2) EIGHT INCH CAST IRON PIPE WATER LINE

From the Gate House of the Dam to Reed Street, in Bakerton, about 6600 lineal feet, with Specials, Gates, Hydrants, etc.

Proposals will be required to conform to Plans and Specifications on file at the Office of the Bakerton Water Company, 421 Chestnut St., Philadelphia; at the Office of the Sterling Coal Company, in Bakerton (Elmora P. O.), Cambria County, Penn.; or at the Office of E. W. Hess, Engineer in Clearfield, Penn., and must be made on the Bidding Sheet that will be furnished to bidders on request.

Each bidder must deposit with each of his bids, Cash or a certified check, made payable to the "aBkerton Water Company" in the amount of Five Hundred Dollars ($500.00) a sa guarantee of good faith that he will, if a contract is awarded to him, within ten (10) days thereafter, execute a written contract for the performance of the same. The deposits of other bidders will be returned them.

A Bond satisfactory to the Bakerton Water Company, in an amount equal to the amount of the bid, for the faithful performance of the contract, will be required of the bidder to whom either contract is awarded.

Bids must be sealed, and addressed to the "Bakerton Water Company" and marked plainly on the outside of the envelope enclosing them, "Proposal for Water Works Improvements."

The right is reserved to accept any or reject any or all of the bids.

BAKERTON WATER COMPANY.
JOHN M. BRADLEY, Pres.

Bids: April 1.

Concrete Bridge

Fort Dodge, Iowa.

Sealed bids will be received until 9:30 A.M., April 1, 1919, at the office of the City Clerk, for the construction of a reinforced concrete bridge across Des Moines River, in the City of Fort Dodge, Iowa. Estimated quantities, 2100 cu.yd. concrete, 60 tons reinforcing steel. Plans and specifications may be received from the City Engineer upon a deposit of $25, which will be refunded upon return of plans within 30 days in good condition. Certified check, 10 per cent.

C. H. REYNOLDS, City Engineer

OFFICIAL PROPOSALS

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following classes of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale }
Screened or crushed gravel } Surfacing
Crushed rock }
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

Were YOU Ever Turned Down?
Many a contractor has been turned down on his
BOND
because his case was not properly presented.
Swart "Engineering Insurance Service" gives your application a far better chance.
NO EXTRA CHARGE
Phone, Wire, Write.
HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: April 3.

Road Improvements

Jonesboro, Ark.

Sealed bids for the improvement of certain roads and streets in Road Improvement District No. 4, Craighead County, Arkansas, will be received by the Board of Commissioners of the Jonesboro-Nettleton Road Improvement District at the office of the Secretary, V. C. Kays, Jonesboro, Arkansas, until 2 P.M., April 3, 1919, at which time and place they will be publicly opened and read.

The work proposed consists of the grading and paving with asphaltic concrete pavement of approximately nine miles of roads, together with the construction of the necessary culverts.

The principal quantities are approximately as follows:

Grading, average haul not exceeding 500 ft.	27,800	cu.yd.
Paving, asphaltic concrete	78,100	sq.yd.
Vitrified pipe culverts, 18 in. diameter	335	lin.ft.
Vitrified pipe culverts, 24 in. diameter	235	lin.ft.
Concrete in culverts and head walls	583	cu.yd.

Plans and specifications may be examined at the office of the Secretary of the District, Jonesboro, Arkansas, or at the Jonesboro office of the Engineers, Klyce & Kackley, or a copy may be obtained from the Engineers upon receipt of a deposit of $15, of which amount ten dollars ($10) will be refunded when the plans and specifications are returned in good order. If additional information is required, address the Engineers.

The right is reserved to reject any or all proposals and to waive informalities. The contractor will be paid cash on monthly estimates amounting to 80 per cent of the work done.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company and made payable to J. E. Parr, Treasurer, for a sum not less than $10,000. The successful bidder will be required to furnish a performance bond in the sum of 50 per cent of the contract price.

V. C. KAYS, Secretary,
Board of Commissioners.

KLYCE & KACKLEY,
Civil and Consulting Engineers,
721 Fourth and First National Bank Building, Nashville, Tenn.
March, 1919.

Bids: April 2.

Road Construction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of a section of state highway upon the Putnam Pike, so-called, in the towns of Smithfield and Glocester and approximately 2.4 miles in length will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Wednesday, April 2, 1919, at which time they will be opened and read in public:

The principal quantities involved are as follows:

Earth excavation	9250	cu.yd.
Borrow	3500	cu.yd.
Ledge	500	cu.yd.
Stone fill	3450	cu.yd.
Gravel foundations	3350	cu.yd.
Concrete masonry	160	cu.yd.
Rip-rap	1500	sq.yd.
Cobble gutter	1100	sq.yd.
Wooden guard rail	2750	lin.ft.
Crushed stone	6000	tons
Bituminous concrete surface (Topeka type)	26000	sq.yd.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, March 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bridge Letting

Greenbrier County, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

POSITIONS VACANT

CONTRACTOR'S superintendent wanted—with several years' experience on all classes of building work. State experience in full, giving names past employers and capacity in which employed. State age, married or single, salary desired. P-985, Eng. News-Record, Chicago.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

POSITIONS VACANT

DETAILER wanted—familiar with making shop drawings for structural steel and reinforcing concrete. State in detail experience, age, married or single, salary and date available. Mosher Mfg. Company, Dallas, Texas.

MAN WANTED with wide experience and executive ability, for general manager of Building Supplies Corp. Apply with reference and recommendations to P-982, Eng. News-Record, Philadelphia.

FOUR crews for Marion Steam Shovel wanted; out of town; long railroad job. Rates: Runner, $225; Craneman, $175, for 30 day month, straight time ten hours. P-983, Eng. News-Record.

OPERATING and mechanical engineer wanted, with technical education and practical experience, to take charge of our power plant—B. & W. boilers, Corliss compound and turbo engines, surface, condenser, pumps, etc.; $200 per month. Give age, references, and when could report. Good schools and surroundings. Burton-Swartz Cypress Company of Florida, Perry, Fla.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

WANTED first-class highway engineer on sand-clay and gravel-clay roads in Florida. Must be young and active, come well recommended, and furnish transit and a light car. Party will be required to pay present incumbent of the place $350 for placing him and taking the time to initiate the applicant into the job. Salary, $300 per month. Address P-958, Eng. News-Record, Philadelphia.

ENGINEER WANTED

A large firm contemplating extensive Harbor and Dock works abroad desires to secure the services of a capable construction engineer. One who can prepare the general layout and estimates of cost, and, should occasion require, direct its operations. Knowledge of French and Spanish desirable.

Address "HARBOR,"
Room 2502, 110 West 40th St.,
New York City.

WANTED

Reinforced Concrete Engineer

familiar with estimating and designing concrete buildings and capable as salesman, preferably one having had experience with the reinforcing bar companies.

CONCRETE ENGINEERING CO.
140 S. Dearborn St., Chicago.

STRUCTURAL STEEL DETAILING for

Mill buildings, office buildings, towers, tipples, viaducts, schools, theatres, etc.

Correctness and time of delivery of drawings guaranteed. All drawings made in accordance with your Shop Standards. We have a complete organization, which will save you money, time and worry; can refer you to twenty or more satisfied clients, covering nine years' business. The Mail makes Five Hundred Miles the same as next door.

Send us your Inquiries.
Write or wire and we will come and talk it over.

Designs for Structural Steel and Reinforced Concrete Industrial Buildings. Foundations, etc.

RAPP & DUNKEL
Fulton Bldg., Pittsburgh, Pa.

An Opportunity—
for

Sales Managers, Department Managers, District Managers, and Salesmen, who have been more than successful in the building material line.

We want to receive confidential applications from men who have their eyes open, who know that some men have made their biggest strides by going from one industry to another.

The positions in question are newly created and applications should be made to cover any one but only one of the above positions.

Age: About 30 to 40 years with a degree of maturity greater, if possible, than is usually found at that age.

Experience: A record of successful accomplishments in any Branch of the building material business. Practical experience in dealing with sales problems, organization and management and sound methods of procedure are essential.

Personal Qualifications:

1. Superior executive ability which will enable you to deal effectively with new situations and problems as they arise.
2. Poise and judicial quality which will inspire confidence in your mental processes.
3. Initiative and resourcefulness which will assist you in obtaining results without close supervision of others.
4. Tact, cooperative spirit, and adaptability which will insure your making good with our business friends and your office associates and obtaining their support.

To the right men these positions offer genuine opportunity for growth. You will be cordially received into an official family of young men who know the value of team work and who are practicing it.

We especially solicit applications from men who have done big things elsewhere and who will enjoy surroundings inviting their highest ability.

To insure consideration applications should set forth full particulars concerning age, nationality, business experience, especially what line of building material have you sold or managed successfully, past and present connections. Please state these as concisely as possible, if possible forward a recent photograph (this will be returned to you.)

Do not answer this unless you are thoroughly convinced of your eligibility and can demonstrate in your letter that it would be advantageous to engage you.

All replies will naturally be held in the strictest confidence, and must be by letter only.

Address Vice President,

GAGEN SALES CORPORATION
Majestic Building, Chicago, Ill.

OFFICIAL PROPOSALS

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following classes of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale ⎫
Screened or crushed gravel ⎬ **Surfacing**
Crushed rock ⎭
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

Bids: April 4.

Excavating Ditch

Sterling, Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37.765 feet. Specifications office of Carl E. Sheldon.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 8, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

OFFICIAL PROPOSALS

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A.M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457 miles
Broken stone	2250 tons
Filler	700 tons
Dustless screenings...	400 tons
Tarvia B	15135 gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholder ' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 58.4 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

Greenville to head of Lake Washington	25.2 Miles
Head of Lake Washington to County line	8.9 Miles
Greenville to Metcalfe........	4.4 Miles
Leland to Sunflower County line	10.2 Miles
Hollandale to Murphy Bayou..	5.0 Miles
Arcola to Trail Lake..........	4.7 Miles

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD, Chairman.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

OFFICIAL PROPOSALS

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5

Hagerstown, Maryland.
March 3, 1919.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.
(Countersigned) WILLIAM WINGERT,
Chairman.

OFFICIAL PROPOSALS

Bids: April 25.

Constructing 48-Inch Force Main

CONTRACT NO. 121
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CITY OF AKRON, OHIO

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the twenty-fifth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 8.

Bridge Letting

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

OFFICIAL PROPOSALS

Bids: April 8.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET

Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 8, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 32,200 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 1.

Sanitary Sewer

Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on Centre St. from Washington Ave. to Franklin Ave., will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8.15 P.M., April 1, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are: 8572 ft. of trench of various depths; 3200 ft. of 6 in. vitrified pipe; 5000 ft. of 6 in. vitrified pipe; 22 manholes. The time of completion is limited to ninety calendar days.

Pamphlets containing information for bidders, form of proposal, agreement and specifications, also set of blue prints, can be obtained from the Town Engineer or Town Clerk on payment of $5, which will be refunded on the return of the pamphlet and drawings in good order.

A certified check for $1000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

SIMON BLUM, Town Clerk

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 2.

Road Construction

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the reconstruction of a section of state highway upon the Putnam Pike, so-called, in the towns of Smithfield and Glocester and approximately 2.4 miles in length will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Wednesday, April 2, 1919, at which time they will be opened and read in public:

The principal quantities involved are as follows:

Earth excavation	9250	cu.yd.
Borrow	3500	cu.yd.
Ledge	500	cu.yd.
Stone fill	3450	cu.yd.
Gravel foundations	3350	cu.yd.
Concrete masonry	160	cu.yd.
Rip-rap	1500	sq.yd.
Cobble gutter	1100	sq.yd.
Wooden guard rail	2750	lin.ft.
Crushed stone	6000	tons
Bituminous concrete surface (Topeka type)	26000	sq.yd.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, March 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: April 9.

Reservoir Completion

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M., on Wednesday, April 9, 1919, for the construction and completion of a 15 million gallon storage basin at Wabash and St. John Avenue, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the approximate estimate of quantities, and the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Contract for the excavation of the above basin has been let and work is now proceeding on same. The proposals requested in this advertisement are to cover all other work as shown in the plans and specifications to fully complete the basin.

Proposals shall be made upon the forms attached to specifications and inclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside: "Proposal for 15 Million Gallon Storage Basin."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or Trust Company, made payable to the City Comptroller, in the amount of $1,500, which deposit shall be forfeited to the city in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.
W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: March 31.

Highway Work

Baltimore, Maryland.

Sealed proposals for guilding one section of State Highway, as follows:

Contract No. A-13, Allegany County.—One section of State Highway from Green Ridge to the West side of Polish Mountains, for a distance of 1.4 miles, oilbound macadam will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of March, 1919.

FRANK H. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

OFFICIAL PROPOSALS

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 30,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor,
GEO. W. WOODWARD, City Clerk,
J. L. MOOREHEAD, City Attorney,
H. W. KUEFFNER, City Engineer.

Bids: April 7.

Road Improvement

Camden, N. J.

Notice is hereby given that sealed bids will be received by Chas. F. Wise, Chairman of Road Committee for the widening and resurfacing of a portion of the Camden, Ellisburg and Marlton Turnpike Road, in the County of Camden, with a bituminous surface upon an old Telford and new Telford foundation; estimated amount of surface pavement required is 5640.19 tons of bituminous concrete, of foundation 9471.9 tons of new stone; and opened and read in public at public meeting in the Court House in Camden, N. J., on Monday, April 7, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by J. J. Albertson, Camden County Engineer, and approved by the State Highway Department, have been filed in the office of the said engineer at the Court House in Camden, and of said State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Chas. F. Wise, Chairman, Road Committee, Court House, Camden, N. J., and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Board of Chosen Freeholders of the County of Camden, N. J.

FRED W. GEORGE, Clerk.
March 17, 1919.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

Bids: April 10.

Earth and Concrete Levee

Newport, Arkansas.

Sealed proposals will be received by the Board of Directors of the Newport Levee District, Jackson County, Arkansas, at Newport, Arkansas, until 2 o'clock P.M., April 10, 1919, for the construction of flood protection works, involving approximately the following principal quantities:

Earth embankment	297,500 cu.yd.
Concrete	2,150 cu.yd.
Reinforcing steel	65 tons
Miscellaneous cast iron and steel	5 tons
Wood sheet piling	116 M. ft. B.M.
Tile, 4 in. and 10 in. diameters	8,270 lin.ft.
Corrugated iron pipe—18 in. and 24 in. diameters.	550 lin.ft.
Cast iron or concrete pipe, 24 in. and 36 in. diameters	290 lin.ft.
Sluice gates, 24 in. diam.	4
36 in. diam.	4
48 in. diam.	2
Sodding embankments...	162,800 sq.yd.

The work is divided into three sections and proposals will be received for the entire work or for any section or combination of sections. Proposals must be submitted on the form furnished by the Board and must be accompanied by a certified check, payable to the Treasurer of the Newport Levee District, for not less than 5 per cent of the total amount of the bid, but in no case need the certified check exceed $5000.

Payments for the work will be made in cash.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF DIRECTORS NEWPORT
LEVEE DISTRICT.
By C. R. Hite, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: April 8.

Sewer Construction

College Hill, Pa.

Sealed proposals will be received by the undersigned, up to 6 o'clock P.M., April 8, 1919, for the construction of 28,000 ft. of sewer, more or less, with necessary manholes, flush tanks, etc. The pipe will be furnished by the Borough.

Plans and specifications are on file at the offices of H. P. Dawson, Borough Engineer, Colonial Theatre Bldg., Beaver Falls, Pa., and 341 Fourth Avenue, Pittsburgh, Pa.

Proposals shall be made on the blank forms to be obtained at the Borough Engineer's Offices.

A certified check for $1000 shall be enclosed in the sealed bids.

The Borough Council reserves the right to reject any or all bids.

JOHN LEEPER,
Secretary of Council.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.

Bids: April 9.

Road Improvement

Hackensack, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation; estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

Bids: April 12.

Highway Construction

Johnstown, Pa.

Sealed proposals will be received in person by Webster Mosholder, President of the Board of Supervisors of Upper Yoder Township, Cambria County, Pennsylvania, at the office of Frank P. Barnhart, Solicitor for Upper Yoder Township, at his offices in the Swank building, in the City of Johnstown, Pennsylvania, promptly at 12 o'clock noon, Saturday, April 12, 1919, from the bidders in person or their duly constituted agents, at which time and place the bids will be opened and read in the presence of all bidders or their said agents, and the contracts awarded within five (5) days thereafter, for the reconstruction of approximately 28,500 lin.ft. of the Millcreek road in said township, extending from the line of the Borough of Westmont to the Ligonier Pike, with three-inch vitrified block on a concrete base.

At the same time and place and in the same manner, separate bids will be received, opened and read and the contracts awarded within five (5) days thereafter for furnishing the following items, namely:

3,500	M 3-in. vitrified blocks.
12,000	barrels of Portland cement.
2,000	lin.ft. of 24-in. reinforced concrete pipe.
2,000	lin.ft. of 30-in. reinforced concrete pipe.
2,000	lin.ft. of cast-iron pipe, sizes 12 in. to 24 inches.

The unloading from cars, hauling to the roadside and stacking of each of the above items.

All quantities are approximate.

Each proposal must be accompanied with a certified check to the amount of at least five (5) per centum of the total amount of the proposal, and the envelope enclosing the proposal must be marked "Proposal for the Reconstruction of the Millcreek Road."

Proposals must be submitted upon the blank forms provided for that purpose. The Supervisors reserve the right to reject any and all bids.

Plans, specifications and bidding blanks may be seen at the office of C. E. Brown, Township Engineer, third floor Hannan Building, Johnstown, Pennsylvania. A deposit of fifteen ($15) dollars will be required with request for plans and five ($5) dollars with request for specifications, which amount will be refunded upon return of the same with a bid.

WEBSTER MOSHOLDER,
CONRAD H. RAAB,
D. H. WEIMER,
Supervisors.
Frank P. Barnhart, Att. for Supervisors.
Swank Building.
Johnstown, Pa.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: April 2.

Road Work

Paragould, Arkansas.

Notice is hereby given that the Board of Commissioners of Road Improvement, District No. 4, of Poinsett County, Arkansas, at the office of W. R. Heagler & Sons, in the city of Harrisburg, Arkansas, will until 2 P.M., on Wednesday, April 2, receive proposals for the performance of the following work:

Clearing, 43.4 acres; grubbing, 39 acres; furnishing and placing 797 lin.ft. 12-in. vitrified clay pipe, 491 lin.ft. 18-in. vitrified clay pipe; reinforced concrete abutments, 7 cu.yd.; reinforced concrete culverts, 75 cu.yd.; plain concrete end walls for pipe, 71.5 cu.yd.; 742 lin.ft. wood and pile bridges; 6840 ft. B.M. reflooring old steel bridges; moving one 25-ft. steel span about twenty-five feet to line; 97,000 cu.yd. excavation for roadway and ditches; furnish gravel and clay binder, haul and roll and finish hard surface on 16.38 miles road. The preceding quantities are approximate only.

All proposals must be made on blanks furnished by the engineers or may be had on application to the secretary of the Board of Commissioners, and must be accompanied by either a certified check or a proper and good proposal bond in the amount of one thousand dollars.

All proposals will be opened in public promptly at 2 P.M. on Wednesday, April 2, 1919, at the office of the Board of Commissioners.

The Board of Commissioners reserve the right to accept any or to reject any or all of the bids or proposals offered.

Plans, specifications and estimates may be had from the engineer, W. R. Heagler & Sons, Paragould, Arkansas, upon deposit of ten dollars, or may be seen at the office of the County Court of Poinsett County, in the City of Harrisburg, Arkansas.

L. B. STONE, President.
L. N. LANDERS, Secretary.
W. R. HEAGLER & SONS, Engineer,
Paragould, Arkansas.
March 10, 1919.

Bids: April 11.

Earth Dam, Filter Plant and Appurtenances

City of Jacksonville, Ill.

Sealed proposals for an Earth Dam and Filter Plant will be received by the City of Jacksonville until 12 o'clock noon, on the 11th day of April, 1919.

The work for which proposals are invited includes an earth dam about 600 ft. long, a concrete spillway, a water filtration plant of 1.5 million gallons capacity with all appurtenances, according to plans and specifications on file in the office of the City Engineer, Jacksonville, Ill., and of Pearse and Greeley, Engineers, 64 W. Randolph St., Chicago, Ill.

A certified check or surety bond acceptable to the City to the sum of $500 shall be deposited with each bid. Bids may be made on the dam and the filter plant as separate contracts, or together as one.

Plans and specifications may be secured upon deposit of $5.

The City Council reserves the right to reject any or all bids, waive any informality in the bids and to accept any bid which it deems most favorable to the City of Jacksonville.

The City of Jacksonville, Illinois.
BY HENRY J. RODGERS,
Mayor.
R. L. PYATT, Clerk.
March 24, 1919.

OFFICIAL PROPOSALS

Bids: April 9.

Wood Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b., cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate and the furnishing of all necessary labor and materials to lay approximately 8000 lin.ft. of 48-in. wood pipe and specials in accordance with the plans, bill of material, and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Board of Fire and Water Commissioners of Kansas City, Mo., and marked "Proposals for Furnishing and Laying 48-in. Wood Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of twenty-five hundred dollars, made payable to the City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City (Mo.) so to do.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 9.

Concrete Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, in the City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b., cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate and the furnishing of all necessary labor and material to lay approximately 8000 lin.ft. of 48-in. concrete pipe and specials in accordance with the plans, bill of material and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Board of Fire and Water Commissioners of Kansas City, Mo., and marked, "Proposal for Furnishing and Laying 48-in. Concrete Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of twenty-five hundred dollars, made payable to the City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City (Mo.) so to do.

J. RAY SAMUEL,
Purchasing Agent.

OFFICIAL PROPOSALS

Bids: April 9.

Steel Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b. cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate, and the furnishing of all necessary labor and material to lay approximately 8000 lin.ft. of 48-in. steel pipe and specials in accordance with the plans, bill of material and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent of Kansas City, Mo., and marked, "Proposal for Furnishing and Laying 48-in. Steel Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of two thousand five hundred ($2500) dollars, made payable to City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City, Mo., so to do.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 12.

Storm Water Drains

Buffalo, N. Y.

The Commissioner of Public Works will receive sealed proposals at Room No. 1, Municipal Building, Buffalo, N. Y., until 11 o'clock A.M., April 12, 1919, for the construction of an 8, 7 and 6 foot storm water drain, known as "The Sloan Drain."

It is to be about 11,000 ft. in length on which brick, segmental tile block or reinforced concrete pipe may be used in part or in whole. The first section is in sandy soil with water, the remainder in clay with some rock excavation required. Part may be constructed in tunnel at contractor's option.

Bids and contract will be on a lump sum basis, excepting a very small section. Bond for 50% or certified check for 10% required with bids.

Plans and specifications may be had by addressing City Engineer, No. 7 Municipal Building, Buffalo, N. Y.

Formal advertisement will be found in the Buffalo Commercial, Morning Express and Buffalo Engineer, March 24, 25, 31 and April 1, 1919.

This is not a formal advertisement.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: April 8.

Highway Work

Johnstown, Pa.

Sealed proposals will be received at the Office of the Superintendent of Streets and Public Improvements, City Hall, Johnstown, Pa., until 12 o'clock noon of Tuesday, April 8th, 1919, for curbing, grading and paving the following highways, also sanitary sewers, storm sewers, and their appurtenances, and one reinforced concrete culvert bridge, all in accordance with plans and specifications on file in the office of the City Engineer:

Highway	From	To	Estimated Quantity
GROUP NO. 1			
Franklin Street	Stephen Street	City Line	Brick Paving 11,625 sq.yds.
Derby Street	Franklin Street	Riddle Ave.	Brick Paving 3,602 sq.yds.
Derby Street	Franklin Street	Riddle Ave.	Storm Sewer 2058 lin.ft. 8″ to 36″
GROUP NO. 2			
Fairfield Avenue	Butler Alley	St. Clair Run	Brick Paving 7047 sq.yds.
Cooper Avenue	End of Paving	City Line	Brick Paving 1373 sq.yds.
GROUP NO. 3			
Ridge Avenue	Horrocks Street	End of Ave.	Brick Paving 1540 sq.yds.
Ridge Avenue	Horrocks Street	End of Ave.	Sanitary Sewer 828 lin.ft. 8″
Ridge Avenue	Horrocks Street	End of Ave.	Storm Sewer 732 lin.ft. 8″ to 15″
Church Avenue	Angle in Avenue	End of Str.	Brick Paving 1628 sq.yds.
Church Avenue	Angle in Avenue	End of Str.	Sanitary Sewer 726 lin.ft. 8″
GROUP NO. 4			
Central Avenue	Horner St. Bridge	Moxham Bridge	Brick Paving 1322 sq.yds.
Bell Alley	Cherry Street	Poplar Street	Brick Paving 684 sq.yds.
Bell Alley	Cherry Street	Poplar Street	Sanitary Sewer 540 lin.ft. 27″
GROUP NO. 5			
Fronheiser Street	McMillen St.	Murdock St.	Brick Paving 1545 sq.yds.
Fronheiser Street	McMillen St.	Murdock St.	Sanitary Sewer 558 lin.ft. 8″ to 18″
McMillen Street	Ash Street	Von Lunen Rd.	Brick Paving 1084 sq.yds.
McMillen Street	Ash Street	Von Lunen Rd.	Sanitary Sewer 488 lin.ft. 8″ to 18″
GROUP NO. 6			
Spring Street	Lemon Avenue	Butler Ave.	One-course Concrete Pavement 6536 sq.yds.
Spring Street	Lemon Avenue	Butler Ave.	Sanitary Sewer 2000 lin.ft. 8″
Bradley Alley	Second Avenue	Third Ave.	One-course Concrete Payement 570 sq.yds.
GROUP NO. 7			
"I" Street	Fairfield Ave.	Barron Ave.	One-course Concrete Pavement 522 sq.yds.
"I" Street	Fairfield Ave.	Barron Ave.	Sanitary Sewer 308 lin.ft. 8″
"H" Street	Fairfield Ave.	Bheam Ave.	One-Course Concrete Pavement 1163 sq.yds.
"H" Street	Fairfield Ave.	Bheam Ave.	Sanitary Sewer 460 lin.ft. 8″
Paul Alley	Franklin Street	Kennedy Ave.	One-course Concrete Pavement 232 sq.yds.
CONTRACT NO. 8			
	Russel Avenue	Over Sams Runs	Reinforced concrete bridge 9207 lb. steel bars 154 cu.yds. Class A Concrete 97½ cu.yds. Class B Concrete 63 cu.yds. Excavation 84½ sq.yds. Paving.

Plans, specifications, and blank proposals can be obtained at the Office of the City Engineer on payment of $3.00 for each set or group, which will be refunded upon the day of the letting to those submitting bids, providing the plans and specifications are returned in good condition.

Each proposal must contain the full name of the party or parties presenting the same and all persons interested therein; and must be accompanied by a bond, duly and legally executed, for an amount which shall not be less than five per cent. (5% of the contract price, or a certified check for like amount, on a solvent bank, doing business in the City of Johnstown, Pa., and made payable without reservation to the order of the Treasurer of the City of Johnstown, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

All proposals must be made on the blank forms attached to the specifications, as none other will be accepted, and they shall be enclosed in an envelope, bearing the name and address of the bidder, marked "Proposal for Highway Improvements," and addressed to "The Superintendent of Streets and Public Improvements." Bids will be opened and publicly read at the regular session of City Council in their chambers at 2:00 o'clock p.m. on the same date.

The City reserves the right to reject any or all bids ,to waive irregularities, and to award the contract as may be deemed to the best interests of the City.

M. LEE MASTERTON,
Supt. of Streets and Public Improvements.

OFFICIAL PROPOSALS

Bids: April 15 .

Dredging

FORMATION OF SECTION OF INLAND WATERWAY CONNECTING BARNEGAT BAY WITH THE MANASQUAN RIVER
OFFICE OF BOARD OF COMMERCE AND NAVIGATION
State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,
Director

March 25, 1919.

Proposal Advertisements

can be received at our New York office until

10 A. M. Wednesday

for publication in the issue of Engineering News-Record out the

Next Morning

When there is any doubt as to copy reaching us by mail by Wednesday morning, telegraph both copy and instructions as a

Night Letter

forwarding confirmation, copy and order by mail.

ENGINEERING NEWS-RECORD

10th Ave. at 36th St., New York

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering News-Record
10th Ave. at 36th St.
New York

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OFFICIAL PROPOSALS

Bids: April 15.

Water Work System

Freeport, Ohio.

Sealed proposals will be received at the office of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, until six (6) o'clock P.M., of the fifteenth (15) day of April, 1919, and will be publicly opened and read by the Clerk in the Council Room for furnishing all tools, labor and materials and constructing certain improvements to the existing municipal water works system, including cast-iron pipe lines, valves, hydrants and appurtenances, in accordance with the plans and specifications now on file at the offices of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, and the W. J. Sherman Co., Engineers, Toledo, Ohio.

Copies of the bidding blanks, contract and specifications may be obtained from the undersigned.

Each bid must be accompanied by a surety company bond, a cash deposit or a certified check on some solvent bank, payable to the order of the Village Treasurer, for an amount equal to five (5) per cent of the aggregate amount of the bid, as a guarantee that if the bid is accepted a contract will be entered into and the required bond will be furnished for the faithful

Bids will be received on the whole or any portion of the work herein provided for.

The Board of Trustees of Public Affairs reserves the right to reject any or all bids received, to waive irregularities in the bids, in the interests of the village, and to adjust the extent of the work to the amount of the appropriation.

CHAS. LINARD, Clerk.

Bids: April 9.

Sanitary Work

Willard, N. Y.

Sealed proposals for Sanitary Work—Chlorinating Plant, Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M., on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3174. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: March 17, 1919.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

Bids: April 10.

Paving

Farmville, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Farmville, N. C., at Town Hall in Farmville, N. C., until 2 P.M., April 10, 1919, for Street Improvements.

The work will consist of about:

25,000	or 50,000 sq.yd. of asphalt, bitulithic, brick or other pavement.
15,000	lin.ft. of granite or concrete curb.
15,000	lin.ft. of concrete gutter.
20,000	sq.yd. of sidewalk.

And the necessary grading and drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2,000.00 as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Farmville and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

R. E. BELCHER, Mayor.
T. E. JOYNER, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

Bids: April 24.

Paving

Auburn, Me.

Sealed bids will be received until 10 A.M., Thursday, April 2⁴ 1919, by the City Manager, City Building, Auburn, Me., for the improving and paving of certain streets in said City with vitrified paving block or concrete, or granite block. The work contemplated is about 12,000 sq.yd. Plans and specifications may be seen at the office of the City Manager.

GEORGE W. BUMPUS,
City Clerk.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 11.

Furnishing Asphalt

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and delivering of 90,000 gallons of asphalt in wooden barrels or metal drums will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Friday, April 11, 1919, at which time they will be opened and read in public.

Bids must be made upon blank forms to be furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island .

The Board reserves the right to reject any and all bids.

Forms of specifications ,proposal and contract may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 31, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODWARD

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: April 8.

Highway Work

STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for building one section of State Highway, as follows:

Contract No. T-11—Talbot County—One section of State Highway from St. Michaels to Claiborne, for a distance of 2.65 miles, concrete,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1.00 ,as hereafter no cahrges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: March 31.

Unloading and Loading Stone Chips

STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for unloading and hauling stone chips, as follows:

Division	Tons
No. 1—Dorchester, Somerset, Wicomico, Worcester Counties	3,260
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties	8,161
No. 5—Carrol, Frederick (Part), Howard (Part), Montgomery (Part), and Baltimore (Part), Counties	12,603
No. 6—Garrett, Washington and Frederick (Part) Counties	10,520

will be received by the State Roads Commission ,at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be mads upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

The right is reserved to increase or diminish the above quantities 20%.

Bids: April 11.

Dredging

Bridgeport, Conn.

Sealed proposals will be received at the office of the Clerk of the Board, by the Board of Park Commissioners of Bridgeport, Connecticut, for filling at Fayerweather Island Seaside Park up to 12 o'clock noon of April 11, 1919, at which time the proposals will be publicly opened.

Job includes about 40,000 cubic yards of suction dredging.

Plans and specifications can be obtained fro mthe Engineer, Alfred H. Terry, 886 Main Street, Bridgeport.

No proposal will be accepted unless accompanied by a certified check for $500 payable to the Treasurer of the City of Bridgeport.

The Board reserves the right to reject any and all bids.

B. F. COONEY, Clerk.
Security Building,
Bridgeport, Connecticut.

OFFICIAL PROPOSALS

Bids: April 7.

Street Improvements

ETC., ON THE GLOUCESTER HOUSING PROJECT, NOREG VILLAGE, CENTER TOWNSHIP, NEW JERSEY, FOR UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION

Sealed proposals will be received at the office of William H. Boardman, Project Engineer, 426 Walnut Street, Philadelphia, Pa., until 12 o'clock noon, april 7th, 1919, for the construction of Street Pavements, Curbs, Gutters, Storm Water Inlet, Street Walks, House Walks, and work incidental thereto, on the Gloucester Housing Project, Noreg Village, Center Township, New Jersey, for United States Shipping Board, Emergency Fleet Corporation, according to Drawings and Specifications on file with the Project Engineer, and at that time and place the proposals will be publicly opened and read.

On and aftre March 28th plans, specifications, blank forms and all necessary information may be obtained from the Project Engineer, 426 Walnut Street, Philadelphia, and plans may also be seen at the Field Engineer's Office on the Project.

The approximate cost of the work to be done is $15,000.00. Each bid must be accompanied by a certified check drawn upon a National Bank or Trust Company in the amount of Twenty-Five Hundred Dollars, ($2500), payable to the United States Shipping Board, Emergency Fleet Corporation.

Only experienced and responsible bidders will be considered in awarding the Contract, and bidders may be required to submit evidence of experience and financial ability sufficient to warrant their undertaking the work and carrying it on to successful completion. The Owner does not obligate itself to accept the lowest, or any bid.

Bids: April 14.

Standpipe, 25 Ft. Diameter by 130 Ft. High; Concrete Foundation; Metal Work

City of Salem, N. J.

Sealed proposals, marked "Proposal for ("Standpipe Foundation," 'Standpipe Metal Work," or both), and addressed to W. A. W. Grier, Mayor, City of Salem, Salem, New Jersey, will be received until seven (7) o'clock P.M., on Monday, April 14th, 1919, at City Hall, Salem, New Jersey, for the furnishing of all of the materials and labor required for the installation of the said Standpipe Foundation and Metal Work.

Specifications and information may be obtained at the office of Mr. William H. Boardman, Engineer, 426 Walnut St., Philadelphia, or at the office of the undersigned.

A certified check for $200.00, drawn to the order of "The City Treasurer of the City of Salem, New Jersey," or equivalent bidder's bond, must accompany each proposal for the said Foundation, and for $500.00 for the said Metal Work.

The City of Salem reserves the right to reject any or all proposals, or to accept any proposal subject to such modifications as the Engineer may recommend at any time prior to the signing of the Contract.

N. S. HIRES,
Superintendent Water Department,
Room 6, Dunn Building,
Salem, New Jersey.

A wise Americaan once said
"Let those serve you most who serve you best"
"Nuf Sed"
See me—for your next
CONTRACT BOND
Harmon V. Swart
19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award ha sbeen made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 5.

Motor Vehicle Seals

Austin, Texas.

Proposals will be received until April 5th for 400,000 motor-vehicle seals, 3¼ x 5⅜ inches, bearing the following indicia in three lines:

Registered Motor Vehicle
1 2 3 4 5 6
Texas 1920

The seals shall be made of 34 gauge steel. The middle-line serial numbers shall be not less than ⅜ inches high, and shall run consecutively from 1 to 400,000.

STATE HIGHWAY DEPARTMENT,
Austin, Texas.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 8.

Highway Work

STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for building one section of State Highway, as follows:

Contract No. T-11—Talbot County—One section of State Highway from St. Michaels to Claiborne, for a distance of 2.65 miles, concrete,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1.00 ,as hereafter no cahrges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 12.

Highway Construction

Johnstown, Pa.

Sealed proposals will be received in person by Webster Mosholder, President of the Board of Supervisors of Upper Yoder Township, Cambria County, Pennsylvania, at the office of Frank P. Barnhart, Solicitor for Upper Yoder Township, at his offices in the Swank building, in the City of Johnstown, Pennsylvania, promptly at 12 o'clock noon, Saturday, April 12, 1919, from the bidders in person or their duly constituted agents, at which time and place the bids will be opened and read in the presence of all bidders or their said agents, and the contracts awarded within five (5) days thereafter, for the reconstruction of approximately 28,500 lin.ft. of the Millcreek road in said township, extending from the line of the Borough of Westmont to the Ligonier Pike, with three-inch vitrified block on a concrete base.

At the same time and place and in the same manner, separate bids will be received, opened and read and the contracts awarded within five (5) days thereafter for furnishing the following items, namely:

3,500	M 3-in. vitrified blocks.
12,000	barrels of Portland cement.
2,000	lin.ft. of 24-in. reinforced concrete pipe.
2,000	lin.ft. of 30-in. reinforced concrete pipe.
2,000	lin.ft. of cast-iron pipe, sizes 12 in. to 24 inches.

The unloading from cars, hauling to the roadside and stacking of each of the above items.

All quantities are approximate.

Each proposal must be accompanied with a certified check to the amount of at least five (5) per centum of the total amount of the proposal, and the envelope enclosing the proposal must be marked "Proposal for the Reconstruction of the Millcreek Road."

Proposals must be submitted upon the blank forms provided for that purpose. The Supervisors reserve the right to reject any and all bids.

Plans, specifications and bidding blanks may be seen at the office of C. E. Brown, Township Engineer, third floor Hannan Building, Johnstown, Pennsylvania. A deposit of fifteen ($15) dollars will be required with request for plans and five ($5) dollars with request for specifications, which amount will be refunded upon return of the same with a bid.

WEBSTER MOSHOLDER,
CONRAD H. RAAB,
D. H. WEIMER,
Supervisors.
Frank P. Barnhart, Att. for Supervisors,
Swank Building,
Johnstown, Pa.

Bids: April 24.

Paving

Auburn, Me.

Sealed bids will be received until 10 A.M., Thursday, April 24, 1919, by the City Manager, City Building, Auburn, Me., for the improving and paving of certain streets in said City with vitrified paving block or concrete, or granite block. The work contemplated is about 12,000 sq.yd. Plans and specifications may be seen at the office of the City Manager.

GEORGE W. BUMPUS,
City Clerk.

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following classes of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale ⎫
Screened or crushed gravel ⎬ Surfacing
Crushed rock ⎭
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

Bids: April 11.

Dredging

Bridgeport, Conn.

Sealed proposals will be received at the office of the Clerk of the Board, by the Board of Park Commissioners of Bridgeport, Connecticut, for filling at Fayerweather Island Seaside Park up to 12 o'clock noon of April 11, 1919, at which time the proposals will be publicly opened.

Job includes about 40,000 cubic yards of suction dredging.

Plans and specifications can be obtained fro mthe Engineer, Alfred H. Terry, 886 Main Street, Bridgeport.

No proposal will be accepted unless accompanied by a certified check for $500 payable to the Treasurer of the City of Bridgeport.

The Board reserves the right to reject any and all bids.

B. F. COONEY, Clerk.
Security Building,
Bridgeport, Connecticut.

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 58.4 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

Greenville to head of Lake Washington	25.2 Miles
Head of Lake Washington to County line	8.9 Miles
Greenville to Metcalfe	4.4 Miles
Leland to Sunflower County line	10.2 Miles
Hollandale to Murphy Bayou	5.0 Miles
Arcola to Trail Lake	4.7 Miles

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD, Chairman.

OFFICIAL PROPOSALS

Bids: April 25.

Constructing 48-Inch Force Main

CONTRACT NO. 121
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CITY OF AKRON, OHIO

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the twenty-fifth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 10.

Paving

Farmville, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Farmville, N. C., at Town Hall in Farmville, N. C., until 2 P.M., April 10, 1919, for Street Improvements.

The work will consist of about:

25,000 or 50,000 sq.yd. of asphalt, bitulithic, brick or other pavement.
15,000 lin.ft. of granite or concrete curb.
15,000 lin.ft. of concrete gutter.
20,000 sq.yd. of sidewalk.

And the necessary grading and drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2,000.00 as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Farmville and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

R. E. BELCHER, Mayor.
T. E. JOYNER, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

OFFICIAL PROPOSALS

Bids: April 15.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET
Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 15, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 22,400 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation Insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 11.

Furnishing Asphalt

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and delivering of 90,000 gallons of asphalt in wooden barrels or metal drums will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Friday, April 11, 1919, at which time they will be opened and read in public.

Bids must be made upon blank forms to be furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids.

Forms of specifications, proposal and contract may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 31, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODWARD

OFFICIAL PROPOSALS

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5

Hagerstown, Maryland.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.
(Countersigned) WILLIAM WINGERT,
Chairman.

OFFICIAL PROPOSALS

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity in North Terrace Park, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe in North Terrace Park."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 9.

Sanitary Work

Willard, N. Y.

Sealed proposals for Sanitary Work—Chlorinating Plant, Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M., on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3174. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: March 17, 1919.

OFFICIAL PROPOSALS

Bids: April 15.

Water Work System

Freeport, Ohio.

Sealed proposals will be received at the office of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, until six (6) o'clock P.M., of the fifteenth (15) day of April, 1919, and will be publicly opened and read by the Clerk in the Council Room for furnishing all tools, labor and materials and constructing certain improvements to the existing municipal water works system, including cast-iron pipe lines, valves, hydrants and appurtenances, in accordance with the plans and specifications now on file at the offices of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, and the W. J. Sherman Co., Engineers, Toledo, Ohio.

Copies of the bidding blanks, contract and specifications may be obtained from the undersigned.

Each bid must be accompanied by a surety company bond, a cash deposit or a certified check on some solvent bank, payable to the order of the Village Treasurer, for an amount equal to five (5) per cent of the aggregate amount of the bid, as a guarantee that if the bid is accepted a contract will be entered into and the required bond will be furnished for the faithful

Bids will be received on the whole or any portion of the work herein provided for.

The Board of Trustees of Public Affairs reserves the right to reject any or all bids received, to waive irregularities in the bids, in the interests of the village, and to adjust the extent of the work to the amount of the appropriation.

CHAS. LINARD, Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

Bids: April 18.

Constructing, Draining and Paving Chatham County Public Roads

Savannah, Georgia.

Office of the Commissioners of Chatham county and Ex-officio Judges, Savannah, Georgia, March 14, 1919.

Bids will be received by Chatham county at the office of the commissioners of Chatham county in the county court house, Savannah, Georgia, until Friday, April 18, 1919, not later than 12 o'clock noon, Savannah city time, for furnishing all material and labor and constructing, draining and paving the public roads of Chatham county, Georgia hereinafter named. Plans and specifications can be had upon application to this office, and the payment of $50.00 to cover the cost of the detailed plans, should they be desired. Plans and specifications are, however, subject to inspection, in this office, without such payment.

Bids must be sealed and marked, "Proposal for constructing and paving public roads," and addressed to the Commissioners of Chatham County and Ex-officio Judges, and delivered at the office of the Commissioners of Chatham county at the county court house, Savannah, Georgia.

Terms and time of payment. Payment for each kind of work will be made on the basis stated in the specifications for that particular item and at the rate mentioned in the proposal or bid. Partial payments will be made monthly on or before the 15th day of each month, in accordance with the rules of the county commissioners, on the basis specified in the specifications for that particular item, and at the rate mentioned in the proposal. The total amounts of such payment at any time before final completion shall not exceed eighty-five per cent. (85%) of the relative value of the work done and material furnished, as estimated by the engineer. Estimates of the relative value of the material furnished and work performed will be made by the engineer on or before the last day of the month in which the material is furnished and the work done. Payment therefor will be made on or before the 15th day of the succeeding month. Whenever the total amount of work provided for by the contract shall have been performed and all parts of the work have been approved by the engineer, final estimate showing the value of the material and work will be prepared by the engineer as soon as the necessary measurements can be made. The amount of this estimate, less any sums that may have been deducted in accordance with the provisions of the contract, will be paid to the contractor within thirty days after the final estimate is forwarded by the engineer, provided that the contractor has properly maintained the road as required in the specifications.

No material merely delivered, but not worked into place, temporary work, false work, or the like, shall be included in such estimate and no payments will be allowed for such items.

Work under the contract for the Augusta and Port Wentworth roads and Lathrop avenue, from the corporate limits of the city of Savannah to Port Wentworth must be begun within thirty days after the signing of the contract therefor and completed within five months after such signing. Work on the Port Wentworth and Augusta roads, from Port Wentworth to the county line, shall be begun not later than five months after the signing of the contract and completed within nine months after such signing. Work on the Louisville road, from the limits of the city of Savannah to the county line, shall be begun within thirty days after the signing of the contract and completed within seven months thereafter. Work on the Ogeechee road, from the limits of the city of Savannah to the county line, shall be begun within thirty days from the signing of the contract and completed within seven months thereafter. Work on the Tybee road shall be begun within thirty days after the signing of the contract and completed within one and one-half years thereafter.

Further information, detail plans and specifications can be had by reference to this office and such plans and specifications are on file in this office and open to inspection.

Bidder's bond, check, etc. There must accompany each proposal or bid, a certified check, payable to the order of the Commissioners of Chatham County, Georgia, in a sum equal to five per cent. (5%) of the total of any bid, or a bidder's bond in like sum, acceptable to the county commissioners with a surety company as surety, which has a regular established agency at Savannah, Georgia.

The county reserves the right to reject any and all bids.

OLIVER T. BACON, C. C. C.
A. B MOORE, C. C. C.
ALBERT WYLLY, C. C. C.
HARVEY GRANGER, C. C. C.
A. W. SOLOMON, C. C. C.

Bids: April 9.

Water Main

Ward's Island, N. Y.

Sealed proposals for Water Main, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accopmanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 2465 including Addenda No. 1. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: March 24, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu. Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls	392	Cu. Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq. Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu. Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (Sheet Asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be acompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: April 16.

Bridge Structure

SUBSTRUCTURE AND SUPERSTRUCTURE
SCHERZER ROLLING LIFT BRIDGE AND APPROACHES
CITY OF OSHKOSH, WISCONSIN

Sealed proposals will be received by the Board of Public Works of the City of Oshkosh, at the City Hall, until 12 o'clock noon of April 16, 1919, for the construction of a new bridge, to replace the present bridge, across the Fox River at Oregon and Jackson Street.

Proposals shall be made for the removal of the existing bridge substructure, the construction of the piers, fenders, abutments, retaining walls, hand railing, filling and paving the approach roadway, walks and constructing and erecting complete, ready for operation and traffic, a deck highway bridge superstructure consisting of six approach spans and one Scherzer Rolling Lift Span, having a total length of 470 feet face to face of abutments, and a width of 38 feet center to center of sidewalk hand rails. All work shall be fully completed and the bridge in service on or before January 1, 1920.

Printed forms for these proposals, giving estimates of quantities and information relating to the work, contracts and contract bonds and plans and specifications of all portions of the work may be had upon application to the Board of Public Works of the City of Oshkosh, accompanied by check to the order of the City of Oshkosh, for the sum of Five Dollars for each set thereof. No bid will be considered unless accompanied by the contract and bond provided by the city, completely executed, with the exception of the signatures on the part of the city. The amount of the bond submitted shall be the entire contract price; and the right is hereby reserved to reject any and all bids.

WM. F. PORATH
G. H. RANDALL
ALBERT MARCH
FREDERIC J. EATON
BOARD OF PUBLIC WORKS,
City of Oshkosh, Wisconsin.
SCHERZER ROLLING LIFT BRIDGE COMPANY, Engineers.
March 27, 1919.

Bids: April 15.

Dredging

FORMATION OF SECTION OF INLAND WATERWAY CONNECTING BARNEGAT BAY WITH THE MANASQUAN RIVER
OFFICE OF BOARD OF COMMERCE AND NAVIGATION

State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,
Director.
March 25, 1919.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th & Holmes Street, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe, 75th & Holmes Street."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 18.

Metering Feed Water Heater

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS IMPROVEMENT
CONTRACT NO. 140

City of Akron, Ohio.

Sealed bids for Furnishing Metering Feed Water Heater will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard Time, of Friday the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of one vertical open metering feed water heater, meter to be equipped with indicating, recording, and integrating device, exhaust steam to be supplied to heater at approximately three pounds back pressure.

All proposals must be made on the blank forms furnished by the City; each proposal must be accompanied by a certified check on some solvent bank in the sum of One Hundred Dollars ($100.00).

A satisfactory bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

The specifications and the proposal, contract and bond forms may be seen at the office of the director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent Water Works.
G. G. DIXON, Engineer.

OFFICIAL PROPOSALS

Bids: April 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and applying of 485,000 gallons of asphaltic oil or of refined tar to the macadam sections of State highway in Rhode Island will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Wednesday, April 16, 1919, at which time they will be opened and read in public.

The roads to be treated are divided into three divisions and separate bids will be received for furnishing and applying of oil or of tar to the roads in each division.

Bids must be made upon forms furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids.

Forms of specifications, proposal and contract may be obtained at the office of the State Board of Public Roads, Providence, R. I., on and after Tuesday, April 1, 1919, between the hours of 9 A.M. and 5 P.M., Saturdays between 9 A.M. and 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODARD

Bids: April 11.

Street Paving

Lorain, Ohio.

Sealed proposals will be received by R. Winthrop Pratt, representing U. S. Shipping Board, Emergency Fleet Corporation, for the construction of approximately 27,000 square yards of concrete street paving, until twelve o'clock noon of the 11th day of April, 1919, at which time they will be publicly opened and read in the Council Chamber, City Hall, Lorain, Ohio.

Plans and specifications for the proposed work may be obtained at the office of R. Winthrop Pratt, 814 Hippodrome Building, Cleveland, Ohio. Said specifications provide for the grading, draining and paving of streets in the Federal Home Building Company's Allotment, Lorain, Ohio.

The right is reserved to reject any or all bids, waive any informalities in the bids received and to accept any bid which is deemed most favorable to the U. S. Shipping Board.

R. WINTHROP PRATT,
Local Project Engineer.

Bids: April 15.

Excavation and Grading

Pawtucket, R. I.

Sealed proposals addressed to the Commissioner of Public Works and endorsed Proposals for Grading will be received at the office of City Engineer in Masonic Building, until 10 o'clock of Tuesday, April 15, 1919.

Plans can be seen at the office of the City Engineer. The amount of material to be excavated is approximately 19,000 cubic yards.

A certified check for the sum of $200.00 made payable to John B. Reilley, City Treasurer, must accompany each bid and a surety bond for the sum of $2000.00 will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 27, 1919.

OFFICIAL PROPOSALS

Bids: April 9.

Dining Room Accommodations

Ward's Island, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Dining Room Accommodations for Patients in Main Building, Manhattan State Hospital, Ward's Island, N. Y., will be received by the Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3124, including Addenda dated March 12, 1919, No. 3132, No. 3133 and No. 3134. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: March 20, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 8, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.
Bids: April 7.

Bids: April 8.

Bridge Letting

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer

OFFICIAL PROPOSALS

Bids: April 24.

Des Plaines River Sewage Treatment Works

DES PLAINES RIVER SEWAGE TREAT-
THE SANITARY DISTRICT OF
CHICAGO
Chicago, Ill.

Sealed proposals, endorsed "Proposals for Des Plaines River Sewage Treatment Works" will be received by the Clerk of the Sanitary District of Chicago, at the office of said Sanitary District, Room 700, Number 910 South Michigan Avenue, Chicago, Illinois, until 12 noon, standard time, on Thursday, April 24, 1919, and will be opened publicly by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

The work for which tenders are invited includes the following divisions:

Division A.—Sewage Treatment Plant.

This includes excavation, concrete, reinforcing steel, cast iron piping, gate valves, tile piping, and miscellaneous material and equipment to construct an activated sludge plant.

Division C.—Structural Steel.

This includes the furnishing of steel columns, roof trusses, purlins, lintels, crane girders, crane rails, floor beams, wall plates, anchors, bolts, washers, etc., shop painted.

Division N.—Traveling Crane.

This includes the furnishing of a hand traveling crane.

Division O.—Pumping Machinery.

This includes the furnishing of three (3) 14 inch centrifugal pumps (in accordance with designs submitted by the Sanitary District) and miscellaneous appurtenances.

Division P.—Electrical Equipment.

This includes three (3) vertical shaft, squirrel cage induction motors, each 50 H.P.; four (4) horizontal shaft, slipping wound rotor motors, each 150 H.P.; two (2) horizontal shaft squirrel cage induction motors, comprising one (1) at 75 H.P. and one (1) at 30 H.P.; four (4) 300 K.V.A transformers, oil switch equipment and miscellaneous appurtenances.

Division R.—Blowers.

This includes furnishing six (6) blowers of the horizontal hydro-turbine type.

Division V.—Sluice Gates.

This includes furnishing miscellaneous sluice gates with floor stands and appurtenances.

Division W.—Venturi Meters.

This includes furnishing miscellaneous sewage and air eVnturi meters with recording and indicating apparatus.

The work called for under Division A is to be furnished and erected complete, with appurtenances, as shown on the detailed plans and specifications, at the Des Plaines Sewage Treatment Works of The Sanitary District of Chicago, Broadview, Illinois.

The equipment or material called for under Divisions C, N, O, P, R, V, W, is to be delivered, freight prepaid, on board cars, the Chicago and Northwestern Railway, Maywood, Ill.

Proposals may be made on one division or any number of divisions, complete, but not on any part of any one division. A proposal may also be made on all divisions as an entirety.

All proposals must be made on blank forms of proposal furnished by said Sanitary District and shall be made in accordance with and conform to all of the terms and conditions set forth in "Requirements for Bidding and Instructions to Bidders" attached thereto.

Specifications, forms of proposal and plans may be obtained upon deposit of the following amounts at the office of said Sanitary District, which sum or sums so deposited shall be refunded if said plans and specifications are returned in good condition within thirty days following the opening of bids.

Specifications and Forms of Proposal. For each Copy, Two Dollars and Fifty Cents ($2.50).

Plans of Treatment Works, Twenty dollars ($20.00).

Plans of Pumps, Twenty Dollars ($20.00).

Each proposal must be accompanied by a certified check on a responsible bank doing business in the City of Chicago, or U. S. government coupon bonds, payable to bearer, or cash, to the amount or amounts as follows:

Division A.—Sewage Treatment Plant, Fifteen Thousand Dollars ($15,000.00).

Division C.—Structural Steel, Five Hundred Dollars ($500.00).

Division N.—Traveling Crane, Three Hundred Dollars ($300.00).

Division O.—Pumping Machinery, One Thousand Dollars ($1000.00).

Division P.—Electrical Equipment, Two Thousand Dollars ($2000.00).

Division R.—Blowers, Eight Hundred Dollars ($800.00).

Division V.—Sluice Gates, Five Hundred Dollars ($500.00).

Division W.—Venturi Meters, Seven Hundred Dollars ($700.00).

In no event, however, is a total deposit required of more than Twenty Thousand Eight Hundred Dollars ($20,800.00).

The Board of Trustees of The Sanitary District of Chicago reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF CHICAGO
By JOHN McGILLEN, Clerk.
Chicago, March 29, 1919.

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD
A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 32,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

0063

*Bids: May 6.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard Time), May 6, 1919, for the construction of the Sewage Treatment Works at the Westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden piling	15,000 lin.ft.
Excavation	30,000 cu.yd.
Concrete	15,000 cu.yd.
Steel reinforcement	850 tons
C. I. piping	60 tons
Buildings	125,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after April 15, 1919. A deposit of fifteen dollars ($15) will be required for each set of plans and three dollars ($3) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank for ten thousand dollars ($10,000), made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases
and Supplies.

*This ad was published through error in March 20th issue.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 31, 1919.—Sealed proposals will be received at this office until 3 P.M., April 24, 1919, and then opened, for Lookout Gallery at the U. S. Post Office, Saginaw, Mich., in accordance with drawing No. 71 and this specification, copies of which may be had at the office of the Custodian or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids: April 10.

Street Improvementz, Etc.

ON THE GLOUCESTER HOUSING PROJECT, NOREG VILLAGE, CENTER TOWNSHIP, NEW JERSEY, FOR UNITED STATES SHIPPING BOARD.

EMERGENCY FLEET CORPORATION

CHANGE OF DATE

Sealed proposals will be received at the office of William H. Boardman, Project Engineer, 426 Walnut Street, Philadelphia, Pa., until 12 o'clock noon, April 10, 1919, for the construction of Street Pavements, Curbs, Gutters, Storm Water Inlet, Street Walks, House Walks, and work incidental thereto, on the Gloucester Housing Project, Noreg Village, Center Township, New Jersey, for United States Shipping Board, Emergency Fleet Corporation, according to Drawings and Specifications on file with the Project Engineer, and at that time and place the proposals will be publicly opened and read.

On and after March 28th plans, specifications, blank forms and all necessary information may be obtained from the Project Engineer, 426 Walnut Street, Philadelphja, and plans may also be seen at the Field Engineer's Office on the Project.

The approximate cost of the work to be done is $140,000. Each bid must be accompanied by a certified check drawn upon a National Bank or Trust Company in the amount of twenty-five hundred dollars ($2500), payable to the United States Shipping Board, Emergency Fleet Corporation.

Only experienced and responsible bidders will be considered in awarding the contract, and bidders may be required to submit evidence of experience and financial ability sufficient to warrant their undertaking the work and carrying it on to successful completion. The Owner does not obligate itself to accept the lowest, or any bid.

Bids: April 8.

Road Materials

Wilmington, Del.

Proposals addressed to the President of the Levy Court, Room 133 County Building, Wilmington, Delaware, will be received until 12 o'clock noon, Tuesday, April 8, 1919, for the following materials: Prices for Crushed Stone, Gravel, Slag, Road Tar and Oils and Asphalts, f.o.b. at the plant and at the different Railroad Stations in this county. Also prices for sweeping and applying Road Tar and Asphalt as per specifications on the different roads in this county. Prices for hauling Crushed Stone, Gravel and Slag per ton from Railroad Stations to the different roads in this county as per specifications.

Specifications and Bidding Blanks may be obtained at the office of the County Engineer, Room 133, County Building, on and after April 2, 1919. A certified check for the amount of $100 must accompany each bid. The Levy Court reserves the right to reject any and all bids.

CHARLES E. GRUBB,
County Engineer.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Benson, N. C., at the Town Hall in Benson, N. C., until 4 P.M., April 24, 1919, for water works, electric light plant and sewerage.

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, Mayor.
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 16.

Furnishing Valves

WATER DEPARTMENT

Baltimore, Md.

Sealed proposals, in duplicate, addressed to the "Board of Awards" of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, Wednesday, April 16, 1919, for furnishing and delivering the following valves to the Water Department, Baltimore, Maryland.

Iron Body Gate Valves

275— 4 in.
500— 6 in.
6— 8 in.
20—10 in.
10—12 in.
5—16 in.
5—20 in.

Specifications and proposal forms may be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after March 29, 1919. A charge of $5 will be made for each set of specifications. This amount will be refunded upon their return on or before April 25, 1919, in good condition. Specifications used in making a bid will be considered as returned.

All bids must be accompanied by a certified check of the bidder upon a clearing house bank, in the amount recited in the specifications, drawn to the order of the Mayor and City Council of Baltimore, Md. The successful bidder will be required to give satisfactory bond for the faithful performance of the agreement, equal in amount to the value of the contract.

The Board of Awards reserves the right to reject any or all bids.

WALTER E. LEE,
Water Engineer.

Approved:
J. BARRY MAHCOL,
Acting Pres. Board of Awards.

OFFICIAL PROPOSALS

Bids: April 7.

Paving

70,000 SQUARE YARDS OF PAVEMENT
39,000 FT. OF CURBING
Sanborn, Iowa.

Bids will be received by the Town Council until two o'clock P.M., on April 7th, 1919, for the Paving and Curbing of 56 Blocks, consisting of about 70,000 Square Yards and about 39,000 Ft. of Curbing.

The Pavement to be of Concrete, Brick, Asphaltic Concrete, Sheet Asphalt, or Bitulithic Pavement.

Plans and Specifications may be seen at the Office of Town Clerk, or at the Office of Engineer, Primghar, Iowa.

J. C. KERRIGAN, Engineer.

Bids: April 10.

Street Improvements

Notice is hereby given that time for receiving bids for street improvements, etc., on Gloucester Housing Project, Noreg Village, Center Township, New Jersey, has been extended to Thursday, April 10th, 1919.

SEE AD ON PAGE 83

POSITIONS VACANT

AN EXPERIENCED MAN wanted to do country engineering; must be qualified to do surveying as well as engineering. Apply at once to County Commissioners of Hodgeman Co., Jetmore, Kansas.

ARCHITECTURAL draughtsman wanted, general and structural; must be accurate and reliable; to take off quantities for general contractor; state all qualifications. P-89, Eng. News-Record, Chicago.

ASSISTANT city engineer wanted; accurate instrument man with experience in paving and municipal work; state fully education, experience and salary wanted. City Engineer, Mishawaka, Indiana.

CHIEF draftsman and designers wanted for state highway work in the Southwest; give qualifications and initial salary expected. P-115, Eng. News-Record, Chicago.

CIVIL engineer wanted immediately with experience on timber sheet pile dock construction; state experience, age, references, date aavilable and salary desired; several months' work on Lake Michigan. Address P-91, Engineering News-Record, Chicago.

DETAILER wanted—familiar with making shop drawings for structural steel and reinforcing concrete. State in detail experience, age, married or single, salary and date available. Mosher Mfg. Company, Dallas, Texas.

DRAFTSMAN with technical education, familiar with plant layouts and machinery; one with some knowledge of tanneries preferred; give full particulars as to experience, references and salary expected. Elk Tanniny Co., Engineering Department, Ridgway, Pa.

DRAFTSMAN, experienced on structural steet and plate work; must be competent to check drawings and list materials; state salary, experience and when available first letter. Address Box 386, Iola, Kansas.

EXPERIENCED draftsman wanted April 1st by consulting engineers long established Middle West, specializing water works and sewerage. Salary $150. Permanent employment if services satisfactory. Give full record and references. Address P-66, Engineering News-Record, Leader-News Bldg., Cleveland.

ENGINEERING salesman wanted for structural steel, reinforced concrete and fireproofing specialties; state age, experience and nationality; state salary considered and when you could report. Address Southern Engineering Co., Charlotte, N. C.

POSITIONS VACANT

FIRST-CLASS mechanical engineering draftsman wanted in architect's office; must be familiar with plumbing, heating and lighting layout for factory and office buildings; state age, experience in full, giving names of previous employers, character of work done with each, salary desired and earliest date for beginning work; location Detroit. P-88, Eng. News-Record, Chicago.

FOREMAN wanted, familiar with concrete, on sewage disposal and water supply work by New York contractors; state age, salary expected and experience in detail. P-87, Eng. News-Record.

POSITIONS VACANT

FIRST-CLASS structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution; state experience in full, giving names of past employers and character of work with each. Experience must have included detailing, structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location Middle West. P-42, Eng News-Record, Chicago.

NAMES and addresses wanted of competent English-Spanish translators in various localities east of Chicago, who can work part time. P-984, Eng. News-Record.

S. S. JOHNSON & BRO.

312 Chestnut St., Harrisburg, Pa

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

DRAFTSMEN WANTED

Experience on heavy machinery and structural work necessary.

F. C. AUSTIN & CO., INC.
Winthrop Harbor, Ill.

Worth Far More—
But No Extra Charge.

CONTRACT BONDS

Are not easy to get. Swart Engineering Insurance Service gives your application a far better chance.

SWART SERVICE REALLY SERVES

Phone—Wire—Write

HARMON V. SWART
19 Liberty Street, New York

"SEARCHLIGHT" Service

Action!

1—February 12

"Please quote me price for inserting the following For Sale ad in your publication."

S. E. WASHBURN, *City Eng.*,
Montgomery, Ala.

2—February 21

Following advertisement ordered:

Transit For Sale

One Gurley surveyor s transit, two verniers to limb, 5-inch needle, with 4½-inch verticle cycle, level on telescope, clamp and tangent to telescope, with tripod. All complete and in first-class condition. Recently overhauled. Price, $75.00. S. E. Washburn, City Engineer, Montgomery, Ala.

3—March 15

"I am this day in receipt of check for the transit. Many thanks for your assistance."

S. E. W.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY
Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

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OFFICIAL PROPOSALS

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In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS
HIGHWAY
Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing.....	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved........	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 18.

Furnishing Cast Iron Pipe and Special Castings

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATERWORKS
IMPROVEMENT
CONTRACT NO. 131

City of Akron, Ohio.

Sealed proposals for Furnishing Cast Iron Pipe and Special Castings will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard time of Friday the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes approximately 140 tons of 36″ Class "B" pipe, 11 tons of 30″ Class "C" pipe, 88 tons of 12″ Class "B" pipe, 70 tons of 10″ Class "B" pipe, 15 tons of 8″ Class "B" pipe, 30 tons of 8″ Class "C" pipe, 130 tons of 6″ Class "B" pipe, 60 tons of 6″ Class "C" pipe, 10 tons of 4″ Class "B" pipe, 20 tons of 4″ Class "C" pipe and 124 tons of special castings.

All proposals must be made on the forms furnished by the City.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of Three Thousand Dollars ($3000.00). A surety bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 31, 1919.—Sealed proposals will be received at this office until 3 P.M., April 24, 1919, and then opened, for Lookout Gallery at the U. S. Post Office, Saginaw, Mich., in accordance with drawing No. 71 and this specification, copies of which may be had at the office of the Custodian or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: April 11.

Street Paving

Lorain, Ohio.

Sealed proposals will be received by R. Winthrop Pratt, representing U. S. Shipping Board, Emergency Fleet Corporation, for the construction of approximately 27,000 square yards of concrete street paving, until twelve o'clock noon of the 11th day of April, 1919, at which time they will be publicly opened and read in the Council Chamber, City Hall, Lorain, Ohio.

Plans and specifications for the proposed work may be obtained at the office of R. Winthrop Pratt, 814 Hippodrome Building, Cleveland, Ohio. Said specifications provide for the grading, draining and paving of streets in the Federal Home Building Company's Allotment, Lorain, Ohio.

The right is reserved to reject any or all bids, waive any informalities in the bids received and to accept any bid which is deemed most favorable to the U. S. Shipping Board.

R. WINTHROP PRATT,
Local Project Engineer.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

OFFICIAL PROPOSALS

Bids: April 15.

Excavation and Grading

Pawtucket, R. I.

Sealed proposals addressed to the Commissioner of Public Works and endorsed Proposals for Grading will be received at the office of City Engineer in Masonic Building, until 10 o'clock of Tuesday, April 15, 1919.

Plans can be seen at the office of the City Engineer. The amount of material to be excavated is approximately 19,000 cubic yards.

A certified check for the sum of $200.00 made payable to John B. Reilley, City Treasurer, must accompany each bid and a surety bond for the sum of $2000.00 will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 27, 1919.

Bids: April 28.

Repairing and Repainting

Lancaster, Pa.

Sealed proposals for repairing and repainting the outside of the Lancaster County Court House, will be received at the office of the County Commissioners, Lancaster, Pa., until 11 o'clock a.m., Monday, April 28, 1919; they will be publicly opened and read at noon on said date.

Specifications and necessary information are obtainable at the office of the said County Commissioners.

A certified check, payable to the order of the County of Lancaster, for ten per cent. of the amount bid, must accompany the proposal.

The Commissioners reserve the right to reject any or all bids.

ENOS E. MOWRER, County Controller

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.
Bids: April 7.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PROPOSALS

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (sheet asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer of proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: April 15 .

Dredging

FORMATION OF SECTION OF INLAND WATERWAY CONNECTING BARNEGAT BAY WITH THE MANASQUAN RIVER
OFFICE OF BOARD OF COMMERCE AND NAVIGATION

State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,
Director.
March 25, 1919.

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity in North Terrace Park, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe in North Terrace Park."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

PROPOSALS FO TRANSITS AND LEVELS.—Department of Agriculture, Bureau of Public Roads, Washington, D. C., April 4, 1919. Sealed proposals for furnishing sixty (60) No. 27-A Gurley Transits, complete, (or equal), and twenty-four (24) Buff and Buff 16½-in. telescope, erecting, engineers' Dumpy levels, complete (or equal) will be received at the Office of the Chief Clerk, U. S. Department of Agriculture, until 2 P.M., April 15, 1919, and then opened. Right is reserved to increase or decrease the number not more than twenty-five per cent (25%). Each instrument to be engraved "Bureau of Public Roads, No. (to be supplied) U. S. Department of Agriculture." Envelopes containing proposals should be endorsed "Proposals for Transits and Levels," and addressed to R. M. Reese, Chairman, Board of Awards, U. S. Department of Agriculture, Washington, D. C.

OFFICIAL PROPOSALS

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Benson, N. C., at the Town Hall in Benson, N. C., until 4 P.M., April 24, 1919, for water works, electric light plant and sewerage.

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, Mayor.
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

OFFICIAL PROPOSALS

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also, 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER,
State Highway Commissioner.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

*Bids: May 6.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard Time), May 6, 1919, for the construction of the Sewage Treatment Works at the Westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden piling	15,000 lin.ft.
Excavation	30,000 cu.yd.
Concrete	15,000 cu.yd.
Steel reinforcement	850 tons
C. I. piping	60 tons
Buildings	125,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after April 15, 1919. A deposit of fifteen dollars ($15) will be required for each set of plans and three dollars ($3) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank for ten thousand dollars ($10,000), made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases
and Supplies.

*This ad was published through error in March 20th issue.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Re-Paving and Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed "Proposal for Re-paving and Sewer in South Main Street, from Thornton to Crosier" will be received at the office of the Director, Delaware Bldg., Akron, Ohio, until 12 o'clock noon, Central Standard time, of Wednesday, the 30th day of April, 1919, and at that time and place will be publicly opened and read.

The work includes removal of 6670 sq.yds. of old pavement and concrete base.

Removal of 4500 sq.yds. of pavement only.
Laying 6670 sq.yds. concrete base.
910 lin.ft. of 30″ to 36″ Trunk Sewer.
1680 lin.ft. 8″ to 24″ vitrified pipe sewer.
4800 lin.ft. 4″ sub-drain.
13 manholes.
21 street inlets.
Laying 11,175 sq.yds. stone block or brick pavement.

Each proposal must be accompanied by certified check in the sum of Five Hundred Dollars ($500.00).

A surety bond in the sum of Fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of Five Dollars ($5.00), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE, Director Public Service.
E. A. ZEISLOFT, Chief Engineer.

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th & Holmes Street, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe, 75th & Holmes Street."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 29.

Bridge Construction

Franklin, Pa.

Sealed proposals will be received up to 1:00 P.M. on Tuesday, April 29, 1919, by the County Commissioners of Venango County, Pa., at the County Court House at Franklin, Pa., for the construction of the following work. Plans and specifications may be seen at the Court House or at the office of R. L. Phillips, County Bridge Engineer at Meadville, Pa.

1. Constructing New bridge over Scrubgrass Creek one mile north of Clintonville in Clinton Township, Venango County, Pa., known as the Crawford Bridge. For this bridge, bids will be received for the following types of structure.

A. Reinforced concrete bridge consisting of 66 ft. arch span, 15 ft. rise with three 16 ft. approach spans.

B. Stone Arch bridge with a span of 66 ft. and a rise of 20 ft.

C. A Pony Warren Truss Bridge 102.5 ft. span, 16 ft. roadway with a variety of floor types and with both cut stone and concrete abutments.

2. Constructing a new bridge over North Sandy Creek in the Borough of Polk, Venango County, Pa. Bids received for the following styles of structure.

A. Steel pony truss bridge of 45 ft. span with 18 ft. roadway and creosoted wood block floor.

B. Through Girder, reinforced concrete bridge of same span and roadway with concrete floor. Both types on reinforced concrete abutments.

3. Repairing present concrete floor with Tarvia KP and laying thereon a creosoted wood block floor on a 1 in. sand cushion on the Washington St. Bridge in Franklin, Pa. 1600 sq.yards.

VENANGO COUNTY COMMISSIONERS.

OFFICIAL PROPOSALS

Bids: April 23.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 23, 1919, for the road work on the Dixie Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois; in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois; and also in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with District Engineer R. L. Bell, plans may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
Iroquois	1	16	39,730
Iroquois	2	16	22,854
Iroquois	H—15d	16	5,600
Iroquois	4	16	20,999
Iroquois	H—15d	16	5,250
Kankakee	5	16	44,539
Kankakee	K—15d	16	11,161
Kankakee	6	16 & 18	37,757
Kankakee	7	18	35,079

Cement will be furnished on all sections by the Department of Public Works and Buildings or the County.

Sections 4 and H-15d will not be let separately from one another but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the printe accompanying the proposal forms.

By order of Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received until 12 o'clock noon, April 26, 1919, and then opened, for dredging for widening the channel to Newport News, Va. Further information on application.

OFFICIAL PROPOSALS

Bids: May 1.

Road Work

Danville, Ill.

1. Notice is hereby given that sealed proposals for the construction of roads in Vermilion County will be received at the office of the County Clerk, Court House, City of Danville, Illinois, until 2 o'clock P.M., May 1st, 1919, at which time and place during the meeting of the Board of Supervisors, the proposals will be publicly opened and read.

2. The proposed work comprises the construction of concrete and brick roads ten (10) feet wide with three (3) feet macadam or gravel shoulders together with all grading, shaping earth shoulders, reinforced concrete work, ditching, drainage and other incidental work as shown in detail on plans and specifications, on file in the office of the County Clerk, and Superintending Engineer.

3. Proposals shall be made on forms furnished by the County of Vermilion.

3a. Proposal blanks and also the forms of contract and bonds that the successful bidders will be required to execute are now on file in the offices of said County Clerk and said Superintending Engineer.

4. The Board of Supervisors reserves the right to reject any and all proposals, and to waive technicalities in any proposal.

4a. The Board of Supervisors reserves the right to withdraw from said opening of bids, at any time on or before April 25, 1919, any Subdivision or Subdivisions of said unfinished work, in case the bondsmen who are responsible to said County for the completion of such Subdivision or Subdivisions shall have taken over and undertaken the completion of such Subdivision or Subdivisions, and shall have made arrangements, satisfactory to this Board, to complete said work not later than said November 15, 1919; and that said Board reserves the right to reject bids on any part or parts of said work, if such bids seem to this Board to be too high, and to do any part or parts of said work under its own management and direction.

5. Bidders may furnish proposals on one or more of the fourteen Subdivisions of approximately four miles each, into which the work is divided.

6. All proposals must be accompanied by a certified check in the sum of two (2) per cent. of the total bid and made payable to the order of Robert H. Mater, County Treasurer of said County; said check to be returned unless in case of the acceptance of his proposal, the bidder should fail to execute a contract and file a bond in a sum equal to the amount of the bid within ten (10) days of the date of the acceptance of this proposal, in which case the check is to become the property of Vermilion County and is to be considered as payment of damages due to delay and other causes suffered by the county from neglect of the bidder to execute a contract.

7. Proposals must be addressed or delivered to said County Clerk, Court House, Danville, Illinois; marked plainly on the outside, "Proposal for the Construction of Vermilion County Bond Roads Subdivision Number ———."

Dated this 28th day of March A. D. 1919.

JOHN R. MOORE,
County Clerk of the County of Vermilion
in the State of Illinois.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

OFFICIAL PROPOSALS

Bids: April 22 .

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building four sections of State Highway, as follows:

Carroll County, Contract C1-20: One section of Littlestown Pike from Town Limits of Westminster toward Union Mills, for a distance of 2.01 miles. (Concrete.)

Frederick and Washington Counties, Contract W-16A: One section of State Highway from Knoxville to Harpers Ferry, for a distance of 3.51 miles. (Concrete.)

Howard County, Contract Ho-12: One section of Clarksville Pike from Highland to Clarksville, for a distance of 2.51 miles. (Concrete.)

Kent County, Contract K-12: One section of Rock Hall to Swan Creek Road, near Edesville, for a distance of 3.03 miles. (Concrete.)
will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 3rd day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 24.

Cleaning Out Drainage Canals

Hyde Co., N. C.

Sealed proposals will be received by the board of drainage commissioners of the Mattamuskeet Drainage District of Hyde Co., North Carolina, for the cleaning out of approximately 30 miles of drainage canals containing approximately 850,000 cu. yd. of material, until 2 o'clock p.m., Thursday, April 24th, at the offices of the board of commissioners at New Holland, North Carolina.

Proposals will be received in either of the following forms:

Unit price, Cost plus percentage, and rental per hour of operation.

Each proposal must be accompanied by a certified check or bidder's bond executed by some surety company authorized to do business in the state of North Carolina for $1000 as guarantee that the successful bidder will enter into contract with the board of commissioners.

Bond will be required of the successful bidder in the sum of 50 per cent. of his estimated cost.

Right is reserved to reject any and all bids.

J. S. MANN, chairman.
K. L. PONZER, Vice chairman.
T. B. JONES, commissioner.
K. L. PONZER, engineer.

OFFICIAL PROPOSALS

Bids: April 24.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received at the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 24, 1919, for the road work on the Lincoln Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, and also in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the sections in Ogle, Lee and Dhiteside counties may be examined also in the office of District No. 2, H. E. Surman, District Engineer, Dixon National Bank, Dixon, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the district engineer in whose district the work is located, plans for the work in the respective districts may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
DuPage	1	18	22,433
DuPage	G	18	12,400
DuPage	2	18	9,660
DuPage	3	18	8,207
Kane	L—15d	18	17,851
Kane	4	18	25,631
Kane	5	18	24,311
Kane-DeKalb	6	18	22,591
DeKalb	7	18	25,083
DeKalb	G	16	14,400
DeKalb	8	16	8,352
DeKalb	18	6	5,337
DeKalb-Ogle	9	16	29,300
Ogle	E—15d	16	8,433
Lee	12	16	14,750
Lee	14	16	34,362
Lee	H—15d	16	14,719
Lee	15	16 & 18	34,330
Whiteside	17	16	24 687
Whiteside	H	16 & 18	10,135

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Sections 8 and 18 will not be let separately from one another, but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the print accompanying proposal forms.

By order of Department of Public Works & Buildings.

FRANK I. BENNETT,
Director.
S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

OFFICIAL PROPOSALS

Bids: April 24.

Storm Water Drain

Coatesville, Penn.

Sealed proposals, addressed to the City Clerk of Coatesville, Penn., will be received at the City Hall at Coatesville until 8 o'clock P.M., April 24th, 1919, for the construction of a storm water drain to replace "Gibbon's Run."

This drain will be approximately 5400 lineal feet in length and will vary in size from 87" to 36". The construction will be of brick, segmental tile block or reinforced concrete pipe in part or in whole. There will also be 25 manholes and 80 steam water inlets with the necessary vitrified pipe connections.

Plans and specifications are on file in the office of the City Engineer in Coatesville, Penn.

A set of plans and specifications may be obtained upon application to the undersigned accompanied by a deposit of Ten Dollars ($10.00) which will be refunded upon the return of the plans and specifications in good condition up to and including the date of letting.

Proposals shall be submitted upon blanks provided for this purpose by the undersigned, and shall be accompanied by a certified check for Five per cent. (5%) of the total amount of bid. A satisfactory surety bond in an amount equal to fifty per cent. (50%) of the contract will be required from the successful bidder.

The City Council reserves the right to reject any and all bids and to award the work as a whole or in part.

The Contractor must comply with all the requirements of the Workmen's Compensation Law of the State of Pennsylvania.

CHAS. A. NILES,
City Engineer.
WILLIAM S. G. COOK,
City Clerk.
GEORGE ROMMEL, JR.,
Special Assistant.

Bids: April 28.

Sanitary Sewer

Flagstaff, Arizona.

Up to 4 P.M., of the 28th day of April 1919, sealed bids will be received by the Town Clerk of Flagstaff, Arizona, for the construction and extension of a sanitary sewer system. Funds to the amount of $95,000 are available for the work.

Plans and specifications are on file at the office of the Town Clerk and may be obtained from Olmsted & Gillelen, 1112 Hollingsworth Building, Los Angeles, California, on payment of $1.50; the plans to remain the property of the bidder.

Certified check to the amount of 10% of the bid must accompany each bid. The Town retains the right to reject any and all bids.

ALEX. A. JOHNSTON,
Town Clerk

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Buildign, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

Bids: April 18.

Furnishing and Laying 30-in. Cast Iron River Crossing

City Hall, Bayonne, N. J.
April 4, 1919.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, April 18, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and publicly opened and read at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements—one dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the other dated November 15, 1918, made and entered into between the Mayor and Council of the City of Bayonne, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by proposed bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10), which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and repainting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying, with necessary valves and appurtenances, of about 900 ft. of 18-in. cast-iron water pipe, 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water, pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and re-laying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures, and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said controct, and to protect all persons performing labor or furnishing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price and in the form required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the City that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom the expenses of reletting the contract and any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed, using the contract quantities as the basis of such comparison. The certified check of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the City.

By order of the Board of Commissioners of the City of Bayonne.

WM. P. LEE,
City Clerk.

MORRIS R. SHERRERD,
Consulting Engineer.

Bids: April 23.

Portions of Main Dam of the Scituate Reservoir, and Earth Roads

CITY OF PROVIDENCE,
WATER SUPPLY BOARD,

Providence, R. I.

Sealed proposals for building, during 1919, portions of the Main Dam of the Scituate Reservoir (contract 11), and for building an Earth Road about 3.5 miles in length (contract 10), both in the Town of Scituate, R. I., about 10 miles westerly from the City of Providence, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M., on Wednesday, April 23, 1919, at which time and place they will be publicly opened and read.

The Engineer's estimate in cubic yards of some of the main items are as follows: Contract 11—Earth excavation and borrow, 132,000; rock excavation, 3500; concrete masonry, 1500. Contract 10—Earth excavation and borrow, 24,000; rock excavation, 800; concrete masonry, 400.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman,
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

Bids: May 5.

North Hill Viaduct

FOR
SUMMIT COUNTY,
AKRON, OHIO

Sealed proposals to be filed with L. M. Kauffman, Clerk, will be received by the Board of County Commissioners of Summit County, at Akron, Ohio, up to 9 A.M. o'clock (Central Standard time), May 5, 1919, for furnishing the materials and performing the labor necessary for the construction of the North Hill Viaduct in Akron, Ohio.

The viaduct will be of reinforced concrete with an over-all length of about 2790 ft. consisting of 16 arch spans varying in length from 116 ft. to 191 ft., and of 12 short girder spans. A roadway 52 ft. wide and two sidewalks, each 10 ft. wide are provided. Certain piers will rest on sand and gravel; others on concrete piles.

Payments will be made in cash and monthly estimates will be rendered. All bids shall be accompanied by a check of the bidder, certified to by a solvent bank in the State of Ohio, made payable to Board of County Commissioners, for an amount of five per cent of the bid, to be forfeited as liquidated damages (but not a penalty) by any bidder who is awarded a contract and who fails promptly and properly to execute the contract and bond. Upon the execution of the contract and bond by the successful bidder, said check will be returned to him and the checks of unsuccessful bidders will be returned to them. The contract will be awarded to the lowest responsible and competent bidder, but the Board reserves the right to reject any and all bids and to waive informalities.

Conforming to Ohio General Code, bids will also be received on alternate designs prepared by the bidder, providing certain requirements are complied with.

Plans and specifications are on file in the office of the County Engineer, the County Auditor, Akron, Ohio, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies of the plans and specifications may be secured from the Consulting Engineers by depositing twenty-five dollars. Such plans and specifications are to be returned upon request, at which time refund of fifteen dollars will be made.

Bids: April 21.

Storm Sewers

Highland Park, N. J.
(New Brunswick P. O.)

Sealed proposals will be received by the Council of the Borough of Highland Park, at a meeting thereof to be held at the Fire House on Raritan Avenue, Highland Park, New Jersey, on Monday, April 21st, 1919, at 8 p.m., for the construction of Storm Sewers and drains in accordance with plans and specifications prepared for the same by John T. Hopkins, Borough Engineer, approved by said Council. Copies of said plans and specifications may be procured by application to said Borough Engineer at his office in said Fire House.

Said work will be divided in two contracts and bidders may submit proposals for one of said contracts or both of them. Such proposals must be submitted on separate blanks and each proposal must be accompanied by a certified check payable without condition to the order of said Borough of Highland Park for the sum of one thousand ($1000) dollars.

Council reserves the right to reject any and all bids.

ROBERT E. CRAIG,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: **May 15.**

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

Bids: May 7.

Paving

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of Main Street, Moorestown, in the township of Chester and the County of Burlington with sheet asphalt surface upon a concrete foundation; estimated amount of surface pavement required is 34,051 sq.yd., of foundation 34,051 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11 A.M.

Drawings, specifications and forms of bids, contract and bond for the proposed work, prepared by James Logan, County Engineer and Henry J. Sherman, Chester Township Engineer, have been filed in the office of said engineers at No. 11 Main St., Mt. Holly, N. J., and No. 306 Temple Bldg., Camden, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineers on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of the road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders and must be accompanied by a certificate from a Surety Company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineers.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

PROPOSALS FOR DREDGING.—U. S. **Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass.** Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

THE STATE OF DELAWARE

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock P.M., April 30, 1919, and at that place and time publicly opened, for the construction of 14.5 miles of State Highway (cement concrete) in Kent and Sussex Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 10—4.5 MILES

4.0	acres Clearing and Grubbing
27,000	cu.yds. Grading
250	cu.yds. Concrete Masonry
15,000	pounds Reinforcement
60	lin.ft. 15 in. Reinf. Concrete Pipe
102	lin.ft. 18 in. Reinf. Concrete Pipe
170	lin.ft. 24 in. Reinf. Concrete Pipe
50	Bounds
40	tons Stone for Macadam
8,600	cu.yds. Cement Concrete Roadway
130	Joints

CONTRACT NO. 11—4.00 MILES

1.74	acres Clearing and Grubbing
19,500	cu.yds. Grading
240	cu.yds. Concrete Masonry
10,000	pounds Reinforcement
140	lin.ft. 15 in. Reinf. Concrete Pipe
204	lin.ft. 18 in. Reinf. Concrete Pipe
102	lin.ft. 24 in. Reinf. Concrete Pipe
136	lin.ft. 30 in. Reinf. Concrete Pipe
34	lin.ft. 36 in. Reinf. Concrete Pipe
46	Bounds
50	tons Stone for Macadam
7,655	cu.yds. Cement Concrete Roadway
125	Joints

CONTRACT NO. 12—5.97 MILES

11.6	acres Clearing and Grubbing
26,273	cu.yds. Grading
350	cu.yds. Concrete Masonry
10,000	pounds Reinforcement
165	lin.ft. 15 in. Reinf. Concrete Pipe
222	lin.ft. 18 in. Reinf. Concrete Pipe
238	lin.ft. 24 in. Reinf. Concrete Pipe
70	Bounds
50	tons Stone for Macadam
11,400	cu.yds. Cement Concrete Roadway
200	Joints

Bids may be submitted for one, all, or any combination of the three contracts.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) percentum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 10, No. 11, and No. 12."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after April 19, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.

CHAS. M. UPHAM, Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: Two highways, 1.36 and 4.16.
CHEMUNG: Approx. 0.40.
CHENANGO: Three highways, 4.78, 5.57, 5.87.
CLINTON: Approx. 3.34.
ESSEX: Approx. 4.95.
FULTON: Approx. 2.80.
HAMILTON: Approx. 6.82.
ONEIDA: Two highways, 0.97 and 1.65.
ONONDAGA: Five highways, 0.96, 7.45, 2.37, 1.76, 3.75.
OSWEGO: Approx. 5.44.
WARREN: Approx. 4.59.
WAYNE: Two highways, 3.83 and 5.21.
WESTCHESTER: Two highways, 1.74 and 1.09.

And also for the following repair contracts:

BROOME: One contract, reconstruction.
HAMILTON: One contract, resurfacing.
JEFFERSON: One contract, resurfacing.
ONONDAGA: One contract, resurfacing.
OSWEGO: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: April 16.

Paving

Fulton, N. Y

Sealed proposals will be received by the clerk of the city of Fulton, N. Y., until 8 o'clock p.m. on the 16th day of April, 1919, for the construction of pavements in the following named streets: East Fourth Street, Phillips Street, East Sixth Street, Worth Street, Highland Street, Buffalo Street, West Second Street, Leitch Street, Park Street, Division Street, VanBuren Street, Ganesvoort Street, West Sixth Street and East Third Street.

Plans and specifications and detailed information will be furnished by the city engineer upon application. A deposit of $10.00 will be required for every set of plans and specifications so furnished.

A certified check for ten per cent. of the amount of the bid, drawn to the order of tha chemberlain of the city of Fulton must accompany each proposal.

The contract will be awarded on the type of construction selected by the board of public works to the lowest responsible bidder, who shall execute a bond to the city with sufficient surety for the faithful performance of tha contract.

The board of public works reserves the right to reject all bids.

(Signed) JOHN FRAWLEY,
President of the Boar dof Public Works

GEO. A. WASHBURN,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY.
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed wit heach bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN.

Bids: April 28.

Road Repairing

Scranton, Pa.

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent. of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE,
Attest: County Controller.
RALPH COLLINS,
Deputy County Controller.

OFFICIAL PROPOSALS

Bids: April 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC WORKS
Providence, R. I.

Sealed proposals for the furnishing and applying of 485,000 gallons of asphaltic oil or of refined tar to the macadam sections of State highway in Rhode Island will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Wednesday, April 16, 1919, at which time they will be opened and read in public.

The roads to be treated are divided into three divisions and separate bids will be received for furnishing and applying of oil or of tar to the roads in each division.

Bids must be made upon forms furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island.

OFFICIAL PROPOSALS

The Board reserves the right to reject any and all bids.

Forms of specifications, proposal and contract may be obtained at the office of the State Board of Public Roads, Providence, R. I., on and after Tuesday, April 1, 1919, between the hours of 9 A.M. and 5 P.M., Saturdays between 9 A.M. and 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUREN
J. HENRY WOODARD

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

YOUR
Contract Bonds

Have them intelligently handled by an engineer who presents your case fully and clearly to the **underwriters.**

ENGINEERING INSURANCE SERVICE—NO EXTRA CHARGE

Swart Service Really Serves

Phone—Wire—Write

HARMON V. SWART
19 Liberty Street, New York

"SEARCHLIGHT" Service

Action!

1—**February 12**

"Please quote me price for inserting the following For Sale ad in your publication."

S. E. WASHBURN, *City Eng.*,
Montgomery, Ala.

2—**February 21**

Following advertisement ordered:

Transit For Sale

One Gurley surveyor s transit, two verniers to limb, 5-inch needle, with 4½-inch verticle cycle, level on telescope, clamp and tangent to telescope, with tripod. All complete and in first-class condition. Recently overhauled. Price, $75.00. S. E. Washburn, City Engineer, Montgomery, Ala.

3—**March 15**

"I am this day in receipt of check for the transit. Many thanks for your assistance."

S. E. W.

0070

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

Over 4,000 Official Proposals

have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

One Dominant Paper

This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

0052

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: **Two highways, 1.36 and 4.16.**
CHEMUNG: **Approx. 0.40.**
CHENANGO: **Three highways, 4.78, 5.57, 5.87.**
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FULTON: **Approx. 2.80.**
HAMILTON: **Approx. 6.82.**
ONEIDA: Two highways, 0.97 **and 1.05.**
ONONDAGA: **Five highways, 0.96, 7.45,** 2.37, 1.76, 3.75.
OSWEGO: Approx. 5.44.
WARREN: Approx. 4,59.
WAYNE: Two highways, 3.83 and 3.21.
WESTCHESTER: Two highways, 1.74 and 1.09.

And also for the following repair contracts:

BROOME: One contract, reconstruction.
HAMILTON: One contract, resurfacing.
JEFFERSON: One contract, resurfacing.
ONONDAGA: One contract, resurfacing.
OSWEGO: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, **at its offices, twenty-second floor, Municipal Building, Park Row,** Centre and Chambers streets, New York City, until 11 A.M., on **Wednesday, May 14,** 1919, for Contract 203, **for the construction** of the Gilboa dam, **in the Town of Gilboa,** Schoharie county, **New York. The dam is** part of the Schoharie **Watershed development** for the New York City **water-supply and is composed of two parts, an overfall** masonry portion **about 1300 feet in length and having a maximum height of about 160** feet, and **an earthen section approximately** 1000 feet **long.**

At the above place and time the bids will be **publicly opened and read. Pamphlets** containing information for bidders and contract drawings can be obtained at the above **address, at the office of the Secretary,** by depositing the sum of twenty dollars ($20) in **cash or its equivalent for each** pamphlet. **For further particulars apply** to the office of the **Principal Assistant Engineer at the above address.**

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: April 25.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one **section** of State Highway, as follows:

PRINCE GEORGE COUNTY,
Contract WB-Z:

One section of Baltimore-Washington Boulevard between Laurel and Hyattsville. 0.5 miles of 20 ft. concrete roadway—11.14 miles of 3 ft. concrete shoulders on each side of present roadway.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., on the 25th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the plan proposal form which, with Specifications and plans, will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be **required to give bond, and comply with the Acts** of the General Assembly of Maryland, respecting contracts.

The Commission reserves the **right** to reject any and all bids.

By order of the State Roads Commission this 9th **day** of April, 1919.

FRANK K. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the **Mayor and Board of Commissioners of the Town of Benson, N. C.,** at the Town Hall **in Benson, N. C.,** until 4 P.M., April 24, **1919, for** water works, electric light plant and sewerage.

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which, will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, **Mayor.**
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: May 14.

Highway Work

LITTLE ROCK AND HOT SPRINGS
HIGHWAY

CHANGE OF DATE
PREVIOUSLY ADVERTISED
BIDS TO CLOSE APRIL 17

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., May the 14th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into tow 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.
LUND AND HILL, Engrs.
Little Rock, Arkansas.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

Bids: May 1.

Sewers, Water Mains, Disposal Plant, Storage Reservoir, Transmission Line, Pump and Filter.

La Grange, Georgia.

Proposals will be received by the undersigned until 12 o'clock noon, May 1, 1919, for the construction of approximately eleven miles of sewers, Disposal Plant, four miles of Water Mains, Storage Reservoir, two miles Transmission Line, one 500,000 gallon Filter and one 500 gallons per minute Horizontal, Centrifugal pump direct connected to motor, and the furnishing of all materials and labor entering therein.

Specifications may be procured and plans and profiles seen at the office of the City Engineer, LaGrange, Ga., and general information from the undersigned.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid, as evidence of good faith upon the part of the bidder.

A deposit of $10.00 will be required for each set of plans, which will be refunded on the return of plans in good condition.

The Town reserves the right to reject any and all bids, or waiving all formalities to accept any which may seem to be the best for the Town of South West La Grange.

C. W. COLEMAN, Mayor.
C. L. SMITH, Clerk & Treas.,
Southwest LaGrange, Ga.

G. H. SARGENT,
City Engineer,
LaGrange, Ga.

Bids: April 28.

Sanitary Sewer

Flagstaff, Arizona.

Up to 4 P.M., of the 28th day of April, 1919, sealed bids will be received by the Town Clerk of Flagstaff, Arizona, for the construction and extension of a sanitary sewer system. Funds to the amount of $95,000 are available for the work.

Plans and specifications are on file at the office of the Town Clerk and may be obtained from Olmsted & Gillelen, 1112 Hollingsworth Building, Los Angeles, California, on payment of $1.50; the plans to remain the property of the bidder.

Certified check to the amount of 10% of the bid must accompany each bid. The Town retains the right to reject any and all bids.

ALEX. A. JOHNSTON,
Town Clerk.

Bids: May 15.

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

Bids: May 5.

North Hill Viaduct

FOR

SUMMIT COUNTY,
AKRON, OHIO

Sealed proposals to be filed with L. M. Kauffman, Clerk, will be received by the Board of County Commissioners of Summit County, at Akron, Ohio, up to 9 A.M. o'clock (Central Standard time), May 5, 1919, for furnishing the materials and performing the labor necessary for the construction of the North Hill Viaduct in Akron, Ohio.

The viaduct will be of reinforced concrete with an over-all length of about 2790 ft. consisting of 16 arch spans varying in length from 116 ft. to 191 ft., and of 12 short girder spans. A roadway 52 ft. wide and two sidewalks, each 10 ft. wide are provided. Certain piers will rest on sand and gravel; others on concrete piles.

Payments will be made in cash and monthly estimates will be rendered. All bids shall be accompanied by a check of the bidder, certified to by a solvent bank in the State of Ohio, made payable to Board of County Commissioners, for an amount of five per cent of the bid, to be forfeited as liquidated damages (but not a penalty) by any bidder who is awarded a contract and who fails promptly and properly to execute the contract and bond. Upon the execution of the contract and bond by the successful bidder, said check will be returned to him and the checks of unsuccessful bidders will be returned to them. The contract will be awarded to the lowest responsible and competent bidder, but the Board reserves the right to reject any and all bids and to waive informalities.

Conforming to Ohio General Code, bids will also be received on alternate designs prepared by the bidder, providing certain requirements are complied with.

Plans and specifications are on file in the office of the County Engineer, the County Auditor, Akron, Ohio, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies of the plans and specifications may be secured from the Consulting Engineers by depositing twenty-five dollars. Such plans and specifications are to be returned upon request, at which time refund of fifteen dollars will be made.

Bids: April 23.

Asphalt Road Oil

DEPARTMENT OF PUBLIC IMPROVEMENTS, SUB-DEPARTMENT OF HIGHWAYS ENGINEER

Baltimore, Maryland,

Separate sealed proposals, executed in duplicate and addressed to the Board of Awards, care of the City Register, will be received by him at his office until 12 o'clock noon, Wednesday, April 23, 1919, for furnishing and delivering asphalt road oil.

Specifications and blank proposal sheets will be furnished upon application at this office, City Hall. A certified check of the bidder on a clearing house bank, drawn to the order of the Mayor and City Council of Baltimore, in the amount recited in such specification, must accompany each bid.

The Board of Awards reserves the right to reject any and all bids.

GEORGE F. WIEGHARDT,
Highways Engineer,
Baltimore, Maryland.

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (sheet asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer of proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed with each bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: April 22.

Applying Bituminous Dressing

Mercer County, New Jersey.

Sealed proposals will be received by the Board of Chosen Freeholders of the County of Mercer, at its regular place of meeting at the Court House, Trenton, N. J., on Tuesday, April 22, 1919, at 2:30 o'clock in the afternoon:

1. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of TAR to approximately forty miles of road in the southern section of the said County of Mercer, being that portion of said county lying south of the Pennsylvania Railroad. The estimated quantity of tar required will be approximately 95,960 gallons, and the estimated quantity of covering material will be approximately 3695 tons.

2. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of TAR on approximately twenty-four miles of road in the northern section of the said County of Mercer, said northern section being that part of the said County lying north of the Pennsylvania Railroad. The estimated quantity of material required for this section will be 51,030 gallons of tar, and 2005 tons of covering material.

3. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of ASPHALTIC OIL on approximately forty-three miles, on roads located chiefly in that part of the said county of Mercer lying north of the Pennsylvania Railroad or adjacent thereto. The estimated quantity of asphaltic oil required will be 121,773 gallons and the estimated quantity of covering material required will be 4195 tons.

Separate proposals will be received for each of the above divisions of work designated as 1, 2 and 3 respectively.

Complete specifications, as to the quality of materials, manner of application, time of performance and other details of the said work, and the manner of making up and submitting proposals, together with blank forms and maps therefor, may be obtained at the office of Harry F. Harris, County Engineer, Court House, Trenton, N. J., upon payment of the sum of one dollar for each set, covering cost of preparation. The conditions of such specifications shall absolutely govern the manner of submitting bids and of performing the work, and references thereto for complete information regarding the same is herewith insisted upon.

Eac hand every bid must be accompanied by cash or a certified check payable to the order of Edgar G. Weart, County Collector, in the sum of five hundred dollars ($500), which deposit is made with the understanding that it shall be retained and kept by the County of Mercer as against the successful bidder, by way of liquidated damages should he fail to execute valid contract and surety bond within seven (7) days from the awarding of the contract.

Each proposal must be accompanied by a proposition for a Surety Company on the form furnished by the Engineer, whereby said surety company agrees to furnish on application a bond as required. No bid will be received or read unless this condition is complied with on the part of the bidder.

The right is reserved to reject any or all bids, or to waive any immaterial defect or informality in any bid, should it be deemed to the interest of the County to do so.

GEORGE R. HUTCHINSON,
Director of Road Repair.

OFFICIAL PROPOSALS

Bids: April 24.

Storm Water Drain

Coatesville, Penn.

Sealed proposals, addressed to the City Clerk of Coatesville, Penn., will be received at the City Hall at Coatesville until 8 o'clock P.M., April 24th, 1919, for the construction of a storm water drain to replace "Gibbon's Run."

This drain will be approximately 5400 lineal feet in length and will vary in size from 87" to 36". The construction will be of brick, segmental tile block or reinforced concrete pipe in part or in whole. There will also be 25 manholes and 80 steam water inlets with the necessary vitrified pipe connections.

Plans and specifications are on file in the office of the City Engineer in Coatesville, Penn.

A set of plans and specifications may be obtained upon application to the undersigned accompanied by a deposit of Ten Dollars ($10.00) which will be refunded upon the return of the plans and specifications in good condition up to and including the date of letting.

Proposals shall be submitted upon blanks provided for this purpose by the undersigned, and shall be accompanied by a certified check for Five per cent. (5%) of the total amount of bid. A satisfactory surety bond in an amount equal to fifty per cent. (50%) of the contract will be required from the successful bidder.

The City Council reserves the right to reject any and all bids and to award the work as a whole or in part.

The Contractor must comply with all the requirements of the Workmen's Compensation Law of the State of Pennsylvania.

CHAS. A. NILES,
City Engineer.
WILLIAM S. G. COOK,
City Clerk.

GEORGE ROMMEL, JR.,
Special Assistant.

Bids: April 24.

Cleaning Out Drainage Canals

Hyde Co., N. C.

Sealed proposals will be received by the board of drainage commissioners of the Mattamuskeet Drainage District of Hyde Co., North Carolina, for the cleaning out of approximately 30 miles of drainage canals containing approximately 850,000 cu. yd. of material, until 2 o'clock p.m., Thursday, April 24th, at the offices of the board of commissioners at New Holland, North Carolina.

Proposals will be received in either of the following forms:

Unit price, Cost plus percentage, and rental per hour of operation.

Each proposal must be accompanied by a certified check or bidder's bond executed by some surety company authorized to do business in the state of North Carolina for $1000 as guarantee that the successful bidder will enter into contract with the board of commissioners.

Bond will be required of the successful bidder in the sum of 50 per cent. of his estimated cost.

Right is reserved to reject any and all bids.

J. S. MANN, chairman.
K. L. PONZER, Vice chairman.
T. B. JONES, commissioner.
K. L. PONZER, engineer.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PROPOSALS

Bids: April 25.

Laying Sewer

Ridgefield, Conn.

Sealed proposals will be received by the Sewer Committee of the Burgesses for the Borough of Ridgefield, Conn., on April 25, 1919, at 3 o'clock P.M., at the Town Hall at Ridgefield, Conn., for furnishing materials and laying about 5200 ft. of 8 in. tile sewer, according to plans, profiles and specifications on file with said Sewer Committee, in and about section of said Borough known as Bryon Park, together with 28 man-holes and all appurtenances. A bond of 50% of contract price will be required for the faithful performance of the contract. Cash or certified check for $100 must accompany each proposal. This amount will be returned to the unsuccessful bidders.

Separate bids will be received at same time and place for two detention tanks, dosing chamber, sludge bed and appurtenances as per plans and specifications on file with the Sewer Committee. A bond of 50% of contract price will be required and cash or certified check for $100 must accompany each proposal. Plans, blank forms for proposals and specifications may be obtained from the Borough Clerk at Ridgefield, Conn.

The Borough reserves the right to reject any or all bids.

GEO. E. BENEDICT,
Borough Clerk.

W. J. WOOD, JR.
Engineer,
Westport, Conn.
Dated: April 8, 1919.

Bids: April 30.

Re-Paving and Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed "Proposal for Re-paving and Sewer in South Main Street, from Thornton to Crosier" will be received at the office of the Director, Delaware Bldg., Akron, Ohio, until 12 o'clock noon, Central Standard time, of Wednesday, the 30th day of April, 1919, and at that time and place will be publicly opened and read.

The work includes removal of 6670 sq.yds. of old pavement and concrete base.

Removal of 4500 sq.yds. of pavement only.
Laying 6670 sq.yds. concrete base.
910 lin.ft. of 30" to 36" Trunk Sewer.
1680 lin.ft. 8" to 24" vitrified pipe sewer.
4800 lin.ft. 4" sub-drain.
13 manholes.
21 street inlets.
Laying 11,175 sq.yds. stone block or brick pavement.

Each proposal must be accompanied by certified check in the sum of Five Hundred Dollars ($500.00).

A surety bond in the sum of Fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of Five Dollars ($5.00), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE, Director Public Service.
E. A. ZEISLOFT, Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 24.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received at the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 24, 1919, for the road work on the Lincoln Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, and also in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the sections in Ogle, Lee and Dhiteside counties may be examined also in the office of District No. 2, H. E. Surman, District Engineer, Dixon National Bank, Dixon, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the district engineer in whose district the work is located, plans for the work in the respective districts may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
DuPage	1	18	22,433
DuPage	G	18	12,400
DuPage	2	18	9,660
DuPage	3	18	8,207
Kane	L—15d	18	17,851
Kane	4	18	25,631
Kane	5	18	24,311
Kane-DeKalb	6	18	22,591
DeKalb	7	18	25,083
DeKalb	G	16	14,400
DeKalb	8	16	8,352
DeKalb	18	6	5,337
DeKalb-Ogle	9	16	29,300
Ogle	E—15d	16	8,433
Lee	12	16	14,750
Lee	14	16	34,362
Lee	H—15d	16	14,719
Lee	15	16 & 18	34,330
Whiteside	17	16	24,687
Whiteside	H	16 & 18	10,135

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Sections 8 and 18 will not be let separately from one another, but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the print accompanying proposal forms.

By order of Department of Public Works & Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

OFFICIAL PROPOSALS

Bids: April 23.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 23, 1919, for the road work on the Dixie Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois; in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois; and also in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with District Engineer R. L. Bell, plans may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
Iroquois	1	16	39,730
Iroquois	2	16	22,854
Iroquois	H—15d	16	5,600
Iroquois	4	16	20,999
Iroquois	H—15d	16	5,250
Kankakee	5	16	44,539
Kankakee	K—15d	16	11,161
Kankakee	6	16 & 18	37,757
Kankakee	7	18	35,079

Cement will be furnished on all sections by the Department of Public Works and Buildings or the County.

Sections 4 and H-15d will not be let separately from one another but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the printe accompanying the proposal forms.

By order of Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received until 12 o'clock noon, April 26, 1919, and then opened, for dredging for widening the channel to Newport News, Va. Further information on application.

OFFICIAL PROPOSALS

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY
DEPARTMENT
Harrisburg, Pa

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet. wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER.
State Highway Commissioner.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Bridge Construction

SOUTH CAROLINA STATE HIGHWAY COMMISSION

Lockhart, S. C.

Notice is hereby given that sealed proposals for the construction of highway improvement in Union and Chester Counties will be received at the office of Lockhart Mills, at Lockhart, South Carolina, until 12 o'clock, M., April 30, 1919, and then publicly opened.

DESCRIPTION OF WORK TO BE DONE:

To construct a steel highway bridge across the Broad River at Lockhart, South Carolina, of approximately seven hundred (700) feet in total length, consisting of two (2) spans of approximately two hundred and fifty (250) feet and tow (2) end spans of approximately one hundred (100) feet, and the necessary concrete piers and abutments therefor, containing approximately eight hundred and eighty-five (885) cubic yards of Class (1:2½:5) concrete and seven hundred and seventy-five (775) pounds of reinforcing steel. Width of roadway, 16 feet. Bidder to submit design of superstructure in compliance with South Carolina Highway Bridge Specifications.

Uniform live load of 80 pounds per square foot for each 100-ft. span and 64 pounds per square foot for each 250-ft. span. Concentrated live load, 15-ton truck as per specifications.

Detailed plans of the work may be seen for examination at the office of Lockhart Mills, at Lockhart, South Carolina, and at the offices of the State Highway Commission, Columbia, South Carolina. Bids may be submitted separately on substructure and on superstructure.

A certified check for one thousand dollars ($1000), made payable to order of the Chairman of the Commission to erect a bridge at or near Lockhart Mills, S. C., must accompany each proposal.

The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes and marked, "Bids on the Construction of the Lockhart bridge, between Union and Chester Counties."

Proposals may be sent by mail, and when sent by mail shall be inclosed in an additional sealed envelope properly marked as indicated above.

All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the State Highway Commission and will not be returned to the bidders.

J. ROY PENNELL,
State Highway Engineer.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

OFFICIAL PROPOSALS

Bids: May 8.

Construction, Sanitary Work, Etc.

Newark, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Cottage for Inmates, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., will be received by Mrs. Sarah F. S. Armstrong, President, Board of Trustees, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., until 12 o'clock noon, Thursday, May 8, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3130, 3189, 3190, 3191. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Custodial Asylum, Newark, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 11, 1919.

Bids: May 1.

Poughkeepsie Pre-Filter Building Construction

Poughkeepsie, N. Y.

Sealed proposals endorsed "Proposals for Pre-Filter Construction at Poughkeepsie Water Purification Plant" will be received by the Board of Public Works at their office in Eastman Park Mansion until four P.M. May 1st.

The work consists in building a reinforced concrete structure and placing all the pipes, valves ,strainers, etc., which will be furnished by the Board of Public Works.

Plans and specifications may be seen at the office of the Board of Public Works; alsod at the office of Hazen, Whipple & Fuller, Consulting Engineers, 42nd. Street Building, New York City, or may be obtained by depositing thirty dollars. The deposit will be returned only upon the return of the plans in good condition within two weeks after the letting.

No proposal will be entertained unless made on the blanks furnished.

A certified check for nine hundred dollars must accompany the proposal.

The Board reserves the right to reject any or all proposals.

BOARD OF PUBLIC WORKS.
E. W. SYLVESTER,
Supt.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

OFFICIAL PROPOSALS

Bids: April 25.

Highway Works

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, Fourth Floor, West End, State Capitol, Hartford, Connecticut, until 2 P.M., Friday, April 25, 1919, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF HADDAM: About 5200 ft. trap rock macadam road on the Killingworth Road. Plans and specifications at the office of C. F. Taylor, Division Engineer, 151 Main Street, Middletown, Conn.

TOWN OF MANCHESTER: About 3270 ft. of bituminous macadam on Deming Street. Plans and specifications at the office of S. M. Benton, Town Clerk, Manchester, Conn.

TOWN OF MERIDEN: About 4238 ft. of bituminous macadam on the Westfield Road. Plans and specifications at the Selectmen's office in Meriden, Conn.

TOWNS OF NEW BRITAIN, NEWINGTON & FARMINGTON: About 6979 ft. of concrete, topeka, warrenite or asphalt on Stanley Quarter Road. No plans. Specifications at the office of R. W. Stevens, 408 Main Street, Hartford, Conn.

TOWN OF OLD LYME: About 3650 ft. of gravel road on the Black Hall-Niantic Road. Plans and specifications at the store of James F. Bugbee, Old Lyme, Conn.

TOWNS OF SALISBURY AND SHARON: About 34,518 ft. of 10 in. gravel or gravel over slag base on the Lakeville-Sharon Road. Plans and speicfications at the office of R. S. Hulbert, Division Engineer, Station A, Winsted, Conn.

TOWNS OF THOMASTON AND WATERBURY: About 7258 ft. of concrete or topeka over concrete base on Thomaston Avenue. No plans. Specifications at the office of E. C. Welden, Chamber of Commerce Bldg., New Haven, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State highway commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, April 9, 1919.

C. J. BENNETT,
State Highway Commissioner.
Fourth Floor, West End, Capitol,
Hartford, Conn.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

Bids: April 24.

Asphalts and Tars

STATE HIGHWAY DEPARTMENT OF OHIO

Columbus, Ohio.

Sealed bids will be received until 2 P.M., April 24, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for furnishing in tank cars for shopment to various points in Ohio about 1,100,000 gallons of tars and asphalts.

Specifications and bid forms will be furnished on application.

CLINTON COWEN,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 30.

Road Construction

Monmouth, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Matawan-Freehold Road (second section), in the townships of Marlboro and Freehold, in the County of Monmouth, with a reinforced concrete surface, estimated amount of surface pavement required is 36,248 sq.yd., and opened and read in public at Freeholder's office, Court House, Freehold, N. J., on Wednesday, April 30, 1919, at eleven A. M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by George D. Cooper, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer, 60 Broad Street, Red Bank, New Jersey, and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and the name of the road on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth, and must be accompanied by a surety company certificate stating that the said surety company will provide the bidder with the required bond, and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders of the County of Monmouth.

WILLIAM M. BERGEN,
Director.

Attest:
C. E. Close, Clerk.
Dated: April 9, 1919.

Bids: May 6.

Constructing Basin for Water System

Ely, Minn.

Notice is hereby given that the City Council of the City of Ely, Minnesota, will receive sealed proposals for the construction of a sedimentation basin for the water system of the City of Ely.

Separate bids to be made on the construction of the sedimentation basin and the installation and furnishing raw water piping and drainage system.

Plans and specifications now on file in the office of the City Clerk of the City of Ely, Minnesota.

Specified time for the completion of the work to be stated.

A certified check or bond to the amount of 10 per cent of the contract price to accompany each bid.

Bids to be opened May 6, 1919, at 8 o'clock P.M.

Address proposals to the undersigned and marked "Proposal for Construction of Sedimentation Basin," and Proposal for Furnishing and Installation of Raw Water Piping and Drainage System."

The City Council of the City of Ely, Minn., reserves the right to reject any or all bids.

By order of the City Council.

I. WISTED, JR.,
City Clerk.
City of Ely, Minnesota.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 5, Section 1B (Morris Plains to Morristown), concrete surface. Estimated 11,500 sq.yd., Morris County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 30, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 28.

Paving

Elmira, N. Y.

Sealed proposals for grading, curbing and paving the below named streets will be received by the undersigned at his office in the City Hall until 11:30 o'clock A.M., April 28, 1919:

Woodlawn Ave., 2800 sq.yd.
East & West First Street, 2400 sq.yd.
Walnut Street, 14,900 sq.yd.

Plans and specifications are on file in the City Engineer's Office, City Hall, where also may be obtained the "proposal sheets" which must be used.

Separate certified checks are required as follows:

Woodlawn Ave., $1100; E. and W. First Sts., $900; Walnut St., $6200 payable to the order of the Mayor of Elmira, N. Y., and must accompany the bids. They will be returned to the bidders upon execution of the contracts.

The envelopes must be endorsed "Proposals for Pavements."

The Board of Public Works reserves the right to reject any or all bids.

LOUIS C. ANDREWS,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court, House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement, concrete, bituminous concrete, or other approved pavement. Combination cement - concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete - Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe.
152.5	Lin.ft. 18" Standard Vitrified Pipe.
152.5	Lin.ft. 24" Standard Vitrified Pipe.

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County
Commissioners of Durham County.
M. G. MARKHAM,
Clerk or Secretary.

Bids: May 8.

Sewer Construction

Platte, S. D.

Sealed proposals for the construction of a sewer system and sewage disposal plant will be received by the City Auditor in his office, in Platte, S. D., up to 8 P.M., May 8, 1919.

All bids must be on forms furnished by the City Auditor, or City Engineer, W. L. Bruce, Yankton, S.D., and shall be in accordance with the plans and specifications on file in the office of City Auditor and City Engineer, from whom copies may be obtained upon deposit of fifteen dollars, which amount will be returned upon receipt of plans and specifications in good order, within five days after date of receiving bids.

Each proposal shall be accompanied by a bond for 50% of bid.

C. F. SLATE,
City Auditor.

OFFICIAL PROPOSALS

Bids: May 6.

Concrete Bridge Construction

Pottsville, Pa.

Sealed proposals will be received by the undersigned, the Controller of Schuylkill county, at his office in Pottsville, Pa., until 11 o'clock A.M., Tuesday, May 6, 1919, for the construction of a concrete bridge over Swatara creek, in the borough of Pinegrove, Schuylkill County, Pa.

The proposed bridge is 78 ft. clear span, and 36 ft. over all width.

Bids must be made upon proposal blank attached to specifications, and must be accompanied by certified check in a sum equal to 10 per cent. of the bid, made payable to the County of Schuylkill, Pa.

Plans and specifications may be seen at the County Commissioners office, and may be had by prospective bidders on the payment of $5.00.

The right is reserved to reject any or all bids.

Mark envelopes plainly "Proposals for Concrete Bridge."

By direction of the County Commissioners.

J. E. KANTNER,
County Controller.

April 10, 1919.

Bids: May 5.

Paving, Bridging, Grading, Etc.

Dallas, Tex.

Notice is hereby given that sealed proposals will be received by Chas. E. Gross, County Auditor for Dallas County at Dallas, Tex., up to ten o'clock A.M., Monday, May 5, 1919, for the construction of a concrete pavement, including concrete bridging, grading, etc., on the Dallas-Ft. Worth Road, between the City of Dallas and the Dallas-Tarrant County line.

Approximate quantities are as follows:

Concrete pavement	106,000 sq.yd.
Concrete bridging	1,300 cu.yd.
Steel reinforcement ...	210,000 pounds
Grading	70,000 cu.yd.

A certified check in the sum of $10,000 made payable to Cecil L. Simpson, County Judge, shall accompany each proposal. Dallas County reserves the right to reject any or all bids. Plans on file with the State Highway Department at Austin, Texas, also with J. F. Witt, County Engineer for Dallas County at Dallas, Texas.

CHAS. E. GROSS,
County Auditor.

Bids: April 28.

Road Repairing

Scranton, Pa.

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent. of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE,
County Controller.

Attest:
RALPH COLLINS,
Deputy County Controller.

OFFICIAL PROPOSALS

Bids: April 27.

Paving

Elmira Height, N. Y.

Sealed proposals will be received by Norvan Shook Clerk of the Village of Elmira Heights, N. Y., for the construction approximately of

10,500	sq.yd. Vitrified shale brick pitch filled pavement.
3,075	lin.ft. stright concrete curb with protection bar.
380	lin.ft. curved concrete curb with protection bar.
700	lin.ft. 6" medina headers.

on 14th St. in said Vallage until 10 A.M. on the 27th day of April, 1919, at which time they will be publicly opened and read in the Office of the Board of Trustees, Village Hall, Elmira Heights, N. Y.

Plans and Specifications for the proposed work will be on exhibition at the said office after April 16th, 1919.

A certified check of ($2000.00) Two Thousand Dollars made payable to the Village Treasurer of Elmira Heights must accompany all bids.

The Village Board reserves the right to reject any or all bids.

Village Clerk.
NORVAN SHOOK,

SILAS M. HAIGHT,
Village Engineer.

Bids: April 24.

Paving

Jackson, Mich.

Sealed bids will be received by the City Manager of the City of Jackson, Michigan, till 10 o'clock A.M., Thursday, April 24, 1919, for paving several streets. The total estimated quantities are as follows:

21,775	Sq.yd. brick pavement.
40,000	Sq.yd. asphaltic concrete pavement.
46,300	Lin.ft. combined curb and gutter.
16,000	Cu.yd. of excavation.

A certified check for 5% of the amount of the bid, payable to the City Clerk, must be inclosed with each bid, same to be forfeited to the City of Jackson in case the successful bidder refuses or neglects to enter into contract. Separate bids will be received on each street. Plans, specifications ,and bidding blanks are on file in the office of the City Engineer.

The right is reserved to reject any or all bids.

A. W. D. HALL,
City Manager.

W. B. HODGES,
City Engineer.
Dated: Jackson, Mich., April 8, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Buildign, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: April 23.

Portions of Main Dam of the Scituate Reservoir, and Earth Roads

CITY OF PROVIDENCE,
WATER SUPPLY BOARD,

Providence, R. I.

Sealed proposals for building, during 1919, portions of the Main Dam of the Scituate Reservoir (contract 11), and for building an Earth Road about 3.5 miles in length (contract 10), both in the Town of Scituate, R. I., about 10 miles westerly from the City of Providence, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M., on Wednesday, April 23, 1919, at which time and place they will be publicly opened and read.

The Engineer's estimate in cubic yards of some of the main items are as follows: Contract 11—Earth excavation and borrow, 132,000; rock excavation, 3500; concrete masonry, 1500. Contract 10—Earth excavation and borrow, 24,000; rock excavation, 800; concrete masonry, 400.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman.
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

Bids: May 1.

Pavement Construction

DEPARTMENT OF PUBLIC WORKS

Augusta, Georgia.

Sealed proposals will be received by the Streets and Drains Committee of the City Council of Augusta, Ga., at the City Hall, Augusta, Ga., until 12 o'clock noon, May 1, 1919, and at that time and place publicly opened, for the construction of approximately 55,000 sq.yd. pavement on Walton Way from 15th Street to Monte Sano Avenue.

Bids will be received on:

Asphaltic concrete, 4-in. concrete foundation.
Sheet asphalt, 4-in. concrete foundation.
Brick, monolithic construction.
6-in. concrete.

All bids must be accompanied by a certified check in favor of the City Council of Augusta, in the sum of 5% of the amount of the contract bid upon, to guarantee execution of contract if awarded.

The City Council reserves the right to reject any or all bids. Address bids to "Wm. Lyon Martin, Clerk of Council, Augusta, Ga.," marking on envelope, "Proposals Walton Way Pavement."

Plans and specifications may be had after April 16, 1919, by application to the undersigned.

W. H. WISE.
Acting City Engineer and Commissioner
Public Works.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: April 29.

Highway Works

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building six sections of the State Highway, as follows:

ALLEGANY COUNTY,
Contract A-14:

One section of State Highway from Corrigansville to the Maryland-Pennsylvania State Line at Ellerslie, for a distance of 2.33 miles. Concrete.

CAROLINE COUNTY,
Contract Co-19:

One section of State Highway through Greensboro, for a distance of 0.65 miles. Concrete.

GARRETT COUNTY.
Contract G-13:

One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-16:

One section of Defense Highway from Bladensburg toward Lanham, for a distance of 1.63 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-17:

One section of State Highway from Largo to Western Branch on Halls Station Road, for a distance of 1.67 miles. Concrete.

WICOMICO COUNTY,
Contract Wi-13:

One section of State Highway from the end of Quantico State Aid Road toward Catch Penny, for a distance of 1.50 miles. Concrete,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 29th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: May 19.

Road Improvements

Tulsa, Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES:.1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.

BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: April 30.

Laboratory Building, Etc.

Albany, N. Y.

Sealed proposals for Gasoline Tank and Pump, Laboratory Building, Division of Laboratories, State Department of Health, Albany, N. Y., will be received by Dr. H. M. Biggs, Commissioner of Health, State Department of Health, Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 30, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5% of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3213. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 10, 1919.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

OFFICIAL PROPOSALS

Bids: May 5.

Earth Fill Dam and Reservoir

GIRARD WATER COMPANY
POTTSVILLE, PA.
COST PLUS FEE CONTRACT

Pottsville, Pa.

Sealed proposals addressed to James Archbald, General Manager, Girard Water Company, Pottsville, Pa., will be received until 12 o'clock noon, May 5, 1919, for furnishing all materials, equipment and labor, and constructing an

EARTH FILL DAM OF ABOUT
100,000 CUBIC YARDS,

with concrete gate tower, bridge, spillway, and cut-off wall on Whiskey Mill Creek, Schuylkill County, Pa.

Plans, specifications and proposal form will be sent to prospective bidders upon receipt of twenty dollars which will be refunded upon return of the plans and specifications in good condition.

A certified check for $5000 must accompany each bid.

GIRARD WATER COMPANY,
JAMES ARCHBALD, Manager,
Pottsville, Pa.

GANNETT, SEELYE & FLEMING,
Engineers,
Harrisburg and Erie, Pa.

Bids: April 30.

Drainage

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 1:30 P.M., on April 30, 1919, at which time they will be publicly opened, for the work of improvement of the Cottonwood River and its tributaries, in the Cottonwood Valley Drainage District.

Approximate estimate of work to be done:

New channel excavation.....	968,000 cu.yd.
Excavation from present channels	160,000 cu.yd.
Levee embankment	130,000 cu.yd.
Removal of obstruction other than earth from present channels	56,000 lin.ft.

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division covered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Bldg., Kansas City, Mo.

The Engineer will be on the ground after April 28, for the purpose of furnishing information to bidders.

COTTONWOOD VALLEY DRAINAGE DISTRICT,
BY F. R. WILLIAMS, Secretary.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

Over 4,000 Official Proposals

have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

One Dominant Paper

This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

0052

Bids: May 7.

Duboistown Bridge

Williamsport, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River at the foot of Second Street in the Borough of Montgomery, Pa., will be received by the Board of Commissioners of Lycoming County at their office in Williamsport, Pa., until 10 o'clock a.m. of May 7, 1919, at which they will be publicly opened and read.

The bridge as contemplated will be about one thousand (1000) feet long and will consist of nine (9) open spandrel arches; three of the arches will be of 101 feet span and the remainder will be 93 feet.

Prospective bidders may secure copies of the plans and specifications, including form of proposal, by making a deposit of Twenty-five Dollars ($25), which sum will be refunded upon return of plans and specifications in good order.

A certified check for the sum of Five Thousand Dollars ($5000) payable to H. D. Achenbach, County Treasurer, and subject to the usual rules of forfeiture, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked "Proposal for the construction of the Montgomery Bridge," and must be delivered to L. O. Bower, Chief Clerk, Commissioners' Office, Williamsport, Pa.

The right to reject any or all bids or to accept any bid they may deem to be to the best interests of the County is hereby reserved.

CHAS. W. MYERS,
JOHN G. DURRWACHTER,
JOS. H. NICELY,
County Commissioners.

Attest:
L. O. BOWER, Chief Clerk.
M. C. KRAUSE, Engineer,
335 Pine St., Williamsport, Pa.

Bids: May 1.

Boardwalk Decking

Atlantic City, N. J.

Sealed bids will be received by Atlantic City, N. J., until May 1, 1919, for 649,000 feet of Boardwalk decking, Long Leaf Yellow Pine, Douglas Fir, Port Orford Cedar or Sitka Spruce.

Also 397,300 feet Yellow Pine creosoted.

For full particulars and blanks address J. W. Hackeny, City Engineer.

CHARLES D. WHITE,
Director.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

Bids: May 7.

Concrete Roof for Reservoir, Water Supply, Road Improvement, Concrete Coal Bin and Conveyor, Sewage Treatment Plant Extensions

Harrisburg, Pa.

Sealed proposals on contracts for the above work for the State Sanatorium, near Mont Alto, Franklin County, Pa., will be received by Edward Martin, State Health Commissioner, Harrisburg, Pa., until 2 P.M., Wednesday, May 7, 1919.

Concrete roof for reservoir, Cont. No. 30, includes replacing existing wood roof on 60 ft. diam. concrete reservoir, with roof of I-beams, expanded metal and concrete. Extensions to water supply system, Cont. No. 31, include approx. 5000 ft. 8 in. c.i. water pipe, 5000 ft. w.i. and c.i. water pipe varying from 2 in. to 6 in. diam., valves, fire hydrants, etc. Construction and resurfacing macadam roads, Cont. No. 32, includes approx. 15,000 ft. water-bound macadam roads. Elevated concrete coal bin and coal handling machinery, Cont. No. 33, includes reinforced concrete elevated coal bin, 300 tons capacity, with necessary coal handling machinery. Extensions to sewage treatment plant, Cont. No. 34, includes approx. 60 cu.yd. concrete, 1 ton steel reinforcement, 1000 cu.yd. excavation, 350 cu.yd. broken stone filter material, 50 cu.yd. rubble masonry, piping, valves, etc.

Plans and specifications can be seen at offices of Dept. of Health, Harrisburg, at 1900 Race St., Phila., Pa., and sets may be obtained Wednesday, April 23, at the office of the Engineering Div., State Health Dept., Keystone Bldg., Harrisburg, upon deposit of $25 for each contract set. Deposits will be returned upon receipt of sets in good condition. Sets will be issued to general contractors only.

Each proposal must be accompanied by certified check for $500. The successful contractors must file a surety bond for fifty per cent. of estimated amount of each contract. Contracts will be awarded separately. The right is reserved to reject any or all bids.

EDWARD MARTIN,
Commissioner of Health.

Bids: May 7.

Montgomery Bridge

Williamsport, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River between the foot of Arch Street and West Williamsport and the foot of what will be High Street in the Borough of DuBoistown, Pa., will be received by the Board of Commissioners of Lycoming County at their office in Williamsport, Pa., until 10 o'clock a.m. of May 7, 1919, at which time they will be publicly opened and read.

The bridge as contemplated will be about 1500 feet long and will consist of thirteen (13) open spandrel arches of ninety-eight (98) feet clear span.

Prospective bidders may secure copies of the plans and specifications including form of proposal by making a deposit of Twenty-five ($25) Dollars, which sum will be refunded upon return of plans and specifications in good order.

A certified check for the sum of Five Thousand Dollars ($5000) payable to H. D. Achenbach, County Treasurer, and subject to the usual rules of forfeiture, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked "Proposal for the construction of the DuBoistown Bridge," and must be delivered to L. O. Bower, Chief Clerk, Commissioners' Office, Williamsport, Pa.

The right to reject any and all bids or to accept any bid they may deem to be to the best interests of the County is hereby reserved.

CHAS. W. MYERS,
JOHN G. DURRWACHTER,
JOS. H. NICELY,
County Commissioners.

Attest:
L. O. BOWER, Chief Clerk.
M. C. KRAUSE, Engineer.
335 Pine St., Williamsport, Pa

Bids: May 5.

Sewage Disposal Works

Macon, Missouri.

Sealed bids addressed to the "Honorable Mayor and Council," of the City of Macon, Mo., and endorsed "Proposal for Sewage Disposal Works," will be received until 8 P.M., May 5, 1919, at which time they will be publicly opened and read.

Certified check for $700 on a Macon (Mo.) bank, payable to the Treasurer of the City of Macon, Mo.

The work consists of furnishing labor and material, and constructing an Imhoff tank, sludge bed, storm overflow, approximately 790 lin.ft. of 18-in. sewer, and of straightening creek channel.

The City reserves the right to reject any or all bids. 85% monthly estimates in cash.

Sets of plans and specifications may be obtained from the City Clerk's office upon a deposit of $5, said deposit to be returned upon the return of the plans and specifications.

W. H. MARTIN, City Clerk.
Macon, Mo.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg., St. Louis, Mo.

Bids: May 10.

Road Grading

Buckhannon, W. Va.

Sealed proposals will be received at the office of the County Clerk, Buckhannon, W. Va., until 12 o'clock non on Saturday, May 10, 1919, for grading 1.5 miles of the Beverly Pike adjacent to the Town of Buckhannon. Excavation, 6000 cu.yd., 1% rock; pipe culverts, 18; tile drain, 400 to 800 lin.ft.

Plans and specifications are on file with the State Road Commission, Charleston, W. Va., and with the undersigned at Buckhannon, W. Va. Certified check for $200.00 will be required, and the right is reserved to reject any and all bids.

W. C. WEST,
County Road Engineer.

—about
CONTRACT BONDS
Lots of work this spring. You will want your Contract Bonds quickly. Swart will handle your application promptly and efficiently.
—and, best of all, will help to establish *your* prestige with the underwriters.
Swart Service—It Really Serves.
HARMON V. SWART
19 Liberty Street, New York.

BIDS WANTED
30000 yd. Traction Shovel Work, mostly overcasting.
Or Will Rent Shovel
EMPIRE ENGINEERING CO.
Buffalo, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Boston, Mass.—Sealed proposals will be received here until 12 M., May 3, 1919, and then opened, for dredging at Hog Island, Boston, Harbor, Mass. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 5, Section 1B (Morris Plains to Morristown), concrete surface. Estimated 11,500 sq.yd., Morris County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 30, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 15.

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

OFFICIAL PROPOSALS

Bids: May 14.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY

CHANGE OF DATE
PREVIOUSLY ADVERTISED
BIDS TO CLOSE APRIL 17

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., May the 14th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into tow 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.
LUND AND HILL, Engrs.
Little Rock, Arkansas.

PROPOSALS FOR DREDGING.—U. S. **Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.**

UNITED STATES ENGINEER OFFICE, **Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.**

OFFICIAL PROPOSALS

Bids: May 6.

Concrete Bridge Construction

Pottsville, Pa.

Sealed proposals will be received by the undersigned, the Controller of Schuylkill county, at his office in Pottsville, Pa., until 11 o'clock A.M., Tuesday, May 6, 1919, for the construction of a concrete bridge over Swatara creek, in the borough of Pinegrove, Schuylkill County, Pa.

The proposed bridge is 78 ft. clear span, and 36 ft. over all width.

Bids must be made upon proposal blank attached to specifications, and must be accompanied by certified check in a sum equal to 10 per cent. of the bid, made payable to the County of Schuylkill, Pa.

Plans and specifications may be seen at the County Commissioners office, and may be had by prospective bidders on the payment of $5.00.

The right is reserved to reject any or all bids.

Mark envelopes plainly "Proposals for Concrete Bridge."

By direction of the County Commissioners.

J. E. KANTNER,
County Controller.

April 10, 1919.

Bids: May 12.

Heating, Plumbing, Etc.

Erie, Penn.

Sealed proposals will be received by the Board of Education, Erie, Penn., on May 12, for the general work, heating, plumbing, electric work, clocks, bells and telephones and vacuum cleaning system, for new East High School building to be erected at Erie, Penn., from plans of Wm. B. Ittner, architect, St. Louis, Mo. Can secure plans and specifications for figuring this work from Mr. R. S. Scobell, business manager, Board of School Directors, Erie, Penn. Deposit check for fifty dollars required to guarantee return of plans and specifications.

Bids: May 6.

Constructing Basin for Water System

Ely, Minn.

Notice is hereby given that the City Council of the City of Ely, Minnesota, will receive sealed proposals for the construction of a sedimentation basin for the water system of the City of Ely.

Separate bids to be made on the construction of the sedimentation basin and the installation and furnishing raw water piping and drainage system.

Plans and specifications now on file in the office of the City Clerk of the City of Ely, Minnesota.

Specified time for the completion of the work to be stated.

A certified check or bond to the amount of 10 per cent of the contract price to accompany each bid.

Bids to be opened May 6, 1919, at 8 o'clock P.M.

Address proposals to the undersigned and marked "Proposal for Construction of Sedimentation Basin," and Proposal for Furnishing and Installation of Raw Water Piping and Drainage System."

The City Council of the City of Ely, Minn., reserves the right to reject any or all bids.

By order of the City Council.

I. WISTED, JR.,
City Clerk,
City of Ely, Minnesota.

OFFICIAL PROPOSALS

Bids: April 29.

Highway Works

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building six sections of the State Highway, as follows:

ALLEGANY COUNTY,
Contract A-14:

One section of State Highway from Corrigansville to the Maryland-Pennsylvania State Line at Ellerslie, for a distance of 2.33 miles. Concrete.

CAROLINE COUNTY,
Contract Co-19:

One section of State Highway through Greensboro, for a distance of 0.65 miles. Concrete.

GARRETT COUNTY,
Contract G-13:

One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-16:

One section of Defense Highway from Bladensburg toward Lanham, for a distance of 1.63 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-17:

One section of State Highway from Largo to Western Branch on Halls Station Road, for a distance of 1.67 miles. Concrete.

WICOMICO COUNTY,
Contract Wi-13:

One section of State Highway from the end of Quantico State Aid Road toward Catch Penny, for a distance of 1.50 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 29th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: Two highways, 1.36 and 4.16.
CHEMUNG: Approx. 0.40.
CHENANGO: Three highways, 4.78, 5.57, 5.87.
CLINTON: Approx. 3.34.
ESSEX: Approx. 4.95.
FULTON: Approx. 2.80.
HAMILTON: Approx. 6.82.
ONEIDA: Two highways, 0.97 and 1.05.
ONONDAGA: Five highways, 0.96, 7.45, 2.37, 1.76, 3.75.
OSWEGO: Approx. 5.44.
WARREN: Approx. 4.59.
WAYNE: Two highways, 3.83 and 3.21.
WESTCHESTER: Two highways, 1.74 and 1.09.

And also for the following repair contracts:

BROOME: One contract, reconstruction.
HAMILTON: One contract, resurfacing.
JEFFERSON: One contract, resurfacing.
ONONDAGA: One contract, resurfacing.
OSWEGO: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

OFFICIAL PROPOSALS

Bids: May 1.

Sewers, Water Mains, Disposal Plant, Storage Reservoir, Transmission Line, Pump and Filter.

La Grange, Georgia.

Proposals will be received by the undersigned until 12 o'clock noon, May 1, 1919, for the construction of approximately eleven miles of sewers, Disposal Plant, four miles of Water Mains, Storage Reservoir, two miles Transmission Line, one 500,000 gallon Filter and one 500 gallons per minute Horizontal, Centrifugal pump direct connected to motor, and the furnishing of all materials and labor entering therein.

Specifications may be procured and plans and profiles seen at the office of the City Engineer, LaGrange, Ga., and general information from the undersigned.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid, as evidence of good faith upon the part of the bidder.

A deposit of $10.00 will be required for each set of plans, which will be refunded on the return of plans in good condition.

The Town reserves the right to reject any and all bids, or waiving all formalities to accept any which may seem to be the best for the Town of South West La Grange.

C. W. COLEMAN, Mayor.
C. L. SMITH, Clerk & Treas.,
Southwest LaGrange, Ga.

G. H. SARGENT,
City Engineer,
LaGrange, Ga.

Bids: May 5.

Sewage Disposal Works

Macon, Missouri.

Sealed bids addressed to the "Honorable Mayor and Council," of the City of Macon, Mo., and endorsed "Proposal for Sewage Disposal Works," will be received until 8 P.M., May 5, 1919, at which time they will be publicly opened and read.

Certified check for $700 on a Macon (Mo.) bank, payable to the Treasurer of the City of Macon, Mo.

The work consists of furnishing labor and material, and constructing an Imhoff tank, sludge bed, storm overflow, approximately 790 lin.ft. of 18-in. sewer, and of straightening creek channel.

The City reserves the right to reject any or all bids. 85% monthly estimates in cash.

Sets of plans and specifications may be obtained from the City Clerk's office upon a deposit of $5, said deposit to be returned upon the return of the plans and specifications.

W. H. MARTIN, City Clerk.
Macon, Mo.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg., St. Louis, Mo.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Buildign, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet. wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER,
State Highway Commissioner.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

Bids: May 8.

Sewer Construction

Platte, S. D.

Sealed proposals for the construction of a sewer system and sewage disposal plant will be received by the City Auditor in his office, in Platte, S. D., up to 8 P.M., May 8, 1919.

All bids must be on forms furnished by the City Auditor, or City Engineer, W. L. Bruce, Yankton, S.D., and shall be in accordance with the plans and specifications on file in the office of City Auditor and City Engineer, from whom copies may be obtained upon deposit of fifteen dollars, which amount will be returned upon receipt of plans and specifications in good order, within five days after date of receiving bids.

Each proposal shall be accompanied by a bond for 50% of bid.

C. F. SLATE,
City Auditor.

Bids: May 8.

Construction, Sanitary Work, Etc.

Newark, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Cottage for Inmates, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., will be received by Mrs. Sarah F. S. Armstrong, President, Board of Trustees, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., until 12 o'clock noon, Thursday, May 8, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3130, 3189, 3190, 3191. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Custodial Asylum, Newark, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 11, 1919.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 m., May 1, 1919, and then opened, for removing wreck of "Steamship Serantes," sunk in upper bay, New York Harbor. Information on application.

Bids: April 30.

Road Construction

Monmouth, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Matawan-Freehold Road (second section), in the townships of Marlboro and Freehold, in the County of Monmouth, with a reinforced concrete surface, estimated amount of surface pavement required is 36,248 sq.yd., and opened and read in public at Freeholder's office, Court House, Freehold, N. J., on Wednesday, April 30, 1919, at eleven A. M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by George D. Cooper, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer, 60 Broad Street, Red Bank, New Jersey, and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and the name of the road on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth, and must be accompanied by a surety company certificate stating that the said surety company will provide the bidder with the required bond, and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders of the County of Monmouth.

WILLIAM M. BERGEN,
Director.

Attest:
C. E. Close, Clerk.
Dated: April 9, 1919.

Bids: May 1.

Poughkeepsie Pre-Filter Building Construction

Poughkeepsie, N. Y.

Sealed proposals endorsed "Proposals for Pre-Filter Construction at Poughkeepsie Water Purification Plant" will be received by the Board of Public Works at their office in Eastman Park Mansion until four P.M. May 1st.

The work consists in building a reinforced concrete structure and placing all the pipes, valves, strainers, etc., which will be furnished by the Board of Public Works.

Plans and specifications may be seen at the office of the Board of Public Works; alsod at the office of Hazen, Whipple & Fuller, Consulting Engineers, 42nd. Street Building, New York City, or may be obtained by depositing thirty dollars. The deposit will be returned only upon the return of the plans in good condition within two weeks after the letting.

No proposal will be entertained unless made on the blanks furnished.

A certified check for nine hundred dollars must accompany the proposal.

The Board reserves the right to reject any or all proposals.

BOARD OF PUBLIC WORKS.
E. W. SYLVESTER,
Supt.

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court. House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement concrete, bituminous concrete, or other approved pavement. Combination cement concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe.
152.5	Lin.ft. 18" Standard Vitrified Pipe.
152.5	Lin.ft. 24" Standard Vitrified Pipe.

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County
Commissioners of Durham County.
M. G. MARKHAM,
Clerk or Secretary.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed with each bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN

OFFICIAL PROPOSALS

Bids: May 19.

Road Improvements

Tulsa, Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES..1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.

BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: May 5.

Furnishing Asphalt

Lansing, Mich.

The city of Lansing, Michigan, will receive sealed proposals for asphalt to be used in its construction work for the year 1919, in accordance with plans and specifications on file in the office of the City Engineer. Proposals to be received up to 4 o'clock P.M., Monday, May 5, 1919, at the office of the City Clerk of said city.

Each proposal to be accompanied with a certified check in the sum of $1000. Right is reserved to reject any or all bids.

JUDSON A. PARSONS,
City Clerk.

April 15, 1919.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919 and then opened for furnishing Rock Crushers. Further information on application.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Bridge Construction

SOUTH CAROLINA STATE HIGHWAY COMMISSION

Lockhart, S. C.

Notice is hereby given that sealed proposals for the construction of highway improvement in Union and Chester Counties will be received at the office of Lockhart Mills, at Lockhart, South Carolina, until 12 o'clock, M., April 30, 1919, and then publicly opened.

DESCRIPTION OF WORK TO BE DONE:

To construct a steel highway bridge across the Broad River at Lockhart, South Carolina, of approximately seven hundred (700) feet in total length, consisting of two (2) spans of approximately two hundred and fifty (250) feet and tow (2) end spans of approximately one hundred (100) feet, and the necessary concrete piers and abutments therefor, containing approximately eight hundred and eighty-five (885) cubic yards of Class (1:2½:5) concrete and seven hundred and seventy-five (775) pounds of reinforcing steel. Width of roadway, 16 feet. Bidder to submit design of superstructure in compliance with South Carolina Highway Bridge Specifications.

Uniform live load of 80 pounds per square foot for each 100-ft. span and 64 pounds per square foot for each 250-ft. span. Concentrated live load, 15-ton truck as per specifications.

Detailed plans of the work may be seen for examination at the office of Lockhart Mills, at Lockhart, South Carolina, and at the offices of the State Highway Commission, Columbia, South Carolina. Bids may be submitted separately on substructure and on superstructure.

A certified check for one thousand dollars ($1000), made payable to order of the Chairman of the Commission to erect a bridge at or near Lockhart Mills, S. C., must accompany each proposal.

The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes and marked, "Bids on the Construction of the Lockhart bridge, between Union and Chester Counties."

Proposals may be sent by mail, and when sent by mail shall be inclosed in an additional sealed envelope properly marked as indicated above.

All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the State Highway Commission and will not be returned to the bidders.

J. ROY PENNELL,
State Highway Engineer.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PPOPOSALS

Bids: May 1.

Pavement Construction

DEPARTMENT OF PUBLIC WORKS

Augusta, Georgia.

Sealed proposals will be received by the Streets and Drains Committee of the City Council of Augusta, Ga., at the City Hall, Augusta, Ga., until 12 o'clock noon, May 1, 1919, and at that time and place publicly opened, for the construction of approximately 55,000 sq.yd. pavement on Walton Way from 15th Street to Monte Sano Avenue.

Bids will be received on:

Asphaltic concrete, 4-in. concrete foundation.

Sheet asphalt, 4-in. concrete foundation.

Brick, monolithic construction.

6-in. concrete.

All bids must be accompanied by a certified check in favor of the City Council of Augusta, in the sum of 5% of the amount of the contract bid upon, to guarantee execution of contract if awarded.

The City Council reserves the right to reject any or all bids. Address bids to "Wm. Lyon Martin, Clerk of Council, Augusta, Ga.," marking on envelope, "Proposals Walton Way Pavement."

Plans and specifications may be had after April 16, 1919, by application to the undersigned.

W. H. WISE,
Acting City Engineer and Commissioner
Public Works.

Bids: April 30.

Drainage

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 1:30 P.M., on April 30, 1919, at which time they will be publicly opened, for the work of improvement of the Cottonwood River and its tributaries, in the Cottonwood Valley Drainage District.

Approximate estimate of work to be done:

New channel excavation	968,000 cu.yd.
Excavation from present channels	160,000 cu.yd.
Levee embankment	130,000 cu.yd.
Removal of obstruction other than earth from present channels	56,000 lin.ft.

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division covered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Bldg., Kansas City, Mo.

The Engineer will be on the ground after April 28, for the purpose of furnishing information to bidders.

COTTONWOOD VALLEY DRAINAGE DISTRICT.
By F. R. WILLIAMS,
Secretary.

Bids: May 19.

Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in East Avenue, from Maple Street to Wooster Avenue," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3900 ft. of vitrified pipe, sizes 12 to 24 in.
4700 ft. of trunk sewer, sizes 30 to 66 in.
35 manholes.

Each proposals must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer,or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 7.

Road Work

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the improvement of Section No. 2 of the Moorestown-Camden Pike, in the Township of Chester, in the County of Burlington, with a sheet asphalt surface upon a concrete foundation; estimated amount of surface pavement required is 5717 sq.yd. of foundation, 5717 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 12 noon.

Drawings and specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

Bids: May 7.

Road Work

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the River Road, Palmyra to Broad Street, Beverly, in the townships of Palmyra, Cinnaminson, Delran, Beverly, and Burlington, in the County of Burlington, with sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:50 A.M.

Specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, Trenton, N. J., have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.
Clerk.

Bids: May 21.

Sewer

Akron, Ohio.

Sealed bids for proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in West Exchange Street, from Bowery to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3200 lin.ft. vitrified pipe, sizes 12 to 24 in.
5700 lin.ft. trunk sewer, sizes 30 to 120 in.
42 manholes.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: April 28.

Road Repairing

Scranton, Pa

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE.
Attest: County Controller.
RALPH COLLINS,
Deputy County Controller.

Bids: May 7.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for Burlington County, N. J., for the reconstruction of the Moorestown-Mt. Holly Road, in the townships of Chester, Mt. Laurel, Lumberton and Northampton, in the County of Burlington, with sheet asphalt surface upon a macadam foundation; estimated amount of surface pavements required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:40 A.M.

Specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS., JR.
Clerk.

PROPOSALS FOR DREDGING. U. S Engineer Office, Duluth, Minn. Sealed **proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application**

Bids: May 12.

Sewage Treatment Works

Pontiac, Mich.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., **May 12, 1919**, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4,078 cu.yd.
Filter stone	15,700 cu.yd.
C. I. piping	35 tons

Plans and specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Mich. A deposit of $15 (fifteen dollars) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer; a certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewes only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., May 12, 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

Bid: May 3.

Concrete Bridge

City of North Adams, Mass.

Sealed proposals will be received at the office of the Commissioner of Public Works until 12 o'clock noon, May 3, 1919, for the construction of a reinforced concrete arch bridge on West Main Street, consisting of a single arch of 80 ft. clear span, length of bridge 108 ft., width 28 ft. A certified check for 5% of bid required. Plans and specifications may be obtained by responsible bidders upon application. The right is reserved to reject any or all bids.

JACKSON L. TEMPLE,
Commissioner of Public Works.

April 15, 1919.

Bids: May 19.

Bridge Construction

Phoenix, Arizona.

Bids will be received until 12 o'clock noon, **May 19, 1919, for furnishing plans and specifications and constructing a bridge across the Verde River at Cottonwood, near Jerome, Arizona. Profile, topographic map** and general **specifications may be had by** addressing **Thomas Maddock, State Engineer, Phoenix, Arizona. Amount available,** $40,000.

F. N. HOLMQUIST,
Office Engineer.

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF WATER WORKS.
Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS,
Borough of Tamaqua, Pa.
JOHN M. HARRIS,
Secretary.

Bids: May 9.

Concrete Pavements

Village of Patchogue, Suffolk Co., N. Y.

Sealed proposals for the construction of concrete pavements and curbing in North Ocean Avenue and Oak Street, in the Village of Patchogue, N. Y., will be received by the Village Clerk, under 8:15 o'clock P.M., Friday, May 9, 1919, when they will be publicly opened at the village office.

Plans and specifications for the work, which will include approximately 13,000 sq.yd. of concrete pavement and 3400 lin. ft. of concrete curbing may be obtained at the office of Edward A. May, Civil Engineer, Patchogue, N. Y., by payment of $1 to cover cost of producing same.

Each bid must be accompanied by a certified check for an amount equal to 5% of the amount of bid, made payable to the Village of Patchogue.

The right is reserved by the Board of Trustees to reject any or all bids.

E. AGATE FOSTER,
President.
EDWARD B. WOODRUFF, Clerk.
Dated: Apr. 24, 1919.

Bids: June 2.

Constructing Drainage System

Beaufort, N. C.

Sealed proposals will be received by the Virginia-Carolina Farms Co. at Beaufort, N. C., until noon of the second day of June, 1919, for the following work:

Constructing New Canals (Side slopes: ½ to 1)
- 17 miles main canals, 6 to 10 ft. bottom x 8 ft. deep.
- 66 miles laterals, 3 ft. bottom x 6 ft. deep.
- 117 miles sub-laterals, 2 ft. bottom x 4½ ft. deep.

Enlarging existing canals to above sizes:
- 10 miles mains.
- 28 miles laterals.
- 35 miles sub-laterals.

Total excavation: Approximately 1,500,000 cu.yd.

Grading, 110 miles of roads.

Constructing 210 wooden bridges, requiring from 700 to 2200 ft. B.M. lumber per bridge.

Each proposal must be enclosed in a sealed envelope and addressed to the Virginia-Carolina Farms Co., Beaufort, N. C., and marked: "Proposal for Constructing Drainage System."

Each bidder must deposit with his bid cash or certified check, made payable to the Virginia-Carolina Farms Co., in the amount of $1000 as a guarantee of good faith that he will, if a contract is awarded him, execute a written contract to perform the same. Checks of unsuccessful bidders will be returned as soon as award is made.

All requests for information should be directed to B. M. Potter, Engineer, New Bern, N. C. Plans, specifications, forms of proposals, instructions, and a full set of maps and profiles will be furnished upon receipt of a deposit of $10, which amount will be refunded upon return of same in good condition.

VIRGINIA-CAROLINA FARMS CO.
G. S. SPEER, President.
B. M. POTTER, Engineer,
New Bern, N. C.

Bids: May 5.

Earth Fill Dam and Reservoir

GIRARD WATER COMPANY
POTTSVILLE, PA.
COST PLUS FEE CONTRACT

Pottsville, Pa.

Sealed proposals addressed to James Archbald, General Manager, Girard Water Company, Pottsville, Pa., will be received until 12 o'clock noon, May 5, 1919, for furnishing all materials, equipment and labor, and constructing an

EARTH FILL DAM OF ABOUT
100,000 CUBIC YARDS,

with concrete gate tower, bridge, spillway, and cut-off wall on Whiskey Mill Creek, Schuylkill County, Pa.

Plans, specifications and proposal form will be sent to prospective bidders upon receipt of twenty dollars which will be refunded upon return of the plans and specifications in good condition.

A certified check for $5000 must accompany each bid.

GIRARD WATER COMPANY,
JAMES ARCHBALD, Manager,
Pottsville, Pa.

GANNETT, SEELYE & FLEMING,
Engineers,
Harrisburg and Erie, Pa.

OFFICIAL PROPOSALS

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa.

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3	
Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000
SECTION NUMBER 4	
Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000
SECTION NUMBER 5 (Intake)	
Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1, upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements.
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 7.

Road Work

CLARK COUNTY ROAD DISTRICT NO. 1

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Ark., until 2 P.M., May the 7th, 1919, and will then be publicly opened and read. The work contemplated is the building of 93 miles of gravelled roads radiating from the City of Arkadelphia, Clark County, Ark., together with culverts, bridges, etc.

The work has been divided into five sections, ranging in length from ten to thirty miles. Bids will be compared on a basis of the engineers' estimates, copies of which may be obtained free of cost from the engineers or the attorney of the district. Plans and specifications are on file at the office of the County Clerk in Clark County and at the office of the engineers in Little Rock, and may there be seen. Blue prints of alignment, grades and bridges comprising fifty sheets may be obtained from the engineers for $10. Specifications may be obtained from the engineers free of cost.

Bids must be accompanied by a certified check for 5% of the value of the work bid upon, and a construction bond of 25% will be required of the successful bidder.

The right is reserved to reject any and all bids.

BOARD OF COMMISSIONERS,
Clark County Road District No. 1
J. G. CLARK, President.
W. E. BARKMAN, Secretary.
McMILLAN and McMILLAN, Att'ys.
Arkadelphia, Arkansas.
LUND and HILL, Engrs.,
Little Rock, Arkansas.

OFFICIAL PROPOSALS

Bids: May 21.

Repaving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Repaving West Exchange Street, from Bowery to Maple Street" will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

5,200 cu.yd. excavation.
1,000 lin.ft. sandstone curb.
670 lin.ft. granite circular curb.
5,800 lin.ft. curb redressed and reset.
14,100 sq.yd. stone block or vitrified brick pavement.
37,000 sq.ft. artificial stone walks.
32 street inlets.
700 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 19.

Paving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for paving East Avenue from Wooster Avenue to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

9,800 cu.yd. of excavation.
8,900 lin.ft. sandstone curb.
1,100 lin.ft. granite circle curb.
15,250 sq.yd. brick, asphalt or asphaltic concrete pavement.
1,750 sq.yd. hillside brick pavement.
53,600 sq.ft. artificial stone walks.
51 street inlets.
1,460 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: May 7.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the Camden County line, Marlton-Medford Road, in the townships of Evesham and Medford in the County of Burlington, with a sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:30 A.M.

Specifications and forms of bid, contract and bond for the proposed work prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at No. 11 Main St., Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and the name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal forms are attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.
Clerk.

Bids: May 9.

Steel Improvement

OFFICE OF
THE DIRECTOR OF PUBLIC WORKS
Norfolk, Va

Sealed proposals will be received at the office of the City Manager until 12 o'clock noon on the 9th day of May, 1919, for improving with sheet asphalt certain streets designated as Class A, aggregating 27,000 sq.yd. and certain other streets designated Class B, aggregating 17,000 sq.yd. including incidental work, in the City of Norfolk, Virginia, at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Chas. E. Ashburner, City Manager, marked, "Paving Proposal, May 9, 1919."

A certified check on some local bank in the sum of three thousand ($3000) dollars, payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from well recognized surety company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.

WALTER H. TAYLOR, 3rd.
Director Public Works.
April 17, 1919.

Bids: **May 12.**

Santa Fe Trail Road Work

KANSAS HIGHWAY COMMISSION

Hutchinson, Kansas

Project No. 15

SECTION A

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Medford, Salt Creek and Grant Townships, Reno County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section A, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and townships before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginning at Station 0 plus 00, which is a point on the Reno and Rice county line and extending in an easterly direction for a distance of 38,200 ft., of which 37,454 ft. are to be improved.

The point of beginning is approximately 4 miles by road from the A. T. & S. F. railroad passenger depot at Sterling, Kansas.

Station No. 382 plus 00 is approximately ½ mile from the A. T. & S. F. railroad siding at Nickerson, Kansas.

Station No. 382 plus 00 is approximately ¾ mile from the Mo. Pac. railroad siding at Nickerson, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART,
April 10, 1919. County Clerk.

Project No. 15

SECTION B

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Grant Township, Reno County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section B, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and township before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginniing at Station 432 plus 51.1, a point at the east corporate limits of the city of Nickerson, Kansas, and extending in an easterly and southerly direction for a distance of 28,942.3 ft., of which 28,942.8 ft. are to be improved.

The point of beginning is approximately ½ mile by road from the A. T. & S. F. railroad passenger depot at Nickerson, Kansas.

Station No. 432 plus 51.1 is approximately 1 mile from the Missouri Pacific railroad siding at Nickerson, Kansas.

Station No. 721 plus 93.6 is approximately 1¼ miles from the A. T. & S. F. and M. P. railroad siding at Yaggy, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Project No. 15

SECTION C

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Reno and Grant townships, Reno County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section C, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and townships before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginning at Station 721 plus 93.6, a point in the center of the public highway at the end of Section B, and extending in a southerly and easterly direction, for a distance of 26,383.4 ft., of which 26,383.4 ft. are to be improved.

The point of beginning is approximately 1¼ miles by road from the A. T. & S. F. and M. P. railroad depot at Yaggy, Kansas. Station No. 985 plus 77 is approximately 1 mile from the A. T. & S. F. railroad siding at Hutchinson, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reect any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Project No. 15

SECTION D

1. Notice is hereby given that sealed proposals for the construction of concrete bridge work in Medford and Grant townships, Reno County, State of Kansas, said bridge work being located on the road known as the New Santa Fé Trail Road, Section D, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county before mentioned. Said proposed improvement includes the construction of three reinforced concrete bridges, together with all work involved and indicated by the plans and specifications therewith; said bridges being herein designated as Bridge Station 12 plus 70, Bridge Station 483 plus 50, Bridge Station 679 plus 90. Bridge Station 12 plus 70 is approximately 3¼ miles by road from the A. T. & S. F. and M. P. railroad passenger depot at Sterling, Kansas. Bridge Station 483 plus 50 is approximately 1 mile from the railroad siding at Nickerson, Kansas. Bridge Station 679 plus 90 is approximately 2 miles from the railroad siding at Yaggy, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Portland Cement

FEDERAL AID PROJECT NO. 15

Notice is hereby given that sealed proposals will be received at the office of the County Clerk, Hutchinson, Kansas, until 11 A.M., Monday, May 12, 1919, for the Portland cement required in the construction of Federal Aid Project No. 15, Reno County, Kansas.

All proposals otherwise submitted may be rejected as irregular.

The Board of County Commissioners reserves the right to reject any and all proposals.

Full information may be obtained by writing direct to Chas. H. Stewart, County Clerk or W. B. Harris, County Engineer, Hutchinson, Kansas.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Vitrified Brick

FEDERAL AID PROJECT NO. 15

Notice is hereby given that sealed proposals will be received at the office of the County Clerk, Hutchinson, Kansas, until 11 A.M., Monday, May 12, 1919, for the vitrified paving brick required in the construction of Federal Aid Project No. 15, Reno County, Kansas.

All proposals otherwise submitted may be rejected as irregular.

The Board of County Commissioners reserve the right to reect any and all proposals.

Full information may be obtained by writing direct to Chas. H. Stewart, County Clerk, or W. B. Harris, County Engineer, Hutchinson, Kansas.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Bids: May 6.

Paving

Edgerton, Ohio.

1. Sealed bids for the paving of Michigan Avenue from the N. Line of Hull St. to the S. Line of Sargent St. (except between the interesections of Indiana St. and Vine St.); Michigan Avenue and Clarksville Road from the S. Line of Sargent St. to the S. Corporation Line; Hicksville Road from the S. Line of Clarksville Road to the S. Corporation Line, in the village of Edgerton, Ohio, in accordance with the plans and specifications on file with the Village Clerk, will be received by said Clerk, until 12 o'clock noon, on Tuesday, May 6, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices for materials and labor, on the blanks provided therefor; shall be enclosed in a sealed envelope marked, "Bid for Pavement," and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it, and shall be accompanied by a certified check on a solvent back, payable to the Village Clerk, in the sum of $2000, as a guarantee that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within 10 days from the date of notice of award of contract.

4. Each bid for block pavement shall be accompanied by 6 sample blocks, labelled with the name of the block, manufacturer and bidder. Each bid for bituminous pavement shall be acompanied by a sample of the bituminous cement, labelled with the name of the bitumen, manufacturer and bidder.

5. The Council reserves the right to reject any and all bids. By order of the Village Council of Edgerton, Ohio.

April 8, 1919.

GEORGE CHAMPE, Civ. Engr.,
Toledo, O.
E. M. GABRIEL, Clerk.

PRELIMINARY ESTIMATE

1.	Grading	6,850	cu.yds.
2.	27 inch Pipe Sewer	100	lin.ft.
3.	15 inch Pipe Sewer	1,350	lin.ft.
4.	12 inch Pipe Sewer	745	lin.ft.
5.	10 inch Pipe Sewer	990	lin.ft.
6.	Manholes	10	
7.	Catch Basins	20	
8.	Circular Curb	470	lin.ft.
9.	Straight Curb	5,310	lin.ft.
10.	Pavement	14,391	sq.yds.
11.	Cost of Construction	55,430	Dollars

Bids: May 5.

Paving, Bridging, Grading, Etc.

Dallas, Tex.

Notice is hereby given that sealed proposals will be received by Chas. E. Gross, County Auditor for Dallas County at Dallas, Tex., up to ten o'clock A.M., Monday, May 5, 1919, for the construction of a concrete pavement, including concrete bridging, grading, etc., on the Dallas-Ft. Worth Road, between the City of Dallas and the Dallas-Tarrant County line.

Approximate quantities are as follows:

Concrete pavement	106,000	sq.yd.
Concrete bridging	1,300	cu.yd.
Steel reinforcement	210,000	pounds
Grading	70,000	cu.yd.

A certified check in the sum of $10,000 made payable to Cecil L. Simpson, County Judge, shall accompany each proposal. Dallas County reserves the right to reject any or all bids. Plans on file with the State Highway Department at Austin, Texas, also with J. F. Witt, County Engineer for Dallas County at Dallas, Texas.

CHAS. E. GROSS,
County Auditor.

Bids: April 28

Paving

Elmira Heights, N. Y.

Sealed proposals will be received by Norvan Shook Clerk of the Village of Elmira Heights, N. Y., for the construction approximately of

10,500 sq.yd. Vitrified shale brick pitch filled pavement.
3,075 lin.ft. straight concrete curb with protection bar.
380 lin.ft. curved concrete curb with protection bar.
700 lin.ft. 5" medina headers.

on 14th St. in said Village until 10 A.M. on the 27th day of April, 1919, at which time they will be publicly opened and read in the Office of the Board of Trustees, Village Hall, Elmira Heights, N. Y.

Plans and Specifications for the proposed work will be on exhibition at the said office after April 16th, 1919.

A certified check of ($2000.00) Two Thousand Dollars made payable to the Village Treasurer of Elmira Heights must accompany all bids.

The Village Board reserves the right to reject any or all bids.

Village Clerk.
NORVAN SHOOK,
SILAS M. HAIGHT,
Village Engineer.

PROPOSALS FOR the purchase of locomotives, dump and flat cars offered for sale by The Panama Canal.—Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10.30 o'clock a.m., June 2, 1919, at which time they will be opened in public, for purchasing the above-mentioned material. Blanks and information relating to this Circular (1273) may be obtained from this office or the offices of the assistant purchasing agents, 24 State Street, New York City; 606 Common Street, New Orleans, La.; and Fort Mason, San Francisco, Calif.; also from the United States engineer offices in the principal cities throughout the United States.—A. L. Flint, General Purchasing Officer.

Bids: April 25.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one section of Stat Highway, as follows:

PRINCE GEORGE COUNTY,
Contract WB-Z:

One section of Baltimore-Washington Boulevard between Laurel and Hyattsville. 0.5 miles of 20 ft. concrete shoulders on each side of present roadway.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., on the 25th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the plan proposal form which with Specifications and plans, will be furnished b ythe Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of fice hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond ,and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 9th day of April, 1919.

FRANK K. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building the following:

BALTIMORE CITY, CONTRACT BC-29A: One section of Monroe Street from Eagle Street to Mosher Street for a distance of 1.18 miles. Sheet asphalt.

CAROLINE COUNTY, CONTRACT Co-18: One section of State Highway between Grove and Bureau, for a distance of 2.50 miles. Concrete.

MONTGOMERY COUNTY, CONTRACT M-17: One section of State Highway through Rockville, for a distance of 1.76 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 21st day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY.
Clerk.

OFFICIAL PROPOSALS

Bids: May **14.**

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

Bids: May 14.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

OFFICIAL PROPOSALS

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD

A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 33,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

0063

OFFICIAL PROPOSALS

Bids: May 20.

Dam Construction

Stamford, Texas.

Sealed bids will be received by the Mayor and Board of Commissioners of the City of Stamford, Texas, until noon May 20, 1919, and then publicly opened and read, for furnishing all equipment ,tools, labor, materials, etc., necessary for constructing the following:

A dam across the Clear Fork of the Braezs River. The dam contemplated contains approximately nine thousand cubic yards of rubble and concrete masonry, seventy thousand cubic yards earthworth and minor items. A concrete pipe line from river to pumping station (about twelve miles), a cast iron pipe line from pumping station to Stamford (about two miles) and two earthen reservoirs along the pipe line. Plans and specifications for the dam are separate, and either or both sets will be mailed to prospective bidders on receipt of $25.00 for each set, which will be returned only upon their return in good order within two weeks after opening bids. Bids will be considered on all or a part. The right is reserved to reject any and all bids and to waive informalities.

A certified check covering four per cent. of the work bid on must accompany each bid and be made payable to R. L. Penick, Mayor of Stamford, Texas, as an evidence of good faith.

R. L. PENICK, Mayor,
Stmaford, Texas.

Bids: May 6.

Grading and Paving

Omaha, Neb.

Sealed proposals to be received by City Clerk of Omaha, up to nine o'clock on Tuesday, May 6, for grading and repaving within District No. 1721, including 150,000 cu.yd. grading and 20,000 sq.yd. of paving. Approximate private grading work in connection with the above, 200,000 cu.yd. Grading and paving contracts may be let separately.

Plans and specifications on file with John A. Bruce, City Engineer, Chicago office of Engineering News-Record. Work to be commenced about October 1; time limit for grading within district, four months.

Certified check, five per cent. of total bid.

JOHN A. BRUCE,
Omaha, April 17, 1919. City Engineer.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: May 8.

Paving

Milan, Mich.

1. Sealed bids for the paving of Wabash St. from the South End of the Bridge over the Saline River to the South Corporation Line, in the Village of Milan, Mich., in accordance with the plans and specifications on file with the Village Clerk, will be received by said Clerk, until 1:30 o'clock P.M. on Thursday, May 8th, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices in words and figures, on the blanks provided therefor, shall be enclosed in a sealed envelope marked "Bid for Pavement" and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it and shall be accompanied by a certified check on a solvent bank, payable to the Village Clerk, in the sum of 1000 Dollars, as a guaranty that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within ten (10) days from the date of notice of award of contract.

4. Each bid for bituminous pavement shall be accompanied by a sample of bituminous cement, labelled with the name of the bitumen, manufacturer and bidder.

5. The Council reserves the right to reject any and all bids.

By order of the Village Council of Milan, Mich., April 14, 1919.

GEORGE CHAMPE, Civ. Engr.,
Toledo, Ohio.

JESSE BUTTON, Clerk.

PRELIMINARY ESTIMATE

1.	Grading	4,100	cu.yds.
2.	10 inch Pipe Sewer	220	lin.ft.
3.	Manholes	4	
4.	Catch Basins	12	
5.	Inlets	8	
6.	Straight Curb	4,724	lin.ft.
7.	Circular Curb	703	lin.ft.
8.	4' inch Drain Tile	5,427	lin.ft.
9.	Pavement	8 448	sq.yds.
10.	Cost of Construction	27,695	Dollars

BIDS WANTED
30000 yd. Traction Shovel Work, mostly overcasting.
Or will rent shovel
Empire Engineering Company, Inc.
Buffalo, N. Y.

WARNING
Select with care the man who handles
YOUR
Contract Bonds and Insurance
Be as careful as you would be in selecting your attorney for an important case in court. Proper representation before the Underwriters is vital in building your credit standing with the Surety Companies.
You will find in this respect that
SWART SERVICE REALLY SERVES
Try me out on your next bond.
HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: May 6.

Storm Sewer

Dearborn, Mich.

Sealed proposals will be received at the office of the Village Clerk, Village Hall, until 8:00 P.M., May 6, 1919, for the construction of a Storm Water Sewer lying in Military, Garrison, Beeson and Adeline Streets.

The work consists of approximately as follows:

1013	lin.ft.	of	6' 3"	Circular	Sewer
1634	"	"	5' 9"	"	"
950	"	"	5' 6"	"	"
575	"	"	5' 0"	"	"
930	"	"	4' 6"	"	"
1237	"	"	4' 0"	"	"

Plans and specifications are on file at the office of the Village Clerk, Dearborn, Michigan, and copies may be obtained at the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of $10.00 (ten dollars) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for seven thousand dollars ($7000.00). All certificate accompany rejected proposals will be returned. Should any proposal be accepted, the party or parties making same shall execute a contract and furnish the required surety bonds satisfactory to the Village of Dearborn,within ten days after receiving notice; or, failing so to do, the certificate of deposit shall be forfeited to the said Village of Dearborn.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the Village Clerk on or before 8:00 P.M., May 6, 1919.

The Village reserves the right to reject any or all bids.

By order of the Village Commission.

FRED C. REAMER,
Village Clerk.

Bids: April 28.

Paving

Elmira, N. Y.

Sealed proposals for grading, curbing and paving the below named streets will be received by the undersigned at his office in the City Hall until 11:30 o'clock A.M., April 28, 1919:

Woodlawn Ave., 2800 sq.yd.
East & West First Street, 2400 sq.yd.
Walnut Street, 14,900 sq.yd.

Plans and specifications are on file in the City Engineer's Office, City Hall, where also may be obtained the "proposal sheets" which must be used.

Separate certified checks are required as follows:

Woodlawn Ave., $1100; E. and W. First Sts., $900; Walnut St., $6200 payable to the order of the Mayor of Elmira, N. Y., and must accompany the bids. They will be returned to the bidders upon execution of the contracts.

The envelopes must be endorsed "Proposals for Pavements."

The Board of Public Works reserves the right to reject any or all bids.

LOUIS C. ANDREWS,
City Clerk.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: May 12.

Paving

CITY OF ONEONTA, NEW YORK.
DEPARTMENT OF PUBLIC WORK.

Sealed bids or proposals will be received by the Board of Public Works, at the City Clerk's Office, at Oneonta, New York, until 8 P.M., on the 12th day of May, 1919, for the improvement named below, at which time and place such proposals will be publicly opened and read.

Paving with bituminous macadam, Maple Street from Main Street to south line of Center Street; Maple Street from south line of Center Street to Normal School Grounds; Elm Street from Main Street to Cedar Street and Spruce Street from Elm Street to Maple Street, together with such sewer constructions as is necessary for the paving.

All bids must be made on the regular printed forms furnished for that purpose, and all prices must be plainly stated in ink, both in wards and figures.

Plans and specifications are on file in the City Engineer's office and may be obtained for the price of five dollars ($5), said five dollars will not be refunded upon return of the plans, but will be retained by the City of Oneonta as a part compensation for the printing of the same.

All bids will be considered informal, which do not contain prices set opposite each and all of the items which enter into the construction of the particular kind of pavement bid upon, and which are called for in the printed forms for bids, or which are otherwise not in conformity with this notice.

No bid shall be allowed to be withdrawn for any reason whatever, after it has been presented to the Board of Public Works.

No bid shall be accepted from, or contract awarded to any person who is in arrears to the City of Oneonta upon debt or contract, or who is in default as surety or otherwise, upon any obligation to said city.

All bids which, in the opinion of the Board of Public Works, are unbalanced will be deemed informal.

Bidders are required to state in their bids their names and places of residence, and the names of all persons interested with them in said bids. Also that the bid is made without any connection with any persons making another bid for the same contract, and that the bid is in all respects fair and without collusion of fraud.

A certified check in an amount equal to at least five (5%) per cent. of the bid, payable to the Chamberlain of the City of Oneonta, will be required to accompany each bid. All such deposits, except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same within three days (3) after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within fifteen (15) days after the notice that it has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the City of Oneonta as liquidated damages for such neglect or refusal. But if he or they shall execute the contract within the time aforesaid, the amount of his or their deposit will be returned to him or them.

No contract will be considered unless accompanied with a surety bond in an amount equal to fifty (50%) per cent. of the bid, approved as to sufficiency by the Board of Public Works, and conditioned that if the contract be accepted, the proposer will construct the work at the prices and upon the terms proposed, according to the plans and specifications, and subject to the supervision and approval of the City Engineer, and also conditioned for the faithful performance of all the provisions of the contract.

The Board of Public Works reserves the right to reject any or all bids not deemed for the interest of the City.

The Engineer's estimate of quantities, as attached to the bidding form, will be used only as a basis of computing and canvassing the various bids.

Bidders are required to form their own judgment of the quantities and character of the work by personal examination of the ground where it is to be done and of the specifications and the drawings relating to it, or by such other means as they may prefer.

Bidders must not assert any misunderstanding in regard to any thing relating to the work, or the location and ground where it is to be executed.

BOARD OF PUBLIC WORKS,
CITY OF ONEONTA
SHELDON H. CLOSE,
City Clerk.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: May 8.

Paving

Lorain, Ohio.

Sealed proposals will be received by the director of public service of the City of Lorain, State of Ohio, at the office of said director until 12 o'clock noon, May 8, 1919, for the furnishing of labor and material for approximately 70,000 sq.yd. of street paving. For further information write C. C. Miller, City Engineer.

OFFICIAL PROPOSALS

Bids: May 15.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 15th day of May, 1919, for the completion of the following highways:

Cattaraugus...Three highways: 6.88, 4.73 and 2.17
Chautauqua...One highway: 3.90
Delaware......One highway: 6.51
Erie..........One highway: 5.19
Montgomery...Two highways: 2.49 and 1.61
Nassau........Three highways: 4.98, 3.09 and 3.38
Niagara.......One highway: 7.79
Onondaga.....One highway: 5.55
Orange........One highway: 9.18
Ulster.........One highway: 3.17
Wayne........One highway: 3.97

Also for the construction of the following highways:

Onondaga.....One highway: 3.94
Rensselaer....One highway: 3.80

And also for the repair of the following highways:

Columbia......One contract, reconstruction
Livingston.....One contract, reconstruction
Montgomery...One contract, reconstruction
Niagara........One contract reconstruction
Orange........Two contracts, reconstruction and resurfacing
St. Lawrence..One contract, resurfacing
Steuben.......One contract, resurfacing
Westchester...Four contracts, reconstruction

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose divisions the roads to be completed are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
R. K. FULLER,
Secretary.

Bids: May 6.

Highway Work

Clarion, Iowa.

Bids will be received until 2 P.M., May 6, by the Board of Supervisors of Wright County, Ia., at Clarion, Ia., for the grading of 10.37 miles of county road, involving approximately 42,000 cu.yd.

Bids: June 2.

Extension of Water Mains

North Mankato, Minn.

Sealed proposals will be received at Village Recorder's office, North Mankato, Minn., until 8 P.M., June 2, 1919, then opened, for extension of water mains, and furnishing of material. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

Bids: May 9.

Concrete Pavements

Village of Patchogue, Suffolk Co., N. Y.

Sealed proposals for the construction of concrete pavements and curbing in North Ocean Avenue and Oak Street, in the Village of Patchogue, N. Y., will be received by the Village Clerk, under 8:15 o'clock P.M., Friday, May 9, 1919, when they will be publicly opened at the village office.

Plans and specifications for the work, which will include approximately 13,000 sq.yd. of concrete pavement and 3400 lin. ft. of concrete curbing may be obtained at the office of Edward A. May, Civil Engineer, Patchogue, N. Y., by payment of $1 to cover cost of producing same.

Each bid must be accompanied by a certified check for an amount equal to 5% of the amount of bid, made payable to the Village of Patchogue.

The right is reserved by the Board of Trustees to reject any or all bids.

E. AGATE FOSTER,
President.
EDWARD B. WOODRUFF, Clerk.

OFFICIAL PROPOSALS

Bids: May 14.

Road Work

Pineville, W. Va.

Sealed proposals will be received by the County Court of Wyoming County, until 1 o'clock P.M. on May 14, 1919, for the construction and completion of one section of earth road leading from Elmore Yards, at the mouth of Barkers Creek, up said Creek to the mouth of Gooney Otter, a distance of approximately four miles, and consisting of approximately 40,000 cu.yd. of excavation, 500 cu.yd. of random rubble masonry, 400 cu.yd. of concrete, and 100 yd. of dry random rubble retaining walls.

Work consists of grading and construction of bridges and small drainage structures to be done in accordance with the specifications and plans of the State Road Commission on file in the Engineer's office in the town of Pineville, West Virginia, and the contract to be executed by the successful bidder, as well also as the proposal for said work shall be on the forms now adopted and used by the State Road Commission.

All bids must be accompanied by a certified check for five per cent. of the total amount of the bid, and the bid must be securely sealed and filed with the Clerk of the County Court of Wyoming County, West Virginia, at his office in the town of Pineville, West Virginia, on standard form of proposal furnished with specifications which said proposal and specifications shall be those that are adopted as the standard proposal and specifications used by the State Road Commission.

The Court reserves the right to reject any and all bids for said work.

Dated at Pineville, West Virginia, this the 8th day of April, 1919. by order of the Court.

(Signed) WILL P. COOK,
Clerk.

Bids: May 5.

Drag-Line Work

Clinton, Iowa.

The County Board of Supervisors of Clinton County, Iowa, will receive sealed bids at the Office of the County Auditor, at Clinton, Iowa, up to 2 p.m., May 5th, 1919, for deepening and widening a part of the Old Goose Lake Drainage Ditch. Dragline work. No floater or steam shovel work allowed. Check to accompany bid in separate envelope. Check for 10 per cent. of bid, and bond for 25 per cent. of cost. Length of ditch, approximately 10,500 feet. Excavation required, approximately 15,000 cubic yards. Estimated cost, $5250.00. Specifications and Plans may be seen at the Office of the County Auditor.

JOHN W. STROHM,
County Auditor.
BENTON R. ANDERSON, Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 26, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 6, 1919, for the construction of the United States Post Office at Bellefourche, South Dakota. Drawings and specifications may be obtained from the Custodian of the site at Bellefourche, South Dakota, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

OFFICIAL PROPOSALS

Bids: May 7.

Stokers and Drivers

DEPARTMENT OF PUBLIC
IMPROVEMENTS,
SUB-DEPARTMENT OF HIGHWAYS
ENGINEER.

Baltimore, Maryland.

Sealed proposals, in duplicate, endorsed "Bids for furnishing and erecting one Four Hundred and three Two Hundred and Sixty-six Horse-power Mechanical Side-feed Stokers and Drivers for Sewage Pumping Station, Eastern Avenue and President Street, Baltimore, Maryland," addressed to the Board of Awards of Baltimore City; will be received at the office of the City Register, City Hall, Baltimore, Maryland, until noon, Wednesday, May 7, 1919.

Specifications can be obtained at the office of the Highways Engineer, City Hall, Baltimore, Maryland, on and after April 23, 1919. A charge of $5 will be made for each set of specifications; this amount will be refunded upon the return of these specifications in good condition before noon of May 7, 1919. Specifications used in making a bid will be considered as returned.

A certified check of the bidder on a Clearing House Bank, made payable to the Mayor and City Council of Baltimore, for the sum of twelve hundred dollars ($1200) will be required with each bid.

The extent of the work is approximately as follows:

For furnishing and erecting complete ready for brick-work one Four Hundred (400) and three (3) Two Hundred and Sixty-six (266) Horse-power Side Feed type Mechanical Stokers, and the furnishing and ereting complete of two Stoker Engines.

The successful bidder will be required to give bond and comply with the City Charter respecting contracts.

The Board of Awards reserves the right to reject any or all bids.

GEORGE F. WIEGHARDT,
Highways Engineer.
April 23, 1919. Baltimore, Maryland.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK.
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

OFFICIAL PROPOSALS

Bids. May 10.

Pavement Construction

City of Pittsfield, Mass.

Sealed bids or proposals for constructing pavements and appurtenances, addressed to the Clerk of the Board of Public Works, will be received at the office of the Board of Public Works, City Hall, Pittsfield, Mass., until 2:30 o'clock P.M., of the tenth day of May, 1919. At the above place and time the bids will be publicly opened and read.

Pavement on South Street; the principal items of work are about 33,000 sq.yd. of pavement; about 8000 lin.ft. of curbs and other miscellaneous work. Alternative bids on different types of pavements will be received, which must be accompanied by a certified check for thirty-five hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of thirty-five thousand dollars.

Pavement on West Housantonic and other streets; the principal items of work are about 14,000 sq.yd. of pavement; about 6000 lin.ft. of curbs and other miscellaneous work. Alternative bids on different types of pavements will be received, which must be accompanied by a certified check for fifteen hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of fifteen thousand dollars.

Pavement on Pecks Road; the principal items of work are about 9500 sq.yd. of pavement, and other miscellaneous work. Alternative bids on different types of pavement will be received, which must be accompanied by a certified check for one thousand dollars, drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of ten thousand dollars.

Pamphlets containing information for bidders, form of proposal, contract, specifications and plans will be mailed to contractors who apply to the Engineer of the Board of Public Works, or may be obtained at his office.

Bidders may bid on one, two, or all the contracts and the right is reserved to reject any or all bids, or to accept any bid.

Mayor and Chairman Paving Committee.
WILLIAM C. MOULTON,
A. B. FARNHAM,
Engineer Board of Public Works.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Philadelphia, Pa., at 2 o'clock P.M., May 26, 1919, for furnishing rip rap and for building mud banks at Baker Range Front Light Station, Delaware River, Del. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa.

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3

Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000

SECTION NUMBER 4

Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000

SECTION NUMBER 5 (Intake)

Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1, upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements.
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 19.

Paving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for paving East Avenue from Wooster Avenue to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:
9,800 cu.yd. of excavation.
8,900 lin.ft. sandstone curb.
1,100 lin.ft. granite circle curb.
15,250 sq.yd. brick, asphalt or asphaltic concrete pavement.
1,750 sq.yd. hillside brick pavement.
53,600 sq.ft. artificial stone walks.
51 street inlets.
1,460 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: May 21.

Sewer

Akron, Ohio.

Sealed bids for proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in West Exchange Street, from Bowery to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:
3200 lin.ft. vitrified pipe, sizes 12 to 24 in.
5700 lin.ft. trunk sewer, sizes 30 to 120 in.
42 manholes.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 21.

Repaving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Repaving West Exchange Street, from Bowery to Maple Street" will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:
5,200 cu.yd. excavation.
1,000 lin.ft. sandstone curb.
670 lin.ft. granite circular curb.
5,800 lin.ft. curb redressed and reset.
14,100 sq.yd. stone block or vitrified brick pavement.
37,000 sq.ft. artificial stone walks.
32 street inlets.
700 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: May 7.

Road Work

CLARK COUNTY ROAD DISTRICT NO. 1

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Ark., until 2 P.M., May the 7th, 1919, and will then be publicly opened and read. The work contemplated is the building of 93 miles of gravelled roads radiating from the City of Arkadelphia, Clark County, Ark., together with culverts, bridges, etc.

The work has been divided into five sections, ranging in length from ten to thirty miles. Bids will be compared on a basis of the engineers' estimates, copies of which may be obtained free of cost from the engineers or the attorney of the district. Plans and specifications are on file at the office of the County Clerk in Clark County and at the office of the engineers in Little Rock, and may there be seen. Blue prints of alignment, grades and bridges comprising fifty sheets may be obtained from the engineers for $10. Specifications may be obtained from the engineers free of cost.

Bids must be accompanied by a certified check for 5% of the value of the work bid upon, and a construction bond of 25% will be required of the successful bidder.

The right is reserved to reject any and all bids.

BOARD OF COMMISSIONERS,
Clark County Road District No. 1
J. G. CLARK, President.
W. E. BARKMAN, Secretary.
McMILLAN and McMILLAN, Att'ys.
Arkadelphia, Arkansas.
LUND and HILL, Engrs.,
Little Rock, Arkansas.

Bids: May 15.

Ornamental Street Lighting System

Mandan, North Dakota.

The Board of City Commissioners will receive sealed bids, at the office of the City Auditor, Mandan, N. D., until eight o'clock P.M., May 15, 1919, for the furnishing of all material including plant equipment and labor for the installation of an ornamental street lighting system.

The work to be done embraces approximately 80 blocks, with 294 posts.

Each proposal shall be accompanied by a certified check of $500 and a bond running to the city in a sum equal to 5% of the amount of the bid.

Plans and specifications are on file with the City Auditor or may be obtained from the engineers by depositing $5.

The right is reserved to reject any or all bids.

H. L. HENKE,
Pres. City Commission.
W. H. SEITZ, City Auditor.
BLACK & GRIFFIN, Engineers.

Bids: May 13.

Sewer Bonds For Sale

Frederick, Okla.

The City of Frederick, Okla., will offer for sale on Tuesday evening, May 13, 1919 (subject to approval of the property owners of said City at a special election to be called immediately thereafter), one hundred and fifty thousand ($150,000) dollars more or less of 30-year Sanitary Sewer Bonds. The Mayor and Council reserve the right to reject any or all bids.

D. W. WOMACK,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: May 16.

Ditch Construction

Grant City, Mo.

Notice is hereby given that on Friday, the 16th day of May, 1919, at 2:00 o'clock p.m., at the office of the Secretary of Worth County Drainage District Number One in the Town of Grant City, Missouri, bids will be received by W. C. Okey, Secretary of the District for the construction of the Main Ditch and 8 lateral ditches, as set out in "The Plan for Reclamation" of said District.

The letting will be public outcry. If contractors are unable to attend the letting they may send in their bid by mail to W. C. Okey, Secretary, Grant City, Missouri.

Bids will be based on 961,000 cubic yards earth excavation in the Main Ditch and 32,315 cubic yards of earth excavation in the 8 lateral ditches.

Certified check or Bidder's Bond, 5% of the amount of bid. Surety bond, 40% of the cost of the work contracted for.

For further information address W. C. Okey, Secretary, Grant City, Missouri, or Clark E. Jacoby Engineering Company, 528 Shukert Building, Kansas City, Missouri.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Boston, Mass.—Sealed proposals will be received here until 12 M., May 3, 1919, and then opened, for dredging at Hog Island, Boston, Harbor, Mass. Further information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF WATER WORKS.

Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS,
Borough of Tamaqua, Pa.
JOHN M. HARRIS,
Secretary.

Bids: May 14.

EXTENSION OF DATE
Westerly Sewage Treatment Works

Cleveland, Ohio.

In order to give the contractors more time to prepare their bids for construction of Cleveland's Westerly Sewage Treatment Works, it has been decided to change the date of receiving bids from May 6 to May 14. (Previously advertised in issues of April 3rd and 10th.)

UNITED STATES ENGINEER OFFICE Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

PROPOSALS FOR MARINE RAILWAY U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: June 2.

Constructing Drainage System

Beaufort, N. C.

Sealed proposals will be received by the Virginia-Carolina Farms Co. at Beaufort, N. C., until noon of the second day of June, 1919, for the following work:

Constructing New Canals (Side slopes: ½ to 1)
- 17 miles main canals, 6 to 10 ft. bottom x 8 ft. deep.
- 66 miles laterals, 3 ft. bottom x 6 ft. deep.
- 117 miles sub-laterals, 2 ft. bottom x 4½ ft. deep.

Enlarging existing canals to above sizes:
- 10 miles mains.
- 28 miles laterals.
- 35 miles sub-laterals.

Total excavation: Approximately 1,500,000 cu.yd.

Grading, 110 miles of roads.

Constructing 210 wooden bridges, requiring from 700 to 2200 ft. B.M. lumber per bridge.

Each proposal must be enclosed in a sealed envelope and addressed to the Virginia-Carolina Farms Co., Beaufort, N. C., and marked: "Proposal for Constructing Drainage System."

Each bidder must deposit with his bid cash or certified check, made payable to the Virginia-Carolina Farms Co., in the amount of $1000 as a guarantee of good faith that he will, if a contract is awarded him, execute a written contract to perform the same. Checks of unsuccessful bidders will be returned as soon as award is made.

All requests for information should be directed to B. M. Potter, Engineer, New Bern, N. C. Plans, specifications, forms of proposals, instructions, and a full set of maps and profiles will be furnished upon receipt of a deposit of $10, which amount will be refunded upon return of same in good condition.

VIRGINIA-CAROLINA FARMS CO.
G. S. SPEER, President.
B. M. POTTER, Engineer,
New Bern, N. C.

Bids: May 7.

Filters

City of Winston-Salem, N. C.

Sealed proposals for the construction of certain filters for the City of Winston-Salem, will be received by the City of Winston-Salem, up to four o'clock P.M., of the 7th day of May, 1919. Proposals to be addressed to Commissioner of Public Works and endorsed: "Proposals for Constructing Filters."

Plans may be seen, and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any and all bids or any part of a bid.

JOSEPH FIRTH,
Commissioner of Public Works,

PROPOSALS FOR DREDGING. U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 10.

Reinforced Concrete Bridge

Adrian, Mich.

Sealed proposals will be received by the Adrian City Commission until 1:30 o'clock P.M., May 10, 1919, for the construction of a reinforced concrete bridge over the Raisin River on West Maumee Street, in the City of Adrian; bridge to be 54 ft. between abutments, 22 ft. from floor of bridge to bed of stream. Bidders to furnish own plans and specifications.

The City of Adrian reserves the right to reject any and all bids.

For further information apply to N. B. Washburn, Commissioner of Public Improvements, Adrian, Michigan.

G. PERCY LOVE,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 8, 1919.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 8th day of May, 1919, at 2 P.M., in the Mayor's office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from the intersection of Reservoir Street to City line. Brick, bithulitic, concrete, tarvia or bituminous material. Certified check for 10% of amount of bid must accompany proposal. Successful bidder must file bond for 50% of total amount of contract.

EUGENE M. HEBERT,
Secretary.

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court, House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement, concrete, bituminous concrete, or other approved pavement. Combination cement concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe.
152.5	Lin.ft. 18" Standard Vitrified Pipe.
152.5	Lin.ft. 24" Standard Vitrified Pipe.

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County Commissioners of Durham County.
M. G. MARKHAM,
Clerk or Secretary.

Bids: May 15.

Paving

Lebanon, Pa.

Sealed proposals directed to the City Clerk of Lebanon, Pa., will be received at the City Hall until 5 P.M., Thursday, May 15, and publicly opened at a special Council meeting that same evening, for the furnishing of all labor and materials required to construct the following pavements:

Cumberland Street—4th St. to 5th St., approximately.....	1,500 sq.yds.
Cumberland Street—9th St. to Pennsylvania R.R. approximately	4,600 " "
Cumberland Street—Pennsylvania R.R. to 16th St. approximately	9,000 " "
Chestnut Street—4th St. to 12th St. approximately....	16,700 " "

Alternate bids will be received on Woodblock, Vitrified Brick, Cement Concrete, Asphaltic Concrete and Sheet Asphalt. The Contractor may bid on any or all of these different types of surfacing.

Certified check of $250, $700, $1500, $2500 respectively, must accompany each bid.

Specifications, proposal blanks and detailed information concerning the condition and manner of submitting bids can be obtained by applying to the City Engineer. A deposit of $5.00 is required for each complete set of the specifications sent out. This will be refunded upon the return of the specifications in good condition.

Payment for the work done in paving the street intersections and in all drainage structures will be by monthly estimates. Payment for all other work will be made by two-year improvements bonds of the City of Lebanon, bearing 6 per cent. interest. The security for the payment and redemption of these bonds is the assessment levied against the abutting property owners as provided for by an act of Assembly entitled, "An act providing for the Incorporation of 3rd Class Cities" approved May 23, 1889, and any supplements thereto which may be applicable.

Plans of streets and standard structures may be seen at the City Engineer's office.

The Mayor and Council reserve the right to reject any or all bids and to award the contract as is deemed to the best interest of the City of Lebanon.

PAUL A. VOLCKER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: May 6.

Grading and Paving

Omaha, Neb.

Sealed proposals to be received by City Clerk of Omaha, up to nine o'clock on Tuesday, May 6, for grading and repaving within District No. 1721, including 150,000 cu.yd. grading and 20,000 sq.yd. of paving. Approximate private grading work in connection with the above, 200,000 cu.yd. Grading and paving contracts may be let separately.

Plans and specifications on file with John A. Bruce, City Engineer, Chicago office of Engineering News-Record. Work to be commenced about October 1; time limit for grading within district, four months.

Certified check, five per cent. of total bid.

JOHN A. BRUCE,
Omaha, April 17. 1919. City Engineer.

Bids: May 8.

Road Oiling

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at their office in Eastman Park Mansion up to 4 P.M., Thursday, May 8, 1919, for the following:

Furnishing and applying asphaltic oil of 40% to 50% asphaltic content to approximately 300,000 sq.yd. of earth and macadam streets during the season of 1919.

Price to be per square yard treated.

A certified check for $300 must accompany each proposal. Specifications can be obtained from or will be mailed by the Clerk of the Board of Public Works upon receipt of a deposit of $5.

The right is expressly reserved to reject any or all proposals.

E. W. SYLVESTER,
Supt. Public Works.

Dated: April 25, 1919.

Bids: May 9.

Road Reconstruction

Johnstown, Pa.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 2 o'clock P.M., and publicly opened and read in the Commissioners' office at 2:30 o'clock P.M., on the 9th day of May, A. D. 1919, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with an eighteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. Contractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

Bids: May 15.

Street Improvements

Cumberland, Md.

Sealed proposals addressed to the Mayor and City Council of Cumberland, Md., and endorsed "Proposals for the paving and otherwise improving streets in the City of Cumberland, Md.," will be received at the office of the City Clerk on or before 9:30 A.M., May 15, 1919. Plans and specifications may be obtained at the office of the City Engineer. A deposit of one dollar ($1) for each plan will be required, which will be refunded upon the return of same in good condition. Specifications will be furnished free of charge to each bidder receiving one or more plans.

This work embraces curbing, paving and otherwise improving on eight (8) streets, aggregating approximately, as follows:

9,135 ft. concrete curbing.
7,050 sq.yd. concrete paving.
930 sq.yd. wood block paving.
14,200 sq.yd. brick paving (semi-monolithic) and miscellaneous sewer work, etc. Alternate bids will be asked on 11,280 sq.yd. of Sheet Asphalt on part of the above mentioned paving.

Each proposal must be accompanied by a certified check drawn to the order of the Mayor and City Council of Cumberland, Md., amounting to one hundred dollars ($100) for each and every street bid on, which check will be forfeited to the Mayor and City Council of said City as liquidated damages in case an award is made and the contract and bond are not promptly and properly executed. The Mayor and City Council reserve the right to reject any or all bids, and further, to contract for all or any part of said work.

RALPH L. RIZER, City Engineer,
City Hall, Cumberland, Md.

Bids: May 16.

Fire Proof Grade School

Grand Rapids, Mich.

Sealed tenders marked, "Bids for New Henry School," will be received for the General Construction, Heating and Ventilating, Plumbing and Sewering, Electrical Work, Vacuum Cleaning Apparatus, etc., as per plans and specifications, on file at the office of the architect, Henry H. Turner, 234 Division Avenue, North, Grand Rapids, Michigan.

Bids will be received on or before four (4) o'clock P.M., May 16, 1919, addressed to Herbert N. Morrill, Business Manager, Board of Education, City Hall, Grand Rapids, Michigan. All bids must be sealed and accompanied by a certified check as per following schedule:

	Per Cent. of Bid
Bids under $5000................	10
Bids $5000 to $25,000............	7½
Bids $25,000 to $50,000...........	5
Bids $50,000 or over.............	3

made payable to the President of the Board of Education, and will be returned when the successful bidder has qualified and signed contract. This certified deposit check is demanded as a guarantee that the successful bidder will sign the contract and furnish the necessary bonds within ten days after the contract is presented to him for signature. The right is reserved to reject any or all bids.

THE BOARD OF EDUCATION.
HENRY E. CROW,
President.

Attest:
H. N. MORRILL, Secretary.

OFFICIAL PROPOSALS

Bids: May 12.

Hospital Building, Power House, Laundry and Tunnel

CITY OF HIGHLAND PARK,
MICHIGAN.

Sealed proposals in *triplicate* will be received by the City of Highland Park, 20 Gerald Avenue, Highland Park, Michigan, at the office of the City Clerk, up to 8 o'clock P.M., May 12, 1919, for general work, heating, plumbing, electric, lighting fixtures, refrigeration, sterilizers, laundry machinery, cooking apparatus, lockers, for a four story basement and sub-basement hospital building, a two story power house and laundry and connecting tunnel for the City of Highland Park, Michigan.

All bids must be made on the regular bid blanks which will be furnished to the contractors in quadruplicate, three copies to be signed, sealed and returned and the fourth to be filed by the bidder.

Separate bids will be received for each, all or any number of the above enumerated items.

Each bid must be accompaned by a certified check for at least 5% of the bid, as a guarantee that the accepted bidder will enter into contract.

The successful bidder must furnish acceptable bond in the sum of the full amount of his contract.

Right is reserved to reject any or all bids and to waive defect in any bid if deemed to the interest of the city to do so.

Plans and specifications may be obtained upon application at the office of the City Engineer, L. C. Whitsit, 28 Gerald Avenue, Highland Park, Michigan.

All requests for plans and specifications must be accompanied by a certified check for $25, payable to the City of Highland Park, Michigan for the return of such plans and specifications in good order.

DELMER C. GOWING,
City Clerk.

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one section of State Highway, as follows:

WICOMICO AND SOMERSET COUNTIES, CONTRACT NO. 094-A: One section of road over the Allen Mill Dam, for a distance of 0.23 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 25th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

OFFICIAL PROPOSALS

Bids: May 20.

Street Paving

OFFICE OF THE BOARD OF
COMMISSIONERS
Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the Secretary of the Board of Commissioners until 10 o'clock A.M., Tuesday, May 20, 1919, for the construction of certain Bitulithic Paving under Special Benefit Improvement Ordinances Nos. 102, 103, 104, 105; certain Asphaltic Concrete Paving under Special Benefit Improvement Ordinance No. 106; certain Recut Granite Block Paving under Special Benefit Improvement Ordinances Nos. 107, 108, 109, 110, 111, 112; certain Wood Block Paving under Special Benefit Improvement Ordinances Nos. 113, 114; and certain Macadam Paving (Oil and Gravel Surface Treatment) under Special Benefit Improvement Ordinance No. 115.

Separate proposals must be submitted for each street and must be on blank forms accompanying specifications, which will be furnished by William W. Southgate, City Engineer, upon request. Proposals must be accompanied by a certified check or cashier's check of a national bank located in Nashville, Tenn., payable to the order of the Board of Commissioners, in an amount equivalent to 10 per cent. of the aggregate bid, or an approved bond in the penal sum of a like amount, with at least two good solvent sureties, who are citizens or residents of Nashville, Tenn., or in lieu of personal sureties, the bond of some surety company authorized to execute such a bond in the State of Tennessee. The said checks or bonds will be returned to unsuccessful bidders upon award of contracts, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. A deposit of $5 will be required to accompany each application for specifications, and which will be returned to the depositor either upon the filing of bids or upon the return of the specifications. The right is reserved to reject any and all bids.

By order of the Board of Commissioners. WM. GUPTON, Mayor.

Attest:
J. W. DASHIELL, Secretary.

Bids: May 12.

Road Grading

Great Falls, S. C.

Sealed proposals for grading the road from Great Falls to Wateree will be received by the Great Falls Farms Co. until noon, May 12. The work will be let in two sections; Section 2, 10 miles and Section 3, 15 miles. The work will average five thousand cubic yards per mile, with several stream crossings of twenty thousand cubic yards in addition. Information may be obtained from Alfred T. Jones, Engineer Roads and Bridges, Great Falls, S. C.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Drainage Channels

Poplar Bluff, Mo.

Sealed proposals for the construction of 7,200,000 cu.yd. of earth excavation for drainage channels will be received until 10 o'clock P.M., May 14, 1919, by the Board of Supervisors of the Inter-River Drainage District of Missouri at their office at Poplar Bluff, Mo.

Bids will be accepted for the work as a whole or for any contract or combination of contracts into which the work has been divided.

No proposal will be considered unless accompanied by a satisfactory corporate proposal bond, in the form approved by the District or by a certified check for not less than 5% of the amount of the bid, but in no case need a certified check exceed $10,000.

The bidder or bidders, to whom awards are made will be required to enter into written contracts with the District in the form approved by the District, with good and approved security for the full amount of the contract, within twenty days after being notified of the acceptance of his proposal.

The right is reserved to reject any or all bids or to waive any informality in the bids received.

Payments for the work will be made in cash. Requests for information and for plans and specifications should be addressed to the Morgan Engineering Company, Memphis, Tennessee.

INTER-RIVER DRAINAGE DISTRICT
OF MISSOURI.
A. H. FREDERICK, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 8.

Bridge Construction

CITY ENGINEER'S OFFICE
NO. 17 CITY HALL.
New Haven, Conn.

Sealed proposals will be received at this office until 11 a.m., May 8, 1919, for the construction of a three span rolled steel girder beam bridge of Bethlehem sections on Washington Avenue over West River. Total length of bridge 125 feet, width 50 feet. Two new abutments and two new piers to be built of local sandstone on pile and timber foundation. All steel work to be encased in concrete. Flooring to be of reinforced concrete slab construction.

Plans, proposals and specifications can be obtained at the City Engineer's Office on or after April 28th.

A certified check, for 5% of bid, made payable to the Controller of the City of New Haven must accompany each proposal.

No proposals will be received after the time specified, and all proposals not on the blanks furnished or not properly filled out will be rejected.

The right to reject any or all bids is reserved.

By order of the Director of Public Works.

F. L. FORD,
April 23, 1919. City Engineer.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.

Bids: May 7.

Water Tube Boiler

DEPARTMENT OF PUBLIC IMPROVEMENTS,
SUB-DEPARTMENT OF HIGHWAYS ENGINEER.
Baltimore, Md.

Sealed proposals in duplicate, endorsed "Bids for furnishing and erecting Four Hundred Horse Power Water Tube Boiler for Sewage Pumping Station" will be received at the office of the City Register, City Hall, Baltimore, Maryland, until 12 noon, Wednesday, May 7, 1919.

Specifications can be obtained at the office of the Highways Engineer, City Hall, Baltimore, Maryland, on and after April 23, 1919. A charge of five dollars ($5) will be made for each set of specifications. This amount will be refunded upon the return of those specifications in good condition before noon of May 7, 1919. The specifications used in making a bid will be considered as returned.

A certified check of the bidder on a Clearing House Bank, made payable to the Mayor and City Council of Baltimore, for the sum of $1000 will be required with each bid.

The extent of the work is approximately as follows:

For furnishing and erecting complete ready for brick work, on foundation furnished by the City, one Four Hundred Horse Power Water Tube Boiler, together with all iron work and accessories, including Soot Blower.

The successful bidder will be required to give bond and comply with the City Charter respecting contracts.

Bids are asked for on two items and the Board of Awards reserves the right to let the contract as a whole or separately.

The Board of Awards also reserves the right to reject any or all bids.

GEORGE F. WIEGHARDT,
Highway Engineer,
April 23, 1919. Baltimore, Maryland.

Bids: June 2.

Reinforced Concrete Dam and Bridge

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN SERVICE

Sealed proposals for the construction of a reinforced concrete diversion dam and bridge on the Gila River in Arizona will be received at the office of the Supervising Engineer, United States Indian Service, 528 Federal Building, Los Angeles, Calif., until noon June 2, 1919, and then opened.

The structure will be located about three miles east of Sacaton, Arizona, and 18 miles north of Casa Grande, the nearest railroad station.

The work will require about 31,700 cu.yd. of earth work, 17,740 cu.yd. of concrete, 738,500 lb. of reinforcing steel, 12,400 ft. of round piling, 28,000 ft. of wood sheet piling and eighteen steel gates with operating machinery. Cement, reinforcing steel, round piles, gates and machinery will be furnished by the Government f.o.b. nearest railroad point, hauling to be included in the contract.

All proposals must be made upon blank forms of proposal attached to the contract and specifications which, with the plans, may be obtained upon application to the Supervising Engineer. A deposit of $25 will be required for each set of plans and specifications and this amount will be refunded providing the plans and specifications are returned within ten days after the date on which proposals are to be received.

Detailed schedule of the work to be performed will be furnished bidders and bids should be submitted on all items, as proposals for only a part of the work will not be considered.

HERBERT V. CLOTTS,
Supervising Engineer.

Bids: May 19.

Road Improvements

Tulsa, Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES..1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.

BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened. for furnishing Derricks. Further information on application.

Bids: May 20.

Dam Construction

Stamford, Texas.

Sealed bids will be received by the Mayor and Board of Commissioners of the City of Stamford, Texas, until noon May 20, 1919 and then publicly opened and read, for furnishing all equipment ,tools, labor, materials, etc., necessary for constructing the following:

A dam across the Clear Fork of the Braezs River. The dam contemplated contains approximately nine thousand cubic yards of rubble and concrete masonry, seventy thousand cubic yards earthworth and minor items. A concrete pipe line from river to pumping station (about twelve miles), a cast iron pipe line from pumping station to Stamford (about two miles) and two earthen reservoirs along the pipe line. Plans and specifications for the dam are separate, and either or both sets will be mailed to prospective bidders on receipt of $25.00 for each set, which will be returned only upon their return in good order within two weeks after opening bids. Bids will be considered on all or a part. The right is reserved to reject any and all bids and to waive informalities.

A certified check covering four per cent. of the work bid on must accompany each bid and be made payable to R. L. Penick, Mayor of Stamford, Texas, as an evidence of good faith.

R. L. PENICK, Mayor,
Stmaford, Texas.

Bids: May 9.

Street Improvement

OFFICE OF
THE DIRECTOR OF PUBLIC WORKS
Norfolk, Va.

Sealed proposals will be received at the office of the City Manager until 12 o'clock noon on the 9th day of May, 1919,for improving with sheet asphalt certain streets designated as Class A, aggregating 27,000 sq.yd. and certain other streets designated Class B, aggregating 17,000 sq.yd. including incidental work, in the City of Norfolk, Virginia, at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Chas. E. Ashburner, City Manager, marked, "Paving Proposal, May 9, 1919."

A certified check on some local bank in the sum of three thousand ($3000) dollars, payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from well recognized surety company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.

WALTER H. TAYLOR, 3rd,
Director Public Works.
April 17, 1919.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

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Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

OFFICIAL PROPOSALS

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Chosen Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building the following:

BALTIMORE CITY, CONTRACT BC-29A: One section of Monroe Street from Eagle Street to Mosher Street, for a distance of 1.18 miles. Sheet asphalt.

CAROLINE COUNTY, CONTRACT Co-18: One section of State Highway between Grove and Bureau, for a distance of 2.50 miles. Concrete.

MONTGOMERY COUNTY, CONTRACT M-17: One section of State Highway through Rockville, for a distance of 1.76 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Act of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 21st day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: May 20.

Soil Treatment, Laying Pipe, etc.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chembers Strees, New York City, until 11 A.M. on Tuesday, May 20, 1919, for Contract 190, for soil treatment, furnishing and laying water pipes, building concrete steps and walks and doing miscellaneous work in the vicinity of the Kensico dam, in the Towns of Mt. Pleasant and North Castel, Westchester county, New York, all as set forth in the specifications.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer, at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 8.

Paving

Norfolk, Va.

Sealed proposals will be received at the Office of the City Manager until 12.00 noon on the 8th day of May, 1919, for paving Boush Street from Brooke Avenue to Dartmouth Street with Durax, 6130 square yards, more or less, together with all incidental work designated Class D, No. 6. Also for furnishing material and constructing 10,200 linear feet, more or less, concrete curb and gutter designated Class C. All in the City of Norfolk, Va., at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Charles E. Ashburner, City Manager, marked Paving Proposal—May 8, 1919.

A certified check on some local bank in the sum of one thousand dollars ($1000.00) payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from a well recognized Surety Company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.
WALTER H. TAYLOR, 3rd.,
Director of Public Works.

Bids: May 19.

Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in East Avenue, from Maple Street to Wooster Avenue," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3900 ft. of vitrified pipe, sizes 12 to 24 in.
4700 ft. of trunk sewer, sizes 30 to 66 in.
35 manholes.

Each proposals must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER.
State Highway Commissioner.

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Swart deals with reliable contractors only—it is unnecessary to exaggerate about them to secure their Contract Bonds.
You have what I require—Dependability. I have what you need—an engineering service.
Let's Get Together
ON YOUR NEXT BOND
Phone—Wire—Write
HARMON V. SWART
19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its worth-while contractor in this country who bids on public work outside his own city. Searchlight Section is read each week by nearly every

OFFICIAL PROPOSALS

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 26, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 6, 1919, for the construction of the United States Post Office at Bellefourche, South Dakota. Drawings and specifications may be obtained from the Custodian of the site at Bellefourche, South Dakota, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF WATER WORKS.
Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award nas been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS,
Borough of Tamaqua, Pa.
JOHN M. HARRIS,
Secretary.

Bids: May 15.

Ornamental Street Lighting System

Mandan, North Dakota.

The Board of City Commissioners will receive sealed bids, at the office of the City Auditor, Mandan, N. D., until eight o'clock P.M., May 15, 1919, for the furnishing of all material including plant equipment and labor for the installation of an ornamental street lighting system.

The work to be done embraces approximately 80 blocks, with 294 posts.

Each proposal shall be accompanied by a certified check of $500 and a bond running to the city in a sum equal to 5% of the amount of the bid.

Plans and specifications are on file with the City Auditor or may be obtained from the engineers by depositing $5.

The right is reserved to reject any or all bids.

H. L. HENKE,
Pres. City Commission.
W. H. SEITZ, City Auditor.
BLACK & GRIFFIN, Engineers.

Bids: May 15.

Street Improvements

Cumberland, Md.

Sealed proposals addressed to the Mayor and City Council of Cumberland, Md., and endorsed "Proposals for the paving and otherwise improving streets in the City of Cumberland, Md.," will be received at the office of the City Clerk on or before 9:30 A.M., May 15, 1919. Plans and specifications may be obtained at the office of the City Engineer. A deposit of one dollar ($1) for each plan will be required, which will be refunded upon the return of same in good condition. Specifications will be furnished free of charge to each bidder receiving one or more plans.

This work embraces curbing, paving and otherwise improving on eight (8) streets, aggregating approximately, as follows:

9,135 ft. concrete curbing.
7,050 sq.yd. concrete paving.
930 sq.yd. wood block paving.
14,200 sq.yd. brick paving (semi-monolithic) and miscellaneous sewer work, etc. Alternate bids will be asked on 11,280 sq.yd. of Sheet Asphalt on part of the above mentioned paving.

Each proposal must be accompanied by a certified check drawn to the order of the Mayor and City Council of Cumberland, Md., amounting to one hundred dollars ($100) for each and every street bid on, which check will be forfeited to the Mayor and City Council of said City as liquidated damages in case an award is made and the contract and bond are not promptly and properly executed. The Mayor and City Council reserve the right to reject any or all bids, and further, to contract for all or any part of said work.

RALPH L. RIZER, City Engineer,
City Hall, Cumberland, Md.

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER.

Bids: May 8, 1919.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 8th day of May, 1919, at 2 P.M., in the Mayor's office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from the intersection of Reservoir Street to City line. Brick, bithulitic, concrete, tarvia or bituminous material. Certified check for 10% of amount of bid must accompany proposal. Successful bidder must file bond for 50% of total amount of contract.

EUGENE M. HEBERT,
Secretary.

U. S. ENGINEER OFFICE, New London, Conn.—Sealed proposals for dredging in Greenwich Harbor, Conn., will be received here until 2 o'clock p.m., May 28, 1919, and then opened. Information on application.

Bids: May 15.

Paving

Lebanon, Pa.

Sealed proposals directed to the City Clerk of Lebanon, Pa., will be received at the City Hall until 5 P.M., Thursday, May 15, and publicly opened at a special Council meeting that same evening, for the furnishing of all labor and materials required to construct the following pavements

Cumberland Street—4th St. to 5th St., approximately.....	1,500 sq.yds.
Cumberland Street—9th St. to Pennsylvania R.R. approximately	4,600 " "
Cumberland Street—Pennsylvania R.R. to 16th St. approximately	9,000 " "
Chestnut Street—4th St. to 12th St. approximately....	16,700 " "

Alternate bids will be received on Woodblock, Vitrified Brick, Cement Concrete, Asphaltic Concrete and Sheet Asphalt. The Contractor may bid on any or all of these different types of surfacing.

Certified check of $250, $700, $1500, $2500 respectively, must accompany each bid.

Specifications, proposal blanks and detailed information concerning the condition and manner of submitting bids can be obtained by applying to the City Engineer. A deposit of $5.00 is required for each complete set of the specifications sent out. This will be refunded upon the return of the specifications in good condition.

Payment for the work done in paving the street intersections and in all drainage structures will be by monthly estimates. Payment for all other work will be made by two-year improvements bonds of the City of Lebanon, bearing 6 per cent. interest. The security for the payment and redemption of these bonds is the assessment levied against the abutting property owners as provided for by an act of Assembly entitled, "An act providing for the Incorporation of 3rd Class Cities" approved May 23, 1889, and any supplements thereto which may be applicable.

Plans of streets and standard structures may be seen at the City Engineer's office.

The Mayor and Council reserve the right to reject any or all bids and to award the contract as is deemed to the best interest of the City of Lebanon.

PAUL A. VOLCKER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: May 19.

Concrete and Brick Paving

Plainfield, N. J.

Sealed proposals will be received by the Common Council of the City of Plainfield, N. J., at the Council Chambers in said City on Monday, May 19th, 1919, at 8 P.M., for paving certain streets with reinforced concrete and certain other streets with vitrified brick on concrete base.

The approximate amount of the principal items of the work is as follows:

14,700	Sq.Yds. of vitrified brick pavement.
2,300	Cu.Yds. of cement concrete pavement.
9,400	Lin.Ft. of concrete abuttements in place of curbs.

Plans, specifications and forms of proposals, contracts, etc., may be had of Andrew J. Gavett, City Engineer, or of John J. Carroll, City Clerk, Municipal Building, Plainfield, N. J.

JOHN J. CARROLL,
City Clerk.

Bids: May 12.

Paving

CITY OF ONEONTA, NEW YORK.
DEPARTMENT OF PUBLIC WORK.

Sealed bids or proposals will be received by the Board of Public Works, at the City Clerk's Office, at Oneonta, New York, until 8 P.M., on the 12th day of May, 1919, for the improvement named below, at which time and place such proposals will be publicly opened and read.

Paving with bituminous macadam, Maple Street from Main Street to south line of Center Street; Maple Street from south line of Center Street to Normal School Grounds; Elm Street from Main Street to Cedar Street and Spruce Street from Elm Street to Maple Street, together with such sewer constructions as is necessary for the paving.

All bids must be made on the regular printed forms furnished for that purpose, and all prices must be plainly stated in ink, both in wards and figures.

Plans and specifications are on file in the City Engineer's office and may be obtained for the price of five dollars ($5), said five dollars will not be refunded upon return of the plans, but will be retained by the City of Oneonta as a part compensation for the printing of the same.

All bids will be considered informal, which do not contain prices set opposite each and all of the items which enter into the construction of the particular kind of pavement bid upon, and which are called for in the printed forms for bids, or which are otherwise not in conformity with this notice.

No bid shall be allowed to be withdrawn for any reason whatever, after it has been presented to the Board of Public Works.

No bid shall be accepted from, or contract awarded to any person who is in arrears to the City of Oneonta upon debt or contract, or who is in default as surety or otherwise, upon any obligation to said city.

All bids which, in the opinion of the Board of Public Works, are unbalanced will be deemed informal.

Bidders are required to state in their bids their names and places of residence, and the names of all persons interested with them in said bids. Also that the bid is made without any connection with any persons making another bid for the same contract, and that the bid is in all respects fair and without collusion of fraud.

A certified check in an amount equal to at least five (5%) per cent. of the bid, payable to the Chamberlain of the City of Oneonta, will be required to accompany each bid. All such deposits, except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same within three days (3) after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within fifteen (15) days after the notice that it has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the City of Oneonta as liquidated damages for such neglect or refusal. But if he or they shall execute the contract within the time aforesaid, the amount of his or their deposit will be returned to him or them.

No contract will be considered unless accompanied with a surety bond in an amount equal to fifty (50%) per cent. of the bid, approved as to sufficiency by the Board of Public Works, and conditioned that if the contract be accepted, the proposer will construct the work at the prices and upon the terms proposed, according to the plans and specifications, and subject to the supervision and approval of the City Engineer, and also conditioned for the faithful performance of all the provisions of the contract.

The Board of Public Works reserves the right to reject any or all bids not deemed for the interest of the City.

The Engineer's estimate of quantities, as attached to the bidding form, will be used only as a basis of computing and canvassing the various bids.

Bidders are required to form their own judgment of the quantities and character of the work by personal examination of the ground where it is to be done and of the specifications and the drawings relating to it, or by such other means as they may prefer.

Bidders must not assert any misunderstanding in regard to any thing relating to the work, or the location and ground where it is to be executed.

BOARD OF PUBLIC WORKS,
CITY OF ONEONTA
SHELDON H. CLOSE,
City Clerk.

Bids: June 2.

Reinforced Concrete Dam and Bridge

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN SERVICE

Sealed proposals for the construction of a reinforced concrete diversion dam and bridge on the Gila River in Arizona will be received at the office of the Supervising Engineer, United States Indian Service, 528 Federal Building, Los Angeles, Calif., until noon June 2, 1919, and then opened.

The structure will be located about three miles east of Sacaton, Arizona, and 18 miles north of Casa Grande, the nearest railroad station.

The work will require about 31,700 cu.yd. of earth work, 17,740 cu.yd. of concrete, 738,500 lb. of reinforcing steel, 12,400 ft. of round piling, 28,000 ft. of wood sheet piling and eighteen steel gates with operating machinery. Cement, reinforcing steel, round piles, gates and machinery will be furnished by the Government f.o.b. nearest railroad point, hauling to be included in the contract.

All proposals must be made upon blank forms of proposal attached to the contract and specifications which, with the plans, may be obtained upon application to the Supervising Engineer. A deposit of $25 will be required for each set of plans and funded providing the plans and specifications are returned within ten days after the date on which proposals are to be received.

Detailed schedule of the work to be performed will be furnished bidders and bids should be submitted on all items, as proposals for only a part of the work will not be considered.

HERBERT V. CLOTTS,
Supervising Engineer.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 ,and then opened. Information on application.

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3	
Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000
SECTION NUMBER 4	
Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000
SECTION NUMBER 5 (Intake)	
Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1. upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 13.

Sewer Bonds For Sale

Frederick, Okla.

The City of Frederick, Okla., will offer for sale on Tuesday evening, May 13, 1919 (subject to approval of the property owners of said City at a special election to be called immediately thereafter), one hundred and fifty thousand ($150,000) dollars more or less of 30-year Sanitary Sewer Bonds. The Mayor and Council reserve the right to reject any or all bids.

D. W. WOMACK,
City Clerk.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater at Calumet Harbor, Ill. and Ind. Further information on application.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Philadelphia, Pa., at 2 o'clock P.M., May 26, 1919, for furnishing rip rap and for building mud banks at Baker Range Front Light Station, Delaware River, Del. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed bids **will be received** by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Concrete Bridge Construction

Montgomery, Ala.

Sealed bids will be received by the Board of Revenue of Montgomery County, Alabama, until noon, Monday, June 9, 1919, and at that time publicly opened for the construction of a reinforced concrete bridge, one thousand two hundred and eighty-eight feet long, with an eighteen foot roadway, over Catoma Creek on the Norman Bridge Road, five miles south of Montgomery.

A certified check for four hundred dollars will be required to accompany each bid. Plans and specifications are on file in the office of the State Highway Engineer and the County Engineer, Montgomery, Alabama. The right is reserved to reject any or all bids.

W. S. KELLER,
State Highway Engineer,
Montgomery, Alabama.

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., May 1, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Wednesday, May 21, 1919, for paving various streets and avenues in the District of Columbia with sheet asphalt. Forms of proposal, specifications, together with necessary information may be obtained from the Chief Clerk of the Engineer Department, Room 427, District Building. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

Ore Stripping

Americus, Ga.

Work consists of 500,000 to 1,500,000 yards of materials varying in thickness from 30 to 70 feet. Work should preferably be done by a large shovel or drag line so that the ore can be mined by the company as rapidly as it is uncovered by the contractor. Mines located about five miles from Central Railroad of Georgia near Americus, Ga. For further information apply to E. S. Fickes, Chief Engineer, Aluminum Company of America, 2400 Oliver Bldg., Pittsburgh, Pa.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 15th day of May, 1919, for the completion of the following highways:

Cattaraugus	Three highways: 6.88, 4.73 and 2.17
Chautauqua	One highway: 3.90
Delaware	One highway: 6.51
Erie	One highway: 5.19
Montgomery	Two highways: 2.49 and 1.61
Nassau	Three highways: 4.98, 3.09 and 3.38
Niagara	One highway: 7.79
Onondaga	One highway: 5.55
Orange	One highway: 9.18
Ulster	One highway: 3.17
Wayne	One highway: 3.97

Also for the construction of the following highways:

Onondaga	One highway: 3.94
Rensselaer	One highway: 3.80

And also for the repair of the following highways:

Columbia	One contract, reconstruction
Livingston	One contract, reconstruction
Montgomery	One contract, reconstruction
Niagara	One contract reconstruction
Orange	Two contracts, reconstruction and resurfacing
St. Lawrence	One contract, resurfacing
Steuben	One contract, resurfacing
Westchester	Four contracts, reconstruction

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose divisions the roads to be completed are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
R. K. FULLER,
Secretary.

Road Work

Pineville, W. Va.

Sealed proposals will be received by the County Court of Wyoming County, until 1 o'clock P.M. on May 14, 1919, for the construction and completion of one section of earth road leading from Elmore Yards, at the mouth of Barkers Creek, up said Creek to the mouth of Gooney Otter, a distance of approximately four miles, and consisting of approximately 40,000 cu.yd. of excavation, 500 cu.yd. of random rubble masonry, 400 cu.yd. of concrete, and 100 yd. of dry random rubble retaining walls.

Work consists of grading and construction of bridges and small drainage structures to be done in accordance with the specifications and plans of the State Road Commission on file in the Engineer's office in the town of Pineville, West Virginia, and the contract to be executed by the successful bidder, as well also as the proposal for said work shall be on the forms now adopted and used by the State Road Commission.

All bids must be accompanied by a certified check for five per cent. of the total amount of the bid, and the bid must be securely sealed and filed with the Clerk of the County Court of Wyoming County, West Virginia, at his office in the town of Pineville, West Virginia, on standard form of proposal furnished with specifications which said proposal and specifications shall be those that are adopted as the standard proposal and specifications used by the State Road Commission.

The Court reserves the right to reject any and all bids for said work.

Dated at Pineville, West Virginia, this the 8th day of April, 1919, by order of the Court.

(Signed) WILL P. COOK, Clerk

Sanitary Sewer

Frederick, Oklahoma

Sealed bids addressed to the "Honorable Mayor and Council" of the City of Frederick, Oklahoma, and endorsed "Sewer Bid" will be received at the office of the City Clerk until 4 P.M., May 13th, 1919, at which time they will be publicly opened and read

The work consists of furnishing labor and material for the construction and extension of a sanitary sewer system.

Approximate quantities as follows:

Trench excavation 5′ to 17′ deep, Cu.Yds.	26,775
6″ Vitrified pipe, Lin.Ft.	965
8″ " " " "	34,795
12″ " " " "	1,780
15″ " " " "	7,770
Specials	1,032
Manholes	86

Alternate bids will be received for Cement Sewer Pipe in place of vitrified pipe.

Each proposal must be accompanied by a certified check on a Frederick bank for 5% of amount bid.

Plans and specifications are on file at the office of the City Clerk, and copies of same may be obtained from the Engineer upon payment of $15.00 therefor.

The City reserves the right to reject all bids, or accept any that may seem best for the City.

D. W. WOMACK, City Clerk.

Bridge Construction

Mandan, N. D.

Sealed proposals will be receive at the Morton County Court House of Mandan, North Dakota, for the preliminary survey, soundinds, barrings, design and estimate of cost necessary for the submittal to the Secretary of the U. S. Department of Agriculture of a Federal Aid Project statement by the North Dakota State Highway Commission for the construction of a bridge across the Missouri River between Bismarck and Mandan, will be received by the County Boards of Commissioners of the County, Mr. Burleigh and Morton on joint session at the Morton County Court House at Mandan, N. D., not later than 2 P.M. of the 19th of May, 1919. Work to be begun not later than June 1, 1919. The work as above outlined is to be executed to the satisfaction of the North Dakota State Highway Commission.

Each bidder must acompany his proposal with a statement regarding his ability, experience and equipment for carrying out the above work. The right is reserved to reject any or all bids.

LEE NICHOLS, County Auditor.

OFFICIAL PROPOSALS

Bids: May 26.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., May 26, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 13,623 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Blair County; 32,229 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Butler County: 11,065 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Cameron County; 26,648 ft. of Reinforced Concrete and Hillside Vitrified Brick in Clarion County; 4984 ft. of Reinforced Concrete in Clinton County; 16,552 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Crawford County; 33,917 feet of Bituminous Concrete Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Dauphin County; 53,372 ft. of Reinforced Concrete in McKean County; 17,891 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 10,554 ft. of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 13,464 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Union County; 9550 ft. of Reinforced Concrete in Venango County; 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren County; 27,688 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Wayne County and 2085 ft. of Reinforced Concrete in Westmoreland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

Bids: June 2.

Road Work

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Saturday, June 2, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph Co., to be let in Sections. Said work having been heretofore let to Contract to the F. M. Hudson Paving and Construction Co. and not completed by it. A Certified check in the sum of $500.00 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

OFFICIAL PROPOSALS

Bids: May 20.

Concrete Pavement

Town of Nutley, N. J.

Sealed bids for constructing concrete pavement on Park Ave. from Passaic Ave. to Washington Ave. will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., May 20th, 1919, at which time they will be publicly opened and read by the Board of Commissioners. The principal items of the work are approximately as follows:

7800 sq.yds. of concrete pavement, 8" thick in the center and 6" thick at the sides.
1600 lin.ft. of bluestone curb reset in concrete.
3500 lin.ft. of integral concrete curb.

Pamphlets containing Information for Bidders, Forms of Proposal and Agreement, and Specifications, can be obtained from the Town Engineer or Town Clerk on pawment of $1.00 which will be refunded on the return of the pamphlet in good condition.

A certified check for $3000 must accompany each bid and a bond for the total amount of the contract will be required for the faithful performance of the contract.

EMIL DIEBITSCH,
Mayor and Commissioner of Streets
and Public Improvements.

ELIOT N. SMITH,
Town Engineer.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for Concrete, Macadam, Tarvia, Warrenite and Asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: May 27.

Steel and Concrete Bridge Construction

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P.M., May 27, 1919, for the construction of the following bridges:

4—50 ft. steel plate girder spans; width 18 ft., with alternate bids on steel truss spans of same length and width.
2—50 ft. steel truss spans; width 16 ft.
400 lin.ft. concrete viaduct; width 18 ft.
112 lin. ft. I-beam spans; width 16 ft.
Reinforced concrete culverts; 95 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT
DISTRICT,
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Grifflin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Grifflin, Georgia

G. M. HARRINGTON,
City Engineer, Grifflin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: May 19.

Paving and Sewers

Thermopolis, Wyo.

Sealed proposals will be received by the Town Clerk until 6 o'clock P.M., May 19, 1919, for the construction of paving and storm sewers in Paving District No. 1.

The work includes about:

7,600 lin.ft. concrete curb.
26,000 sq.yd. pavement.
5,000 lin.ft. storm sewers and laterals.

Proposals will be received on the following types of pavement: Sheet asphalt, asphaltic concrete, bitulithic, reinforced concrete, brick.

A certified check for 10% of the amount of the bid must accompany each bid.

Plans, specifications and forms of contract and bond may be obtained by addressing J. B. Chessington, Town Engineer, Thermopolis, Wyo., and depositing $10, which will be refunded upon their return in good condition.

A. J. LOWRY,
Town Clerk

OFFICIAL PROPOSALS

Bids: May 20.

Street Paving

OFFICE OF THE BOARD OF COMMISSIONERS

Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the Secretary of the Board of Commissioners until 10 o'clock A.M., Tuesday, May 20, 1919, for the construction of certain Bitulithic Paving under Special Benefit Improvement Ordinances Nos. 102, 103, 104, 105; certain Asphaltic Concrete Paving under Special Benefit Improvement Ordinance No. 106; certain Recut Granite Block Paving under Special Benefit Improvement Ordinances Nos. 107, 108, 109, 110, 111, 112; certain Wood Block Paving under Special Benefit Improvement Ordinances Nos. 113, 114; and certain Macadam Paving (Oil and Gravel Surface Treatment) under Special Benefit Improvement Ordinance No. 115.

Separate proposals must be submitted for each street and must be on blank forms accompanying specifications, which will be furnished by William W. Southgate, City Engineer, upon request. Proposals must be accompanied by a certified check or cashier's check of a national bank located in Nashville, Tenn., payable to the order of the Board of Commissioners, in an amount equivalent to 10 per cent. of the aggregate bid, or an approved bond in the penal sum of a like amount with at least two good solvent sureties, who are citizens or residents of Nashville, Tenn., or in lieu of personal sureties, the bond of some surety company authorized to execute such a bond in the State of Tennessee. The said checks or bonds will be returned to unsuccessful bidders upon award of contracts, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. A deposit of $5 will be required to accompany each application for specifications, and which will be returned to the depositor either upon the filing of bids or upon the return of the specifications. The right is reserved to reject any and all bids.

By order of the Board of Commissioners. WM. GUPTON, Mayor.

Attest:

J. W. DASHIELL, Secretary.

Motor Truck, Hook and Ladder, Etc.

Milville, N. J.

The City of Millville, N. J., invites proposals for one combination two-in-one chemical fire and hose gasoline motor truck; also one gasoline motor driven hook and ladder truck with one nickel plated chemical tank. Detailed specifications will be mailed upon application to Samuel D. Bennett, Director of Public Safety, Millville, N. J.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: May 13.

Road Work

Madisonville, Ky.

Sealed bids will be received by the Hopkins County Fiscal Court at the Office of John G. Salmon. County Court Clerk, Madisonville, Ky., until 1:30 P.M., on May 13, 1919, at which time bids will be publicly opened, for the improvement of 1½ miles of the Madisonville-Princeton Road, State Aid No. 54E 2, and 1½ miles of the Madison-Greenville Road State Aid No. 54B 2.

Approximate Estimate Madisonville-Princeton Road.

6000 Cu.Yds. Earth Excavation.
50 Cu.Yds. Rock Excavation.
112 Lin.Ft. C. IP.
40 Cu.Yds. Concrete.
1 Acre Grubbing.
3950 Cu.Yds. Crushed Stone for water bound macadam surfacing.

Approximate Estimate Madisonville-Greenville Road.

3950 Cu.Yds. Crushed Stone for water bound Macadam Surfacing.

For the information of those wishing to bid on this work, will state that Two miles of State Aid work will be let in the near future. Also 5½ miles of Federal Aid work is being surved, and will be constructed this year.

Plans and Specifications on file in the County Road Engineers Office, Madisonville, Ky., and in the Office of the Commissioner of Public Roads, Frankfort, Ky., which may be inspected by bidders.

A certified check of $500.00, made payable to J. B. Stanley, Treasurer of Hopkins County, shall be filed with each bid.

The Fiscal Court of Hopkins County reserves the right to reject any or all bids.

HOPKINS COUNTY FISCAL COURT
By R. C. GIFFIN,
County Road Engineer.

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

OFFICIAL PROPOSALS

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Choser Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 20.

Soil Treatment, Laying Pipe, etc.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chembers Strees, New York City, until 11 A.M. on Tuesday, May 20, 1919, for Contract 190, for soil treatment, furnishing and laying water pipes, building concrete steps and walks and doing miscellaneous work in the vicinity of the Kensico dam, in the Towns of Mt. Pleasant and North Castel, Westchester county, New York, all as set forth in the specifications.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer, at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK.
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on applicatio

Bids: May 20.

Highway Work and Sewers

Johnstown, Pa.

Sealed proposals will be received at the office of the Superintendent of Streets and Public Improvements, City Hall, Johnstown, Pa., until 12 o'clock noon of Tuesday, May 20, 1919, for curbing, grading and paving the following highways, also sanitary sewers, storm sewers and their appurtenances, all in accordance with plans and specifications on file in the office of the City Engineer:

CONTRACT NO. 1

Buck Avenue and Solomon Street from Bedford Street to City Line:

Brick Paving, 9090 sq.yds.

Storm Sewer and appurtenances, 947 lin. ft. 12" to 36"

Sanitary Sewer and appurtenances, 4015 lin.ft. 8"

CONTRACT NO. 2

Ridge Avenue from Horrocks Street to end of Avenue:

Brick Paving, 1540 sq.yds.

Storm Sewer and appurtenances, 732 lin. ft. 8" to 15"

Sanitary Sewer and appurtenances, 828 lin.ft. 8"

Church Avenue from Angle in Avenue to end of Avenue:

Brick Paving, 1628 sq.yds.

Sanitary Sewer and appurtenances, 726 lin.ft. 8"

CONTRACT NO. 3

Section No. 3 Sanitary Sewer Main and its appurtenances from Hagen Street to Tenth Avenue:

1657 lin.ft. 63"
2336 " " 60"
4 " " 54"

Conemaugh River Siphon:

2 siphon chambers, emergency outfall chamber, 2 lines 39" R. C.

Pipe each 350 lin.ft. and Elk Run auxiliary siphon.

Plans, specifications, and blank proposals can be obtained at the office of the City Engineer on payment of $3 for each set or contract, which will be refunded upon the day of the letting to those submitting bids, returned in good condition.

Each proposal must contain the full name providing the plans and specifications are of the party or parties presenting the same and all persons interested therein; and must be accompanied by a bond, duty and legally executed, for an amount which shall be not less than five (5%) per cent. of the contract price, or a certified check for like amount, on a solvent bank doing business in the City of Johnstown, Pa., and made payable without reservation to the order of the Treasurer of the City of Johnstown, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

All proposals must be made on the blank forms attached to the specifications, as none other will be accepted, and they shall be enclosed in an envelope bearing the name and address of the bidder, marked "Proposal for Highway Improvements" and addressed to "The Superintendent of Streets and Public Improvements.' Bids will be opened and publicly read at the regular session of City Council in their chambers at 2 o'clock p.m. on the same date.

The city reserves the right to reject any or all bids, to waive irregularities, and to award the contract as may be deemed to the best interests of the city.

M. LEE MASTERTON,
Supt. of Streets and Public Improvements.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation.......	4,366 Sq.Yds.
Repaired Macadam Foundation	33,924 " "
Bituminous Macadam Penetration Surface	38,290 " "
Repaired Bituminous Concrete	14,177 " "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN, Recorder.

Bids: May 15.

Sewer System Extensions

OFFICIAL NOTICE NO. 40
PUBLISHED BY AUTHORITY OF THE SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2 P.M., the 15th day of May, A. D. 1919, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

28 Intercepting and Regulating Structures.

Together with all connections to existing sewers, and other appurtenances.

The time allowed for the completion of this contract will be twelve (12) months from the date of the engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be fifty (50) dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of five thousand dollars ($5000).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded, or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Specifications and blank forms of proposals can be obtained, and detailed plans examined, at the office of the Sewerage Commission in the City Hall and a full set of plans will be sent to any contractor upon receipt of five dollars ($5). This sum will be returned upon surrender of the plans in good condition.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES.
Secretary.

Countersigned

A. P. PUELICHER, Deputy Comptroller.

Bids: May 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of the following sections of State highway will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Friday, May 16, 1919, at which time they will be opened and read in public.

1. East Main Road, Portsmouth, 9297 feet—bituminous macadam.
2. Waterman Avenue, East Providence, 8180 feet—cement concrete.
3. Hartford Pike, Johnston and Scituate, 10,560 feet—bituminous concrete.
4. Mendon Road, Lincoln, 3550 feet—cement concrete.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 7, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODARD

OFFICIAL PROPOSALS

Bids: May 29.

Street Improvement

Las Vegas, New Mexico.

Separate sealed proposals for the paving and improving of the following streets within the City of Las Vegas, New Mexico, will be received at the office of the City Clerk until 8:00 o'clock P.M., May 29th: National Street from Sixth Street to Twelfth Street; Sixth Street from Main Street to Friedman Avenue; Seventh and Eighth Streets from Douglas Avenue to Friedman Avenue. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check on some solvent bank in the sum of $1000.00 and made payable to the City Treasurer. Approximate quantities as follows: Concrete, Topeka or Bitulithic pavement, 52,777 Sq.Yds.; Concrete curb and gutter, 22,713 lin.ft.; concrete alley return, 528 lin.ft., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work of certificates bearing 6% interest and of certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, East Las Vegas, N. M. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Las Vegas, N. M.
By F. O. BLOOD, Mayor
ATTEST:
W. G. BENJAMIN, Clerk.

Bids: May 22.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 22, for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refunded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 22, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

Bids: May 8.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 10, Section No. 11, (Fort Lee Ferry to Arcadian Way), Bergen County, estimated to cost $481,000.00. Bids to be received on a percentage of the engineer's estimate.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, May 28, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, and addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 27.

Road Embankment

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P. M., May 27, 1919, for the construction of 16 miles of earth road embankment involving approximately the following principal quantities:

Earth excavation	227,200 cu.yd.
Clearing	21 acres
Clearing and grubbing	36 acres
Corrugated pipe, 18 in. diam..	1,340 lin.ft.
Corrugated pipe, 24 in. diam...	450 lin.ft
Plain concrete headwalls....	90 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than [illegible] per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the District will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT DISTRICT
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 20.

Bituminous Concrete Surfacing

Brockton, Mass.

Bids for laying "Bituminous Concrete Surfacing" or other mixed bituminous surfacing or pavement on North Main, Howard and Copeland Streets, will be received in the office of the Highway Commissioners, City Hall, Brockton, Mass., until four o'clock P.M., on Tuesday, May 20, 1919.

Plans and specifications and other necessary information may be obtained at the office of the City Engineer upon deposit of ten dollars ($10), which will be refunded if the plans and specifications are returned in good condition.

Approximate number of square yards of pavement contemplated is thirty thousand (30,000).

The right to reject any or all bids is expressly reserved.

Per Order:
PATRICK F. McMAHON,
MICHAEL J. KELLEHER,
JAMES F. POWERS,
Highway Commissioners.
HAROLD S. CROCKER, City Engineer,
Office of City Engineer,
City Hall, Brockton, Mass.
Brockton, May 5, 1919.

EXPERT ADVICE
is always worth paying for. On
Contract Bonds
it is invaluable to you. Try it. Expert advice and attention known as Engineering Insurance Service is yours at no extra charge.
HARMON V. SWART
19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: June 5.

Bridge Construction

STATE OF CONNECTICUT
HIGHWAY DEPARTMENT
Hartford, Conn.

Contractors experienced in constructing difficult foundation work and large concrete bridges are invited to present proposals for the construction of the approaches, substructure and reinforced concrete superstructure of a bridge to be built across the Housatonic River between the towns of Milford and Stratford.

The main structure will be a reinforced concrete design consisting of five ribbed arches of 100 foot clear span and sixty (60) feet in width; two girder approach spans about fifty-two (52) feet in length; and suitable approach embankments. The entire improvement is to be covered with a permanent pavement totaling approximately 2800 feet in length.

Bids will be received by the State Highway Commissioner in his office at the State Capitol at Hartford, Connecticut, until 2 P.M. of the 5th day of June, 1919, at which time they will be publicly opened and read.

A surety company bond or a certified check for one-third (⅓) of the contractor's estimated cost of the bridge must be presented with the bid; the check or bond to be returned after the award and signing of the contract by the lowest responsible bidder.

Upon the execution of the contract, a surety company bond must be filed for the full amount of the contract.

All bids must be made on and in conformity with the form of proposal which with the contract, specifications and bond may be obtained and plans examined at the following places:

Office of the State Highway Commissioner, Hartford, oCnn.

Office of Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

Complete plans and specifications will be furnished to bidders upon payment of ten (10) dollars. This amount will be refunded upon the return of the same in good condition.

The Highway Commissioner reserves the right to reject any or all bids or to accept any bid which in his judgment is for the best interest of the State of Connecticut, and other interested parties.

CHARLES J. BENNETT,
State Highway Commissioner.
Dated at Hartford, Conn.,
May 5, 1919.

Bids: May 22.

Sewer System Extensions

OFFICIAL NOTICE NO. 41
PUBLISHED BY AUTHORITY OF THE SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE
Milwaukee, Wis.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2 P.M., the 22nd day of May, 1919, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the hauling and laying of 2370 lin.ft. of 72 in. Pre-Molded Reinforced Concrete Pipe

One Valve Chamber complete, including 72 in. Sluice Gate.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be nine (9) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be fifty (50) dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of five thousand dollars ($5000).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Specifications and blank forms of proposals can be obtained and detailed plans examined, at the office of the Sewerage Commission in the City Hall, and a full set of plans will be sent to any contractor upon receipt of five dollars ($5). This sum to be returned upon surrender of the plans in good condition.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES,
Secretary.
Countersigned:
A. P. PUELICHER, Deputy Comptroller.

Bids: June 2.

Water Filtration Plant and Centrifugal Pumping Equipment

City of Whiting, Indiana.

Sealed Proposals, endorsed "Proposal for Water Filtration Plant, Contract No. 1" and "Proposal for Centrifugal Pumping Equipment, Contract No. 2" will be received for the City of Whiting, by the Board of Public Works thereof, at the City Hall, Whiting, Ind., until 12 o'clock noon on the 2nd day of June, 1919, and will be then publicly opened and read according to law.

The work for which proposals are invited under Contract No. 1, includes the construction of a mechanical water filtration plant of the gravity type with a rated capacity of about four million gallons per 24 hours, including an aerating basin, coagulating basin, filters, filtered water reservoir, head house, piping connections with the city mains, erecting motor driven centrifugal pumps furnished under Contract No. 2 and all appurtenances, in accordance with plans and specifications on file in the City Hall at Whiting, Ind., and in the offices of the engineers, Pearse and Greeley, 39 W. Adams St., Chicago, Ill., Contract No. 2 includes the furnishing of motor driven centrifugal pumping equipment and appurtenances.

The work is located between the P., Ft. W. and C. Ry. and the B. and O. C. T. R.R., south of 119th Street in the City of Whiting, Ind.

Alternate bids are required on two sizes of coagulating basins and two sizes of filtered water basins.

Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check, made payable to the order of the City Controller of Whiting, Ind., in the sum of two (2) per cent. of the amount of bid. This sum is a guarantee that if the proposal is accepted, a contract will be enterede into and its performance properly secured.

All proposalse must be made upon blank forms furnished by the City of Whiting, and in acordance with the "Requirements for Bidding and Instructions to Bidders" attached thereto. Proposals may be entered upon one or both contracts

The Board of Public Works of the City of Whiting reserves the right to reject any or all bids, to omit any one or all of the items 4, 5, 10 and 12, to waive or not waive any informality in the bids received and to accept any bid which it deems most favorable to the City of Whiting, Indiana.

Requirements for Bidding, Instruction to Bidders, For mof Proposal, Contract, Specifications, Form of Bond and Plans, may be obtained from the Board of Public Works of Whiting, or from Pearse and Greeley, 39 W. Adams St., Chicago, upon deposit of Ten ($10.00) Dollars, which sum so deposited will be refunded in good condition within thirty (30) days after the opening of bids.

CITY OF WHITING
By JAMES J. NEJDL,
FRANK B. LEWIS,
A. GONDON,
Board of Public Works.
WALTER E. SCHRAGE, Mayor.

POSITIONS VACANT

ASSISTANT county engineer, competent to make road and land survey, profile, estimate, inspect roads and culvert constructions. Bennett-Coker & Byrne, Poteau, Oklahoma.

ASSISTANT general manager wanted; a Detroit manufacturing industry employing about 1000 men in the automobile line needs the services of a trained executive, who can take general charge of production and act as assistant general manager. The salary will be satisfactory. All applications will be kept strictly confidential. A personal interview can be arranged on receipt of written application with information as to age, experience, etc. Address P-379, Eng. News-Record, Chicago.

DESIGNING engineer for Boston consulting engineer's office. Must be A-1 structural man; prefer technical graduate. Should have experience in design of hydro-electric power houses, textile mills, heavy mill construction, warehouses, terminals, dams and general engineering work. State references (which positively will not be investigated until after interview), salary expected, education, when available and past record. P. O. Box 3278, Boston, Mass.

DRAFTSMAN must be neat and excellent letterer, and understand highway and municipal work. Bennett-Coker & Byrne, Poteau, Oklahoma.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-382, Eng. News-Record.

DRAFTSMAN—Experienced on structural steel and plate work; must be competent to check drawings and list materials; state salary, experience and when available first letter. Address Box 386, Iola, Kansas.

DRAFTSMAN and designer wanted on construction machinery. Permanent position with a future. Write fully giving education, experience and references. Waterloo Cement Machinery Corporation, Waterloo, Iowa.

EXECUTIVE position open to man with good engineering training and executive experience. Salary to start, $5000, with promise of increase when ability is demonstrated. In reply, give age, education and experience. Address P. O. Box 1578, Boston, Mass.

INSTRUMENTMEN wanted for drainage and highway work in the central west; position available for a year. Salary $125 to $150 per month, expenses paid while away from headquarters. Work consists of topographical surveys and levels. Fast and accurate men wanted. P-270, Eng. News-Record, Chicago.

SEARCHLIGHT SECTION

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3 90 an inch. A 1-inch space for 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
935 Real Estate Trust Bldg.,	Philadelphia
657 Leader-News Bldg.,	Cleveland
1570 Old Colony Bldg.,	Chicago
519 Newhouse Bldg.,	Salt Lake City
501 Rialto Bldg.,	San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

An Opportunity to Make Some Extra Money

Construction work is ready for a big boom and the Engineering News-Record wants to publish it all. To do this we must add to our list at least

23 CORRESPONDENTS

The kind of men we want are those who are in close touch with construction work in their community and can devote a little spare time during business hours to calling on engineers, contractors, etc., gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Carson City, Nev.
Cheyenne, Wyo.
Des Moines, Ia.
Erie, Pa.
Halifax, N. S.
Jackson, Miss.
Jersey City, N. J.
Kansas City, Mo.
Keokuk, Ia.
Lowell, Mass.
Miami, Fla.
Milwaukee, Wis.
Mobile, Ala.
Montgomery, Ala.
Newark, N. J.
New Orleans, La.
Oklahoma, Okla.
Sacramento, Cal.
Santa Fe, N. M.
Tulsa, Okla.
Winnipeg, Man.
Worcester, Mass.

Write, telling all about your present work and how much time you have available, to

L. V. FLETCHER

Engineering News-Record, 10th Avenue, at 36th Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

OFFICIAL PROPOSALS

Bids: May 21.

Highway Work

Westwood, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Westwood, Bergen County, New Jersey, for the construction of approximately ten thousand (10,000) square yards of Cement Concrete Pavement on Railroad Avenue.

Drawings and specifications are on file at the office of the Supervisor of Roads, Hackensack, N. J., and can be obtained upon deposit of $25, which amount will be refunded upon return of them in good condition.

Bids will be received until 8:30 P.M., May 21, 1919, at the Fire House, Westwood, New Jersey.

J. ERNEST THIER.
Supervisor of Roads.

Bids: May 26.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., May 26, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 13,623 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Blair County: 32,229 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Butler County: 11,065 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Cameron County; 26,648 ft. of Reinforced Concrete and Hillside Vitrified Brick in Clarion County; 4984 ft. of Reinforced Concrete in Clinton County; 16,552 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Crawford County; 33,917 feet of Bituminous Concrete Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Dauphin County; 53,372 ft. of Reinforced Concrete in McKean County; 17,891 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 10,554 ft. of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 13,464 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Union County; 9550 ft. of Reinforced Concrete in Venango County; 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren County; 27,688 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Wayne County and 2085 ft. of Reinforced Concrete in Westmoreland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: May 28.

Paving

Milan, Mich.

1. Sealed bids for the paving of Wabash Street from the South End of the Bridge over the Saline River to the South Corporation Line, in the Village of Milan, Mich., in accordance with the plans and specifications on file with the Village Clerk will be received by said clerk, until 1:30 o'clock P.M. on Wednesday, May 28, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices in words and figures, on the blanks provided therefor, shall be inclosed in a sealed envelope marked, "Bid for Pavement," and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it and shall be accompanied by a certified check on a solvent bank, payable to the Village Clerk, in the sum of one thousand dollars, as guarantee that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within 10 days from the date of notice of award of contract.

4. Each bid for bituminous pavement shall be accompanied by a sample of bituminous cement, labelled with the name of the bitumen, manufacturer, and bidder.

5. The Council reserves the right to reject any and all bids. By order of the Village Council of Milan, Mich., April 14, 1919.

JESSE BUTTON,
Clerk.

GEORGE CHAMPE, Civil Engineer,
Toledo, Ohio.

PRELIMINARY ESTIMATE

1.	Grading	4100	cu.yds.
2.	10 inch Pipe Sewer	200	lin.ft.
3.	Manholes	4	
4.	Catch Basins	12	
5.	Inlets	8	
6.	Straight Concrete Curb	4724	lin.ft.
7.	Circular Concrete Curb	703	lin.ft.
8.	4 inch Drain Tile	5427	lin.ft.
9.	Concrete Pavement	8448	sq.yds.

Bids: May 21.

Paving

Reinbeck, Iowa.

Sealed proposals will be received at the office of the Town Clerk, Reinbeck, Iowa, until two (2:00) o'clock P.M. on the 21st day of May, 1919, for a street improvement, consisting of the following approximate quantities:

38,300 sq.yd. vitrified block, asphaltic concrete, sheet asphalt, or bitulithic paving.
20,800 lin.ft. combined curb and gutter.

Certified check, $5000.

Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

R. B. FERGUSON, Town Clerk.
J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa.

Bids: June 3.

Vitrified Brick for Paving

Saranac Lake, N. Y.

Bids will be received until June 3, 1919, for furnishing vitrified paving brick for 1800 sq.yd. of pavement. Submit samples.

HARRY HULL, Engineer.
Address: S. A. MILLER, Clerk,
Village of Saranac Lake, N. Y.

OFFICIAL PROPOSALS

Bids: May 20.

Grading, Paving, Etc.

Beverly, N. J.

Notice is hereby given that sealed bids will be received by the Board of Commissioners of the City of Beverly, N. J., for the construction, reconstruction, laying, grading, paving, repaving and improving of cement or concrete sidewalks, curbs and crosswalks on the streets of the City of Beverly, N. J., estimate amount of surface work 315,000 sq.ft. of sidewalks and crosswalks, 70,000 lin.ft. of curbing, and opened and read in public at the City Hall, Beverly, N. J., Tuesday, May 20, 1919, at 8 o'clock P.M.

Specifications and forms of bids, contract and bond for proposed work, prepared by Clement M. Anderson, City Surveyor, and approved by the Board of Commissioners of the City of Beverly have been filed at the office of the City Surveyor, City Hall, Beverly, N. J., and may be inspected by prospective bidders during business hours on and after May 7, 1919. Bids must be made in the manner designated and required in the Specifications and must be enclosed in sealed envelopes, bearing the name and address of the bidder on outside, addressed to W. Fred Brelsford, City Clerk, and must be accompanied by a certificate from a surety company to furnish bond and certified check for $300, and be delivered at the place on the hour above named.

The Standard proposal form is attached to the Specifications, copies of which will be furnished on application to the City Surveyor.

By order of the
BOARD OF COMMISSIONERS OF
THE CITY OF BEVERLY.
Attest: W. FRED BRELSFORD,
Dated: May 1, 1919. City Clerk.

Specifications and Typical Section, $3 per set.

Bids: June 4.

Pavement Construction

Village of Bradford, Ohio.

Sealed proposals will be received by W. Lee Hook, Village Clerk, for the construction approximately of:

10,500 cu.yd. grading.
21,600 sq.yd. pavement (all permanent (types).
13,500 lin.ft. stone or concrete curb.
9,800 lin.ft. sewers (6 in. to 24 in.).

in said Village until 12 o'clock noon on the 4th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Bradford, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $5, no refund.

Certified check, $1000, payable to Village Clerk.

The Council reserves the right to reject any or all bids.

W. LEE HOOK, Village Clerk.
THE L. A. BOULAY CO., Engineers,
1250 Nicholas Building,
Toledo, Ohio.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 8, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 5, 1919, for the construction of the United States post office at Denton, Texas. Drawings and specifications may be obtained from the Custodian of the site at Denton, Texas, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bridge Construction

Mandan, N. D.

Sealed proposals will be receive at the Morton County Court House of Mandan, North Dakota, for the preliminary survey, soundinds, barrings, design and estimate of cost necessary for the submittal to the Secretary of the U. S. Department of Agriculture of a Federal Aid Project statement by the North Dakota State Highway Commission for the construction of a bridge across the Missouri River between Bismarck and Mandan, will be received by the County Boards of Commissioners of the County, Mr. Burleigh and Morton on joint session at the Morton County Court House at Mandan, N. D., not later than 2 P.M. of the 19th of May, 1919. Work to be begun not later than June 1, 1919. The work as above outlined is to be executed to the satisfaction of the North Dakota State Highway Commission.

Each bidder must acompany his proposal with a statement regarding his ability, experience and equipment for carrying out the above work. The right is reserved to reject any or all bids.

LEE NICHOLS, County Auditor.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation	4,366	Sq.Yds.
Repaired Macadam Foundation	33,924	" "
Bituminous Macadam, Penetration Surface	38,290	" "
Repaired Bituminous Concrete	14,177	" "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN,
Recorder.

U. S. ENGINEER OFFICE, New London, Conn.—Sealed proposals for dredging in Greenwich Harbor, Conn., will be received here until 2 o'clock p. m., May 28, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffiin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Griffiin, Georgia.

G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

OFFICIAL PROPOSALS

Bids: May 29.

Street Improvement

Las Vegas, New Mexico.

Separate sealed proposals for the paving and improving of the following streets within the City of Las Vegas, New Mexico, will be received at the office of the City Clerk until 8:00 o'clock P.M., May 29th: National Street from Sixth Street to Twelfth Street; Sixth Street from Main Street to Friedman Avenue; Seventh and Eighth Streets from Douglas Avenue to Friedman Avenue. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check on some solvent bank in the sum of $1000.00 and made payable to the City Treasurer. Approximate quantities as follows: Concrete, Topeka or Bitulithic pavement, 52,777 Sq.Yds.; Concrete curb and gutter, 22,713 lin.ft.; concrete alley return, 528 lin.ft., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work of certificates bearing 6% interest and of certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, East Las Vegas, N. M. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Las Vegas, N. M.
By F. O. BLOOD, Mayor.
ATTEST:
W. G. BENJAMIN, Clerk.

Bids: May 20.

Boiler Breeching

Ogdensburg, N. Y.

Sealed proposals for Boiler Breeching, St. Lawrence State Hospital, Ogdensburg, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuedsay, May 20, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3015, including Addenda No., dated April 22, 1919. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the St. Lawrence State Hospital, Ogdensburg, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 1, 1919.

OFFICIAL PROPOSALS

Bids: May 28.

Syphon Duplication

Jersey City, N. J.

Sealed proposals for furnishing and laying of 72-in. steel water pipe between Boonton Reservoir and Jersey City, as follows: Section No. 1, to duplicate the existing syphons between Boonton Reservoir and Passaic River at Lyndhurst; and Section No. 2, to duplicate the existing syphons between the Passaic Rivert at Lyndhurst and Summit Avenue Reservoir at Jersey City, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N.J.,

WEDNESDAY, MAY 28, 1919,

at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal form, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or may be seen and obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

The Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By Order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Bids: June 4.

Sanitary Sewers

Garner, Iowa.

Sealed proposals will be received by the Town Clerk in his office in the Town Hall until 2:30 P.M., June 4, 1919, for constructing a system of sanitary sewers and a sewerage disposal plant.

Section A—Disposal Plant, Concrete Tank, Sand Filters, Sludge Bed.

Section B—Outlet main sewer.
3750 lin.ft. of 18 in. pipe.
6 Manholes.

Section C—Lateral Sewers.
1320 ft. of 18 in. pipe.
2952 ft. of 15 in. pipe.
3400 ft. of 12 in. pipe.
3332 ft. of 10 in. pipe.
24285 ft. of 8 in. pipe.
80 Manholes.
24 Flushtanks.

Certified check required, $1000. Arrangements may be made with local banks for cash on each Section as completed. Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

H. V. REED,
Town Clerk.

J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa

OFFICIAL PROPOSALS

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

Bids: May 22.

Dredging and Laying Steel Intake Pipe and Concrete Crib in St. Clair River near Sarnia

Ontario, Can.

Contractors are invited to examine the plans, specifications and site for above work and to submit tenders until 11 A.M. on May 22, 1919.

A deposit of $20 will be required on plans sent out.

Full particulars on application to the undersigned:

HERBERT SANDERS,
Chairman Water Works Committee.
Sarnia, Ont.
JAMES D. STEWART,
City Clerk,
Sarnia, Ont.

F. W. I. ITHOROLD CO., LIMITED,
Consulting Engineers,
167 Avenue Road, Toronto.

OFFICIAL PROPOSALS

Bids: May 20.

Construction of Pavement

VILLAGE OF GROSSE POINTE FARMS,

Wayne County, Mich.

Sealed proposals will be received by the Village Engineer of Grosse Pointe Farms, Wayne County, Michigan, up to 8 P.M., Tuesday, May 20, 1919, for the furnishing of all materials and the construction of pavement on Grosse Pointe Boulevard from Fisher Road to Provencal Boulevard, including grading and such catch basins, inlets and storm sewers as shown on plans, and consisting of approximately 17,600 sq.yd. of pavement, 11,000 lin.ft. of concrete curbing, 10,000 cu.yd. of excavation, 23 inlets, 4 catch basins, 1000 ft. of 24 in., 2000 ft. of 18 in., 2000 ft. of 15 in. and 3000 ft. of 12 in. vitrified pipe, and 2000 ft. of 10 in. catch basin connections. Proposals will be received on:

One course plain 9 in. concrete.

Creosote block on 8 in. concrete foundation.

Asphaltic concrete on 8 in. foundation.

This work to be done on Grosse Pointe Boulevard from Fisher Road to Provencal Boulevard.

The detailed plans and specifications under which the work is to be done may be examined at the office of the Village Engineer, Village Hall, Kerby Road, or may be obtained by making a deposit of three dollars, which will be refunded upon return of plans and specifications in good condition.

A cash deposit or certified check for an amount equal to 5% of the amount bid must accompany each proposal. Bids will be received for the whole or any part of the work.

The Village reserves the right to reject any and all bids, to waive defects and to accept any bid in whole or in part.

ROBERT H. ERLEY,
Village Engineer.

Bids: May 20.

Concrete Pavement

Town of Nutley, N. J.

Sealed bids for constructing concrete pavement on Park Ave. from Passaic Ave. to Washington Ave. will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., May 20th, 1919, at which time they will be publicly opened and read by the Board of Commissioners. The principal items of the work are approximately as follows:

7800 sq.yds. of concrete pavement, 8" thick in the center and 6" thick at the sides.
1600 lin.ft. of bluestone curb reset in concrete.
3500 lin.ft. of integral concrete curb.

Pamphlets containing Information for Bidders, Forms of Proposal and Agreement, and Specifications, can be obtained from the Town Engineer or Town Clerk on pawment of $1.00 which will be refunded on the return of the pamphlet in good condition.

A certified check for $3000 must accompany each bid and a bond for the total amount of the contract will be required for the faithful performance of the contract.

EMIL DIEBITSCH,
Mayor and Commissioner of Streets
and Public Improvements.

ELIOT N. SMITH,
Town Engineer.

OFFICIAL PROPOSALS

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER.

Ore Stripping

Americus, Ga.

Work consists of 500,000 to 1,500,000 yards of materials varying in thickness from 30 to 70 feet. Work should preferably be done by a large shovel or drag line so that the ore can be mined by the company as rapidly as it is uncovered by the contractor. Mines located about five miles from Central Railroad of Georgia near Americus, Ga. For further information apply to E. S. Fickes, Chief Engineer, Aluminum Company of America, 2400 Oliver Bldg., Pittsburgh, Pa.

Bids: June 9.

Pipe Sewers

Stratford, Conn.

Pursuant to a resolution adopted the 7th day of May, 1919, the Board of Sewer Commissioners of the Town of Stratford, Conn., will receive at its meeting, to be held on the 9th day of June at 8 P.M. sealed proposals for furnishing materials and doing all other work required to complete the construction of about four (4) miles of pipe sewers from eight (8) to twenty-four (24) inches in diameter with manholes and flushing manholes complete. And also for furnishing all materials and doing all other work required to construct the sewage disposal works, chlorine treatment house and tidal basin and sludge bed, including the necessary piping and grading, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Board of Sewer Commissioners, Town of Stratford, Conn., or at the office of Clyde Potts, 30 Church Street, New York City.

Plans may be taken away upon the payment of ten dollars ($10) for each set, the same to be refunded if the plans are returned within twenty days, in good condition.

Bids on the sewage system umst be accompanied by a certified check on a solvent bank for $5000, and bids on the sewage disposal works must be accompanied by a certified check on a solvent bank for $10,000.

The Board of Sewer Commissioners reserve the right to reject any and all proposals, and to waive any informality in the proposals received, and to accept any proposal which they deem to be most favorable to the interests of the Town.

F. S. BEARDSLEY,
Chairman.

PAUL P. GOODELL,
Secretary.

Bids: May 20.

Notice to Contractors

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

Sealed proposals for the following:

ALLEGANY COUNTY, CONTRACT NO. A-17: FEDERAL AID PROJECT NO. 24 -One section of State Highway from the Corporate Limits of Cumberland to Brady Lane near Cresaptown, for a distance of 4.68 miles. Concrete.

BALTIMORE COUNTY, CONTRACT NO. B-34: FEDERAL AID PROJECT NO. 27—One section of State Highway through Reisterstown from the end of the concrete road to Hitshue's Corner, for a distance of 0.93 miles. 37 ft. concrete road with combination curb and gutter (40 ft. between curbs) United Railways and Electric Company's tracks in center.

BALTIMORE COUNTY, CONTRACT NO. B-W-A — One section of Baltimore-Washington Boulevard from New City Limits of Baltimore to the Baltimore and Ohio overhead crossing near Relay, for a distance of 2.70 miles. Sheet asphalt on existing concrete base.

CECIL COUNTY, CONTRACT NO. Ce-26: FEDERAL AID PROJECT NO. 7, SECTION B—Surfacing the sections of gravel road between North East and Elkton, for a distance of 1.38 miles. Concrete.

DORCHESTER COUNTY, CONTRACT NO. D-19B—One section of State Highway from the end of Contract No. D-19 near Madison to the beginning of Contract No. 466 at Parsons Creek, for a distance of 2.15 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 7th day of May, 1919.

FRANK H. ZOUCK,
Chairman.

CLYDE H. WILSON,
Secretary.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application.

Bids: May 28.

Highway Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., May 28, 1919, for the road work on the National and the Dixie Highways designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans may also be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the District Engineer, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

NEWS HIGHWAY WORK TABLE

Route	County	Sec.	Width Feet	Approx. Length Feet
National Highway	Clark	D-15d	16	17,868.0
National Highway	Clark	A	16-18	29,200,.0
National Highway	Clark	B	16-18	24,242.0
National Highway	Clark	C	16-18	23,736.0
National Highway	Clark	D	18	26,756.0
National Highway	Cumberland	F-15d	16	17,218.0
National Highway	Cumberland	E	16	24,165.0
National Highway	Cumberland	F	16	19,900.0
National Highway	Cumberland	G	16	20,900.0
National Highway	Cumberland	H	16	28,700.0
Dixie Highway	Will	8	18	24,800.0
Dixie Highway	Will	9	18	18,600.0
Dixie Highway	Will	10	18	15,200.0
Dixie Highway	Will	H-15d	18	4,453.0

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer.

By Order of the Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: May 24.

Vitrified Paving Blocks

Kalamazoo, Mich.

The undersigned will receive sealed bids until 5 P.M., Monday, May 24, 1919, for 1,886,000 vitrified paving blocks. Sample of brick to accompany bid. State if repressed or wire cut. City reserves the right to reject any or all bids.

C. L. MILLER,
City Purchasing Agent.

Bids: May 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of the following sections of State highway will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Friday, May 16, 1919, at which time they will be opened and read in public.

1. East Main Road, Portsmouth, 9297 feet —bituminous macadam.
2. Waterman Avenue, East Providence, 8180 feet—cement concrete.
3. Hartford Pike, Johnston and Scituate, 10,560 feet—bituminous concrete.
4. Mendon Road, Lincoln, 3550 feet—cement concrete.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 7, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODARD

Bids: May 21.

Highway Work

Hillsdale, N. J.

Notice is hereby given that sealed bids will be received by the Township Committee of the Township of Hillsdale, Bergen County, New Jersey, for the construction of approximately twenty-five (2500) hundred square yards of Cement Concrete Pavement on Railroad Avenue.

Drawings and specifications are on file at the office of the Supervisor of Roads, Hackensack, N. J., and can be obtained upon deposit of $25, which amount will be refunded upon return of them in good condition.

Bids will be received until nine (9) P.M., May 21, 1919, at the Fire House, Hillsdale, New Jersey.

J. ERNEST THIER,
Supervisor of Roads.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 ,and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: May 27.

Road Embankment

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P. M., May 27, 1919, for the construction of 16 miles of earth road embankment involving approximately the following principal quantities:

Earth excavation............	227,200 cu.yd.
Clearing	21 acres
Clearing and grubbing	36 acres
Corrugated pipe, 18 in. diam..	1,340 lin.ft.
Corrugated pipe, 24 in. diam...	450 lin.ft.
Plain concrete headwalls....	90 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the District will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT
DISTRICT
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 27.

Trunk and Lateral Sewers

Nashville, Tenn.

OFFICE OF THE BOARD OF COMMISSIONERS

Notice is hereby given that sealed proposals will be received at the office of the Secretary until 10 o'clock A.M., Tuesday, May 27, 1919, for constructing the following sewers:

1 A section of Brown's Creek intercepting sewer.
2. A section of Richland Creek intercepting sewer.
3. A group of clay pipe sewers in streets and alleys between Hamilton and Jefferson Streets, and between Warren Street and Seventeenth Avenue, north.

Approximately 975 thousand brick and 6750 lin.ft. of clay pipe will be required. All proposals must be submitted on blank forms, copies of which, together with other specified requirements, will be furnished by the City Engineer upon application. Separate proposals must be submitted for each of the above named sewer jobs, and contract will be awarded for each job separately. A certified check or cash in amount called for on proposal form must accompany each bid. Said check or money will be returned to unsuccessful bidders upon award of contract and to successful bidders when they have made approved bond for the faithful performance of their contract. The right is reserved to reject any and all bids.

By Order of the Board of Commissioners.
WM. GUPTON, Mayor.
Attest:
J. W. DASHIELL, Secretary.

OFFICIAL PROPOSALS

Bids: May 26.

Water Main and Appurtenaces

Coatesville, Pa.

Sealed proposals will be received by the Mayor and members of the Council of the City of Coatesville, Pa., at 8 P.M., Monday, May 26, 1919, for furnishing and laying approximately 1400 ft. of 12 in. cast iron, class B, water main and appurtenances.

The work includes the following approxmiate quantities:

58 Tons 12 in. (Class B) pipe.
4 Tons 6 in. (Class B) pipe.
7 12 in. by 6 in. Tees.
8 6 in. Valves.
2 12 in. Valves.
4 Fire hydrants.
3 6 in. to 4 in. reducers.

Plans, specifications and blank forms for bidders can be obtained at the office of the City Engineer, Third Ave. and Chestnut Street for $5, which will be refunded upon return of the plans and specifications.

All bids must be submitted on blanks furnished by the City and accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workman's Compensation Act of Pennsylvania.

The Council reserves the right to reject any or all bids or to award the work as may appear to be for the best interests of the City.

WILLIAM S. G. COOK,
City Clerk.
CHAS. A. NILES,
City Engineer.

Bids: May 27.

Steel and Concrete Bridge Construction

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P.M., May 27, 1919, for the construction of the following bridges:

4—50 ft. steel plate girder spans; width 18 ft., with alternate bids on steel truss spans of same length and width.
2—50 ft. steel truss spans; width 16 ft.
400 lin.ft. concrete viaduct; width 18 ft.
112 lin. ft. I-beam spans; width 16 ft.
Reinforced concrete culverts; 95 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnisned on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT
DISTRICT,
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

OFFICIAL PROPOSALS

Bids: May 20.

Laundry Machinery, Motors, Etc.

Ward's Island, N. Y.

Sealed proposals for Laundry Machinery and Motors, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, May 20, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3235. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y. Dated May 7, 1919.

E. S. ELWOOD.
Secretary State Hospital Commission.

Bids: May 26.

Sewers

Coatesville, Pa.

Sealed proposals will be received by the City Council of the City of Coatesville up to 8 P.M. on the 26th of May, 1919, for the construction of storm water and sanitary sewers.

The work to be done is approximately as follows:

STORM SEWER

622 ft. 24 in. vitrified sewer pipe.
570 ft. 24 in. vitrified sewer pipe.
25 ft. 15 in. vitrified sewer pipe.
350 ft. 12 in. vitrified sewer pipe.
3 Manholes.
13 Inlets.

SANITARY SEWER

250 ft. 8 in. vitrified sewer pipe.
1 Flush tank.

All bids must be accompanied by a certified check in an amount of ten per cent of the amount bid.

A surety bond in an amount equal to fifty per cent. of the contract price will be required from the successful bidder.

The contractor will be required to comply with all the provisions of the Workman's Compensation Act of the State of Pennsylvania.

The City reserves the right to reject any and all bids or to award the contract as may appear to be for the best interests of the City.

Plans, specifications and proposals are on file in the office of the City Engineer, Coatesville, Pa., and copies of the same may be obtained on a deposit of $5.

WILLIAM S. G. COOK.
City Clerk.
CHAS. A. NILES.
City Engineer.

OFFICIAL PROPOSALS

Bids: May 29.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 29 (changed from May 22 to May 29), for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refnuded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 29, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

Bids: May 27.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION
Baltimore, Md.

BALTIMORE COUNTY, CONTRACT NO. B-31: FEDERAL AID PROJECT, NO. 26—One section of the Hanover Pike from Hitshue's Corner, Reisterstown, to near Woodensburg, for a distance of 2.00 miles. Concrete.

CECIL COUNTY, CONTRACT NO. Ce-28: FEDERAL AID PROJECT NO. 18—One section of State Highway from the end of the concrete road near Harrisville to the Eastern Corporate Limits of Rising Sun, for a distance of 2.08 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-22—One section of State Highway through Aberdeen from the western town limits to Baltimore & Ohio Railroad crossing and from Pennsylvania Railroad crossing to the eastern town limits, for a distance of 3.92 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-23: FEDERAL AID PROJECT NO. 17—One section of State Highway from Jarrettsville to Bethel Church near Cathcart, for a distance of 2.60 miles. Concrete.

GARRETT COUNTY, CONTRACT NO. G-13: FEDERAL AID PROJECT NO. 4—One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 27th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 9th day of May, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: June 9.

Pumping Equipment

Sarasota, Fla.

The City of Sarasota, Fla., will receive bids sealed, and to be filed with the City Clerk, on or before 7:30 o'clock on Monday, June the 9th, 1919, for the furnishing and erecting complete, on foundations to be determined by the class of machinery selected later, as follows, 3 Internal combustion engines, fuel oil as a motive power, 2 of 150-H.P. 1 of 100-H.P. To be D.C. to Generators, Exciters, Air to be furnished in acordance to Under-writers Specifications, two (2) compressors, Complete circulating system, Switchboard, Two-Three Stage rotary pumps, with 25 ft. suction and against a 350 ft. head, D.C. to have a capacity of 500 U. S. Gallons per minute each. Motors 75 H.P., 220 Volts, three phase, sixty cycle, slip ring type, all on one C. I. Base. All to be complete and installed in accordance with guarantees that are called for. Specifications $2.00. All rights recerved.

E. J. MESSER,
Commissioner of Public Works.
PAUL THOMPSON,
City Clerk.
WILBUR A. GINN,
Engineer in charge of works.

Bids: May 27.

Concrete Road

Darien, Conn.

Sealed proposals for approximately one and one-fourth miles of concrete road will be received at the office of the Superintendent of Highways and Bridges, Darien, Conn., until two o'clock P.M., May 27tn, 1919.

A surety company bond or certified check in the amount of $500.00 must accompany each proposal.

The successful bidder will be required to execute a construction bond in the amount of $40,000.00 and start work within ten days after notice of award.

Only contractors experienced in the construction of concrete roads are asked to submit proposals.

Plans, specifications and proposal forms on file at above office.

HORACE B. OLMSTED,
Supt. of Highways and Bridges.

Bids: May 28.

Road Reconstruction

Johnstown, Pa.

Philadelphia.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 10 o'clock, A.M., and publicly opened and read in the Commissioners' office at 20.30 o'clock A.M., on the 28th day of May, A. D. 1918, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with a sixteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. oCntractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

OFFICIAL PROPOSALS

Bids: May 26.

Concrete Road Work

LAKE CO., ILLS.

Waukegan, Ill., May 12, 1919.

Sealed proposals will be received by the undersigned for the improvement of Belvidere Road from Milwaukee Ave. to Volo, in Lake County, by grading, draining and paving with concrete, until 10:30 o'clock A.M., Friday, May 23rd, 1919, and publicly opened. Separate proposals will be received for the cement work until 10:30 o'clock A.M., Monday, May 26th, 1919.

The work is divided into three sections, as follows:

Sec. G—15 D, 53,760 Sq.Yds. 18′ Portland Cement Pavement.
Sec. H—15 D, 27,300 Sq.Yds. 16′ Portland Cement Pavement.

Sec. I—15 D, 38,133 Sq.Yds. 16′ Portland Cement Pavement.

Bidders may submit multiple bids for two or three sections.

INFORMATION: Work will be done under the 1919 Specifications of the State Highway Department, together with Supplementary Specifications and plans prepared by the County Superintendent of Highways.

A certified check for at least five (5) per cent. of amount of the bid, payable to the County Treasurer of Lake Co., Ill., shall accompany each bid.

Plans and specifications may be examined at the following offices:

State Highway Dept., Springfield, Ill.

State District Engineer's Office, Aurora, Ill.

County Superintendent of Highways' office, Waukegan, Ill.

Plans and specifications will be sent by the Co. Supt. or taken from his office upon request and deposit of $20.00, of which $13.00 will be refunded upon their return. When taken from office a charge of $3.00 a day will be made.

Proposal forms, notice to contractors and copies of Superintendent's estimate may be obtained from the County Superintendent's office.

The Road and Bridge Committee reserves the right to reject any or all proposals and to waive technicalities subject to approval of the State Highway Dept.

By order of the Lake Co.

ROAD AND BRIDGE COMMITTEE

CHAS. E. RUSSELL,
County Superintendent of Highways

Are You a Good Business Man?

"Business Law for Engineers" says:

—another bid

". . . an additional bid lower than would otherwise be secured will fully justify the cost of much advertising."

—engineering journal advertisements

". . . the advertisements may be published in prominent engineering journals . . ."

—Engineering News-Record specialty

"The Engineering News and the Engineering Record (now combined in the Engineering News-Record) have long made a specialty of such advertisements, which come from all parts of the United States."

We say:

The paper that stands head and shoulders above all others for the advertising of contracts to be let (official Proposals) is

Engineering News-Record
The most widely circulated weekly technical paper *in the world.*

Your reputation as an engineer and a business man will be helped materially through recommending the advertising of *all* contracts.

When you specify Engineering News-Record as the medium for this advertising you are sure of the greatest publicity—the most satisfactory results—and the maximum prestige for yourself.

0048

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD
A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 33,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

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OFFICIAL PROPOSALS

Bids: June 4.

Construction, Heating, etc.

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Additional Quarters for Acute Patients, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M., on Wednesday, June 4, 1919, w hen they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3219, 3239, 3240, 3241. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: May 7, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: May 27.

Sanitary Sewers, and Pump Stations

Meadville, Penn.

Sealed proposals for the construction of approximately two miles of sanitary sewers will be received at the office of the undersigned until 5 P.M., Tuesday, May 27, 1919. Also for the construction of a sewage pump station, including equipment. Equipment consisting of 2 twelve horsepower motors, 2 air compressors, 1 air tank and 1—200 gallon ejector. Separate proposals to be made on sewers and pump station. Bond or certified check for $2500 must be submitted with each proposal. Plans and specifications will be furnished by the City Engineer of Meadville, a deposit of $10 being required, to be remitted upon return of the plans in good condition within ten days after receipt of same by bidder. The right to reject any and all proposals is hereby reserved.

FRED C. KIEBORT,
City Clerk,
Meadville, Penn.

OFFICIAL PROPOSALS

Bids: May 27.

Sanitary Sewers

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on a number of side streets will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., on May 27th, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are:
10,700 ft. of trench of various depths.
2,000 ft. of 6" sewer.
8,700 ft. of 8" sewer.
35 manholes.

The time of completion is limited to 120 calendar days.

Pamphlets containing Information for Bidders, For mof Proposal, Agreement and Specifications, can be obtained from the Town Engineer on Payment of $2.00, which will be refunded on the return of the pamphlet in good order. Sets of blue prints, if desired, will be furnished to bidders at cost.

A certified check for $2000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

EMIL DIEBITSCH,
Mayor and Commissioner of
Streets and Public Improvements.
ELIOT N. SMITH,
Town Engineer.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

OFFICIAL PROPOSALS

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Chosen Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 24.

Paving

Duquesne, Pa.

Sealed proposals directed to City Clerk of Duquesne, Pa., will be received at his office in the City Hall, until 5 P.M., Saturday, May 24th, 1919, and publicly opened at a meeting of Council to be held on Monday, May 26th, 1919, at 9:30 A.M., for the furnishing of al labor and amterials required to construct the pavement, curbing, grading and drainage of Center Street between South Duquesne Ave. and Crawford St., having approximate quantities as shown on letting plans.

Alternate bids will be received on Legonier or granite block on bank slag foundation, and Legonier or granite block on concrete base. Certified check for 5% of amount of bid must accompany proposal. Specifications, proposal blanks, and detailed information concerning proposed work, will be on file at the City Engineers office in City Hall, on and after aMy 17th, 1919.

The right is reserved to reject any or all bids.

E. C. KASTEN, Controller.

HERE IS WHY

Swart has a distinctly better service to offer in securing your contract bonds. The better part is the engineering experience. Your case is presented clearly to the underwriters.

TRY ME OUT
No Extra Charge
HARMON V. SWART
19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—ENGINEERING NEWS-RECORD is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

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OFFICIAL PROPOSALS

Bids: May 28.

Highway Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., May 28, 1919, for the road work on the National and the Dixie Highways designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans may also be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the District Engineer, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

NEWS HIGHWAY WORK TABLE ....

Route	County	Sec.	Width Feet	Approx. Length Feet
National Highway	Clark	D-15d	16	17,868.0
National Highway	Clark	A	16-18	29,200..0
National Highway	Clark	B	16-18	24,242.0
National Highway	Clark	C	16-18	23,736.0
National Highway	Clark	D	18	26,756.0
National Highway	Cumberland	F-15d	16	17,218.0
National Highway	Cumberland	E	16	24,165.0
National Highway	Cumberland	F	16	19,900.0
National Highway	Cumberland	G	16	20,900.0
National Highway	Cumberland	H	16	28,700.0
Dixie Highway	Will	8	18	24,800.0
Dixie Highway	Will	9	18	18,600.0
Dixie Highway	Will	10	18	15,200.0
Dixie Highway	Will	H-15d	18	4,453.0

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer.

By Order of the Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: June 3.

Vitrified Brick for Paving

Saranac Lake, N. Y.

Bids will be received until June 3, 1919, for furnishing vitrified paving brick for 1800 sq.yd. of pavement. Submit samples.

HARRY HULL, Engineer.

Address: S. A. MILLER, Clerk,
Village of Saranac Lake, N. Y.

OFFICIAL PROPOSALS

Bids: May 27.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

BALTIMORE COUNTY, CONTRACT NO. B-31: FEDERAL AID PROJECT, NO. 26—One section of the Hanover Pike from Hitshue's Corner, Reisterstown, to near Woodensburg, for a distance of 2.00 miles. Concrete.

CECIL COUNTY, CONTRACT NO. Ce-28: FEDERAL AID PROJECT NO. 18—One section of State Highway from the end of the concrete road near Harrisville to the Eastern Corporate Limits of Rising Sun, for a distance of 2.08 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-22—One section of State Highway through Aberdeen from the western town limits to Baltimore & Ohio Railroad crossing and from Pennsylvania Railroad crossing to the eastern town limits, for a distance of 3.92 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-23: FEDERAL AID PROJECT NO. 17—One section of State Highway from Jarrettsville to Bethel Church near Cathcart, for a distance of 2.60 miles. Concrete.

GARRETT COUNTY, CONTRACT NO. G-13: FEDERAL AID PROJECT NO. 4—One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 27th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 9th day of May, 1919.

FRANK H. ZOUCK,
Chairman.

CLYDE H. WILSON,
Secretary.

Bids: May 31.

Pumping Equipment

Wheeling, W. Va.

On May 31st, 1919, between the hours of 10 a.m. and 1 p.m., S. G. Smith, Receiver of the Benwood-McMechen Consolidated Water Company will receive bids on two (2) motor driven centrifugal pumps.

For detailed information and specification apply to Leo Hudson, Engineer, 801 House Building, Pittsburgh, Pa., and local bidders can secure same from Mr. Smith. The right is reserved to reject any or all bids.

S. G. SMITH, Receiver.

OFFICIAL PROPOSALS

Bids: May 28.

Road Reconstruction

Johnstown, Pa.

Philadelphia.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 10 o'clock, A.M., and publicly opened and read in the Commissioners' office at 20.30 o'clock A.M., on the 28th day of May, A. D. 1918, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with a sixteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. oCntractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

Bids: May 27.

Road Construction

Darien, Conn.

Sealed proposals for approximately one and one-fourth miles of reinforced concrete, biturminous concrete or warrenite pavement will be received at the office of the Superintendent of Highways and Bridges, Darien, Conn., until two o'clock P.M., May 27, 1919.

A surety company bond or certified check in the amount of $5000 must accompany each proposal.

The successful bidder will be required to execute a construction bond in the amount of $40,000, and start work within ten days after notice of award.

Only contractors experienced in the construction of the above types of road are asked to submit proposals.

Plans, specifications and proposal forms on file at above office.

HORACE B. OLMSTED,
Supt. of Highways and Bridges.

OFFICIAL PROPOSALS

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

Bids: June 4.

Pavement Construction

Village of Bradford, Ohio.

Sealed proposals will be received by W. Lee Hook, Village Clerk, for the construction approximately of:

10,500 cu.yd. grading.
21,600 sq.yd. pavement (all permanent (types).
13,500 lin.ft. stone or concrete curb.
9,800 lin.ft. sewers (6 in. to 24 in.).

in said Village until 12 o'clock noon on the 4th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Bradford, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $5, no refund.

Certified check, $1000, payable to Village Clerk.

The Council reserves the right to reject any or all bids.

W. LEE HOOK, Village Clerk.

THE L. A. BOULAY CO., Engineers,
1250 Nicholas Building,
Toledo, Ohio.

OFFICIAL PROPOSALS

Bids: May 28.

Syphon Duplication

Jersey City, N. J.

Sealed proposals for furnishing and laying of 72-in. steel water pipe between Boonton Reservoir and Jersey City, as follows: Section No. 1, to duplicate the existing syphons between Boonton Reservoir and Passaic River at Lyndhurst; and Section No. 2, to duplicate the existing syphons between the Passaic Rivert at Lyndhurst and Summit Avenue Reservoir at Jersey City, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N.J.,

WEDNESDAY, MAY 28, 1919,

at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal form, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or may be seen and obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

The Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By Order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Bids: June 9.

Pumping Equipment

Sarasota, Fla.

The City of Sarasota, Fla., will receive bids sealed, and to be filed with the City Clerk, on or before 7:30 o'clock on Monday, June the 9th, 1919, for the furnishing and erecting complete, on foundations to be determined by the class of machinery selected later, as follows, 3 Internal combustion engines, fuel oil as a motive power, 2 of 150-H.P. 1 of 100-H.P. To be D.C. to Generators, Exciters, Air to be furnished in accordance to Under-writers Specifications, two (2) compressors, Complete circulating system, Switchboard, Two-Three Stage rotary pumps, with 25 ft. suction and against a 350 ft. head, D.C. to have a capacity of 500 U. S. Gallons per minute each. Motors 75 H.P., 220 Volts, three phase, sixty cycle, slip ring type, all on one C. I. Base. All to be complete and installed in accordance with guarantees that are called for. Specifications $2.00. All rights reserved.

E. J. MESSER,
Commissioner of Public Works.
PAUL THOMPSON,
City Clerk.

WILBUR A. GINN,
Engineer in charge of works.

OFFICIAL PROPOSALS

Bids: June 4.

Construction, Heating, etc.

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Additional Quarters for Acute Patients, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 8 o'clock P.M., on Wednesday, June 4, 1919, w hen they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3219, 3239, 3240, 3241. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: May 7, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: May 26.

Water Main and Appurtenaces

Coatesville, Pa.

Sealed proposals will be received by the Mayor and members of the Council of the City of Coatesville, Pa., at 8 P.M., Monday, May 26, 1919, for furnishing and laying approximately 1400 ft. of 12 in. cast iron, class B, water main and appurtenances.

The work includes the following approximate quantities:

58 Tons 12 in. (Class B) pipe.
4 Tons 6 in. (Class B) pipe.
7 12 in. by 6 in. Tees.
8 6 in. Valves.
2 12 in. Valves.
4 Fire hydrants.
3 6 in. to 4 in. reducers.

Plans, specifications and blank forms for bidders can be obtained at the office of the City Engineer, Third Ave. and Chestnut Street for $5, which will be refunded upon return of the plans and specifications.

All bids must be submitted on blanks furnished by the City and accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workman's Compensation Act of Pennsylvania.

The Council reserves the right to reject any or all bids or to award the work as may appear to be for the best interests of the City.

WILLIAM S. G. COOK,
City Clerk.

CHAS. A. NILES,
City Engineer.

Bids: May 27

Sanitary Sewers

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on a number of side streets will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., on May 27th, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are:

10,700 ft. of trench of various depths.
2,000 ft. of 6" sewer.
8,700 ft. of 8" sewer.
35 manholes.

The time of completion is limited to 120 calendar days.

Pamphlets containing Information for Bidders, For mof Proposal, Agreement and Specifications, can be obtained from the Town Engineer on Payment of $2.00, which will be refunded on the return of the pamphlet in good order. Sets of blue prints, if desired, will be furnished to bidders at cost.

A certified check for $2000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

EMIL DIEBITSCH,
Mayor and Commissioner of
Streets and Public Improvements.
ELIOT N. SMITH,
Town Engineer.

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

Bids June 2

ROAD WORK

Osceola, Arkansas

203½ Miles Graded Roads, 1,448,660 Cu. Yds. of Excavation, as described in the following advertisements. For further information address Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 12½ miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of Osceola & Little River Road Improvement District No. 1, Mississippi County, Ark., and publicly opened at Osceola Ark., for the construction of the following approximate quantities:

90,000 cubic yards of earth excavation
7 acres clearing and grubbing
300 feet of 18 inch pipe in place
600 " " 24 " " " "
180 " " 35 " " " "
48 cubic yards concrete in place in headwalls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 75 miles of graded earth roads, will be received at Osceola, Ark., until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Luxora & Little River Road Improvement District No. 2, Mississippi County, Arkansas, for the construction of the following approximate quantities:

650,000 cubic yards of earth excavation
197 acres clearing and grubbing
107 acres of grubbing
3,180 lineal feet pipe in place, 18 inch
1,230 " " 24 inch pipe in place
45 " " 36 " " " "
223 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any or all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 26 miles of graded earth roads will be received until 2 o'clock P.M. on Monday, June 2, 1919, by the Board of Commissioners of the Burdette Road Improvement District No. 3, Mississippi County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000 cubic yards of earth excavation
45 acres of clearing and grubbing
5 acres of grubbing
20-18 inch pipe in place
30-24 " " " "
75 cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete or corrugated iron. Bids must be accompanied by a certified check or bidder's bond for at least five per cent. of the bid. The Commissioners reserve the righ to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 25 miles of graded earth roads will be received until 2 o'clock P.M., Monday, June 2, 1919, by the Board of Commissioners of Poinsett County Road Improvement District No. 3, Poinsett County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000 cubic yards of earth excavation
20 acres of clearing and grubbing
25 acres of grubbing
5-35 inch pipe in place
10-30 " " " "
15-24 " " " "
32-18 " " " "
95 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 45 miles of graded earth roads, will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Road Improvement District No. 5, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

140,000 cubic yards of earth excavation
136 acres clearing and grubbing
1,530 lineal feet 18 inch pipe in place
480 " " 24 " " " "
70 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 20 miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Cimmissioners of Etowah Road Improvement District No. 2, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

125,000 cubic yards of earth excavation
75 acres of clearing and grubbing
60 acres of grubbing
35-18 inch pipe in place
20-24 " " " "
2-36 " " " "
100 cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffiin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Griffiin, Georgia.

G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation	4,366 Sq.Yds.
Repaired Macadam Foundation	33,924 " "
Bituminous Macadam, Penetration Surface	38,290 " "
Repaired Bituminous Concrete	14,177 " "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN,
Recorder.

Bids: June 4.

Sanitary Sewers

Garner, Iowa.

Sealed proposals will be received by the Town Clerk in his office in the Town Hall until 2:30 P.M., June 4, 1919, for constructing a system of sanitary sewers and a sewerage disposal plant.

Section A—Disposal Plant, Concrete Tank, Sand Filters, Sludge Bed.
Section B—Outlet main sewer.
3750 lin.ft. of 18 in. pipe.
6 Manholes.
Section C—Lateral Sewers.
1320 ft. of 18 in. pipe.
2952 ft. of 15 in. pipe.
3400 ft. of 12 in. pipe.
3332 ft. of 10 in. pipe.
24285 ft. of 8 in. pipe.
80 Manholes.
24 Flushtanks.

Certified check required, $1000. Arrangements may be made with local banks for cash on each Section as completed. Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

H. V. REED,
Town Clerk.

J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

Bids: May 26.

Sewers

Coatesville, Pa.

Sealed proposals will be received by the City Council of the City of Coatesville up to 8 P.M. on the 26th of May, 1919, for the construction of storm water and sanitary sewers.

The work to be done is approximately as follows:

STORM SEWER
622 ft. 24 in. vitrified sewer pipe.
570 ft. 24 in. vitrified sewer pipe.
25 ft. 15 in. vitrified sewer pipe.
350 ft. 12 in. vitrified sewer pipe.
3 Manholes.
13 Inlets.

SANITARY SEWER
250 ft. 8 in. vitrified sewer pipe.
1 Flush tank.

All bids must be accompanied by a certified check in an amount of ten per cent. of the amount bid.

A surety bond in an amount equal to fifty per cent. of the contract price will be required from the successful bidder.

The contractor will be required to comply with all the provisions of the Workman's Compensation Act of the State of Pennsylvania.

The City reserves the right to reject any and all bids or to award the contract as may appear to be for the best interests of the City.

Plans, specifications and proposals are on file in the office of the City Engineer, Coatesville, Pa., and copies of the same may be obtained on a deposit of $5.

WILLIAM S. G. COOK,
City Clerk.

CHAS. A. NILES,
City Engineer.

Bids: May 29.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 29 (changed from May 22 to May 29), for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refnuded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 29, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

Bids: June 17.

Construction, Heating, etc.

Ossining, N. Y.

CONSTRUCTION WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8); and Pump House and Reservoir;

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

ELECTRIC WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.; at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: May 14, 1919.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR CONSTRUCTION, ETC.—Office of Constructing Quartermaster, Mexican Border Project, Camp Travis, Texas.—Sealed proposals will be received here until 10 A.M., June 2, 1919, and then opened, for constructing approximately nine hundred and ninety seven brick, adobe and frame buildings; water and sewer lines, wiring, etc., at approximately thirty posts and camps along Mexican Border in Texas, New Mexico and Arizona. Complete information, plans, specifications, etc., furnished on receipt of certified check for $50.00.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District Engineer, P. O. Box 1017, Memphis, Tenn.

Bids: June 3.

Paving

Emmetsburg, Iowa.

The City of Emmetsburg, Iowa, will receive bids at 1:30 P.M., June 3rd, 1919, for approximately 73,000 square yards of brick, sheet asphalt, asphaltic concrete, or bitulithic pavement, or 82,000 square yards of concrete pavement, together with necessary curb, gutter and grading, etc., and for approximately 26,000 lineal feet of 10-inch to 30-inch storm water sewers, material to be vitrified tile pipe or concrete.

All to be paid for from funds realized from the sale of special assessment bonds.

Certified checks for $25,000.00 required on the paving contract, and $4000.00 on the sewer contract.

The city is desirous of securing responsible bidders not only from the State of Iowa, but from outside of the State of Iowa.

The city reserves the right to reject any and all bids.

General plan, specifications and bidding sheet may be secured from the engineers, Marr, Green & Co., 17 N. LaSalle St., Chicago, Ill., upon application, without charge. A charge of $2.00 for a set of detailed plans of the sewers, and $1.00 for a set of detailed plans of the paving will be made, which sum will not be returned.

MARR, GREEN & CO., Eggineers,
17 N. LaSalle St., Chicago.
T. F. RUTLEDGE, City Clerk.

Bids: June 4.

Paving

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington county, N. J., for the improvement of Section No. 2 of the Moorestown-Camden pike in the township of Chester, in the county of Burlington, with a sheet asphalt surface upon a concrete foundation, estimated amount of surface pavement required is 5717 square yards, of foundation 5717 square yards, and opened and read in public at the court house on Wednesday, June 4, 1919, at 12 noon.

Drawings and specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at No. 11 Main Street, Mount Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR., Clerk.

Bids: June 6, 1919.

Pavement Construction

Village of Centerburg, Ohio.

Sealed proposals will be received by N. C. Smith, Village Clerk, for the construction approximately of

4600 cu.yds. Grading
8300 sq.yds. Pavement (permanent types)
5500 lin.ft. Stone or concrete curb
1500 lin.ft. Sewers (8" and 10")

in said Village until 12 o'clock noon on the 6th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Centerburg, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $2.00, no refund.

Certified check $500.00 payable to Village Clerk.

The Council reserves the right to reject any or all bids.

N. C. SMITH,
Village Clerk.

THE L. A. BOULAY, Engineers,
1250 Nicholas Building,
Toledo, Ohio.

Bids: June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 12, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: June 10.

Pumping Plant

MUSCATINE LOUISA DRAINAGE DISTRICT NO. 13

Wapello, Ia.

Sealed bids will be received until one o'clock P.M., June 10, 1919, by the Muscatine-Louisa Drainage District No. 13, at the office of the County Auditor of Louisa County, Wapello, Iowa, for a steam driven pumping plant containing one 36 in. and one 24 in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

Bids: June 5.

Bridge Construction

STATE OF CONNECTICUT
HIGHWAY DEPARTMENT

Hartford, Conn.

Contractors experienced in constructing difficult foundation work and large concrete bridges are invited to present proposals for the construction of the approaches, substructure and reinforced concrete superstructure of a bridge to be built across the Housatonic River between the towns of Milford and Stratford.

The main structure will be a reinforced concrete design consisting of five ribbed arches of 100 foot clear span and sixty (60) feet in width; two girder approach spans about fifty-two (52) feet in length; and suitable approach embankments. The entire improvement is to be covered with a permanent pavement totaling approximately 2800 feet in length.

Bids will be received by the State Highway Commissioner in his office at the State Capitol at Hartford, Connecticut, until 2 P.M. of the 5th day of June, 1919, at which time they will be publicly opened and read.

A surety company bond or a certified check for one-third (⅓) of the contractor's estimated cost of the bridge must be presented with the bid; the check or bond to be returned after the award and signing of the contract by the lowest responsible bidder.

Upon the execution of the contract, a surety company bond must be filed for the full amount of the contract.

All bids must be made on and in conformity with the form of proposal which with the contract, specifications and bond may be obtained and plans examined at the following places:

Office of the State Highway Commissioner, Hartford, Conn.

Office of Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

Complete plans and specifications will be furnished to bidders upon payment of ten ($10) dollars. This amount will be refunded upon the return of the same in good condition.

The Highway Commissioner reserves the right to reject any or all bids or to accept any bid which in his judgment is for the best interest of the State of Connecticut, and other interested parties.

CHARLES J. BENNETT,
State Highway Commissioner.

Dated at Hartford, Conn.,
May 5, 1919.

Cast-Iron Pipe

THE CORPORATION OF WATERFORD, IRELAND

Tenders are hereby invited by the Corporation of the City of Waterford, Ireland, from American manufacturers for the supply of 13,000 lin.yd. of 15 in. diameter cast iron water pipes, to stand a vertical pressure of a column of water of 300 ft. The pipes to be delivered at the Quays, Waterford. Waterford is a free port.

Envelopes containing quotations to be endorsed "Water Pipes" and addressed to Thomas F. J. Higgins, Esq., Town Clerk, Town Hall, The Mall, Waterford, Ireland.

Dated this 2nd day of May, 1919.

Bids: June 5.

Reservoir Construction, Pumping Units, Chlorinator

Bellevue, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Bellevue, Ohio, until 12 o'clock noon of the 5th day of June, 1919, and then publicly opened and read for:

(a) The construction of an impounding reservoir requiring about 100,000 cu.yd. of earth excavation and embankments, a low service pumping station 20 ft. x 26 ft. in plan, an 18 in. vitrified tile pipe line between 1500 ft. and 3000 ft. in length and incidental work.

(b) The furnishing and erecting of two gas engine driven centrifugal pumping units each having a capacity of 5000 gallons per minute.

(c) The furnishing and delivering of a chlorinator for disinfecting of the municipal water supply.

Copies of the plans, proposal forms, specifications and forms of bonds can be seen at the office of the Director of Public Service, or can be obtained from that office or from the office of Wm. G. Clark, Consulting Engineer, 1047 Spitzer Bldg., Toledo, Ohio, upon deposit of ten dollars for each set, which will be refunded provided they are returned in good order on or before June 15, 1919.

Each proposal or bid shall be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service, in the sum of 10% of the amount of proposal or bid; or in lieu of such bond the bidder may deposit with the Director of Public Service a certified check on a solvent bank in the City of Bellevue, Ohio, payable to the order of the Director of Public Service equal in amount to such bond.

The Director of Public Service reserves the right to reject any and all bids, waive any informalities in any bid, or to accept any bid which he may deem advantageous to the City of Bellevue.

By direction of

O. C. LITZKEY,
Director of Public Service.

Bids: June 3.

Creek Widening

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10 o'clock, Tuesday morning, June 3, 1919, providing for the change, alteration and relocation of the course and channel of the Neshannock Creek within the City of New Castle and the widening of the said channel for said purpose, the reëstablishment of the line on the west or right bank of said creek, for the purpose aforesaid, between the Rosena Furnace Dam on said creek and a point on the bridge over said creek at South Jefferson Street and opposite the south line of said street and the erection of a cement wall along the right bank of said creek. Work to be done in accordance with plans and specifications approved by Council on file in the office of the City Engineer. Each proposal to be accompanied by a certified check for $1000, made payable to the City Clerk and marked, "Neshannock Creek Widening."

Right reserved to reject any or all bids.

C. ED. BROWN, City Clerk.

OFFICIAL PROPOSALS

Bids: June 3.

Paving

Columbia, S. C.

Sealed bids will be received until 10 A.M., Tuesday, June 3, 1919, by the City of Columbia, S. C., for the paving of Assembly Street from Gervais to Taylor Street, consisting of approximately 17,000 sq.yd. of street paving and 5000 lin.ft. of curb.

Proposals will be considered for paving with sheet asphalt, bitulithic, vitrified brick and cement concrete, but the kind of paving will be selected by City Council after proposals are submitted. Each bid must be accompanied by a certified check, drawn to the order of the City Treasurer of Columbia, S. C., or New York draft, to the amount of $500, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract and furnish a bond with approved sureties in the sum of one-half the amount of the contract within ten days after being called upon to do so. Specifications and all available information will be furnished upon application to the City Engineer. The right to reject any or all bids is reserved by the City of Columbia.

T. KEITH LEGARE,
City Engineer.

M. M. RICE, Councilman,
Superintendent of Engineering
and Streets.

Bids: June 9.

Sewage Treatment Works

Pontiac, Michigan.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., June 9, 1919, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4.078 cu.yd.
Filter stone	15.700 cu.yd.
C. I. piping	35 tons

Plans and Specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbel, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of fifteen dollars ($15) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer. A certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewer only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., June 9, 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

OFFICIAL PROPOSALS

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40	cu.yd. dry excavation.
155	cu.yd. wet excavation.
1240	lin.ft. wood piles under foundation piers.
880	lin.ft. creosoted piles under foundation piers.
3720	lin.ft. 14 x 14 in. reinforced concrete piles.
812	lin.ft. 10 x 10 in. reinforced concrete piles.
904.37	cu.yd. Class "A" concrete.
463.15	cu.yd. Class "B" concrete.
94,520	lb. reinforcing steel.
3363	sq.ft. hog wire.
6	cast-iron rockers.
12	steel rocker plates.
18	3 x 3 in. metal drains.
120	2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

Bids: June 11.

Furnishing and Erecting One Twenty-five and One Fifteen Kilowatt Turbo-Generator Set and Switchboard for Mount Royal Pumping Station, Baltimore, Md.

Sealed proposals in duplicate, endorsed bids for furnishing and erecting one twenty-five and one fifteen kilowatt turbo-generator sets and switchboard for Mt. Royal Pumping Station, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, June 11, 1919.

Specifications can be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after May 23, 1919. A charge of five dollars ($5) will be made for each set of specifications; this amount will be refunded upon the return of these specifications in good condition before June 30, 1919. Specifications used in making a bid will be considered as returned.

OFFICIAL PROPOSALS

A certified check of the bidder on a clearing-house bank, made payable to the Mayor and City Council of Baltimore, for the sum of five hundred dollars ($500), will be required with each bid.

The successful bidder will be required to give bond to comply with the City Charter respecting contracts.

While bids are asked for on three items the contract will be let as a whole.

The Board of Awards reserves the right to reject any or all bids and to waive technical defects if in its judgment it is to the best interest of the City to do so.

Approved: WALTER E. LEE,
J. BARRY MAHOOL, Water Engineer.
Acting Pres. Board of Awards.

Bids: June 10.

Highway Construction

Schoharie Co., N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 10, 1919, for Contract 202, for the construction of about 7⅞ miles of highways, including clearing, grading, draining, building of culverts and guard-rails, around the Schoharie reservoir, in the Towns of Gilboa and Conesville, Schoharie county, Prattsville, Greene county, and Roxbury, Delaware county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Comimssioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 29.

Sanitary Sewer

Frederick, Oklahoma.

Sealed bids addressed to the "Honorable Mayor and Council" of the City of Frederick, Oklahoma, and endorsed "Sewer Bid" will be received at the office of the City Clerk until 4 P.M., May 29, 1919, at which time they will be publicly opened and read.

The work consists of furnishing labor and material for the construction and extension of a sanitary sewer system.

Approximate quantities as follows:

Trench excavation 5 ft. to 17 ft. deep, cu.yd.	26,775
6" vitrified pipe, lin.ft.	965
8" vitrified pipe, lin.ft.	34,795
12" vitrified pipe, lin.ft.	1,780
15" vitrified pipe, lin.ft.	7,770
Specials	1,032
Manholes	86

Alternate bids will be received for Cement Sewer Pipe in place of vitrified pipe.

Each proposal must be accompanied by a certified check on a Frederick bank for 5% of amount bid.

Plans and specifications are on file at the office of the City Clerk, and copies of same may be obtained from the engineer uopn payment of $15 therefor.

The City reserves the right to reject all bids, or accept any that may seem best for the City.

D. W. WOMACK, City Clerk.

OFFICIAL PROPOSALS

Bids: June 3.

Paving and Sewering

Butler, Pa.

Sealed proposals directed to the City Clerk of Butler, Pa., will be received at the City Hall until 3 P.M., Tuesday, June 3, 1919, for the paving and sewering of the following streets:

Oak Street, south property line of Polk to Charles Street, approximately 1152 sq.yd.

Summit Street, Fulton to Polk, approximately 1365 sq.yd.

Jefferson Street, Main to east side of Monroe, approximately 6915 sq.yd.

Wayne Street, Main to Viaduct, approximately 1917 sq.yd.

Center Avenue, bridge to west curb line of Lookout Avenue, approximately 4175 sq.yd.

Jefferson Street, sewer approximately 1840 lin.ft. of main sewer and 1150 lin.ft. of laterals.

Wayne Street, sewer, approximately 550 lin.ft. of main sewer and 324 lin.ft. of laterals.

Specifications, proposal blanks and detailed information can be obtained by applying to the City Engineer.

A deposit of five ($5) dollars is required for each complete set of plans and specifications sent out, which will be refunded upon the return of the plans in good condition.

A certified check in the sum of ten (10%) per cent. of the gross bid must accompany the proposal.

The City reserves the right to reject any and all bids.

H. O. CARSON,
City Engineer.

Bids: June 6.

Pavement

Rockford, Ill.

Sealed proposals will be received until two o'clock P.M. June 6, 1919 ,at the office of the President of the Board of Local Improvements of the City of Rockford, Illinois, for the construction of a brick pavement on portions of Elm Street and South Elm Street. Estimated quantities as follows:

4000 cu.yds. excavation, 11,300 sq.yds. brick pavement, 175 ft. curb, 5960 ft. curb and gutter, 2 catchbasins and 16 curb intakes.

Plans and specifications will be furnished upon application to the Public Engineer of the City of Rockford.

ROBERT REW,
President of the Board of Local
Improvements.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: June 5

Concrete Bridges

BUREAU OF HIGHWAYS, PHILADELPHIA, PA.

Sealed bids will be received by the Director of the Department of Public Works up to noon Thursday, June 5th, 1919, and then publically read, for one concrete arch bridge, 86 foot span and 78 feet wide and one flat slab construction bridge, 24 Is incased in concrete, 32 feet clear span and 82 feet wide.

Plans, specifications and proposal sheets may be seen at Room 232 City Hall; a deposit of Twenty Dollars will be required of those taking out plans to be refunded upon return.

The attention of bidders is called to the special requirements contained in the proposal sheet.

GEORGE E. DATESMAN,
Director, Department of Public Works.

Bids: June 9.

Water Main and Sewer Construction

WASHINGTON SUBURBAN SANITARY DISTRICT
CONTRACT NO. 1
Washington, D. C.

Sealed proposals will be received at the office of the Washington Suburban Sanitary Commission, 611 F Street, N. W., Washington, D. C., until Monday, June 9, 1919, at 3 P.M., and then and there opened, for water main and sewer construction in the Hyattsville, Maryland Water and Sewer District, approximately as follows:

6500 lin.ft. 6 in. and 8 in. cast-iron water mains.
7200 lin.ft. 6 in., 8 in. and 10 in. vitrified pipe sewers.
16 fire hydrants.
22 manholes.

Water service and sewer house connections.

Bids must be accompanied by certified check in sum equal to 5% of the amount of the bid.

On and after May 26, plans and specifications may be seen at the Washington office of the Commission, and may be obtained at the office of the Chief Engineer of the Commission, Hyattsville, Maryland, for the sum of two dollars, which will not be refunded.

WASHINGTON SUBURBAN SANITARY COMMISSION
(By) WILLIAM T. S. CURTIS,
Chairman.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: June 11

Paving

Ithaca, N. Y.—Until June 11 by Board of Public Works, 27,522 sq.yds. paving. Including 22,785 yds. 6 in. cement concrete foundation remainder over old macadam foundation. Also 2600 lineal feet concrete curb. Bids invited for both vitrified brick block and bitulithic. Detailed plans on file with City Clerk and at Engineer's office.

HENRY L. STEWART,
City Engineer.

POSITIONS VACANT

A CAPABLE man wanted as chief of department of hydro-electric and steam power plants, in an organization of municipal and industrial enginers and architects. Fixed salary and liberal share in profits. Main office and field of operations in the South. Address, giving full particulars of training, experience, etc., P-466, Eng. News-Record, Philadelphia.

A CAPABLE man wanted as chief of department of general architecture, in an organization of municipal and industrial engineers and architects. Fixed salary and liberal share in profits. Main office and field of operations in the South. Address, giving full particulars of training, experience, etc., P-467, Eng. News-Record, Philadelphia.

ARCHITECTURAL and structural designers wanted by manufacturing concern in Middle West. Architectural applicants must be experienced and good draftsmen. Structural applicants must have thorough experience with steel, also knowledge of reinforced concrete; only men capable of earning $225.00 per month need apply; positions permanent if you prove satisfactory. P-424, Eng. News-Record, Chicago.

AN industrial firm in western Massachusetts wants competent structural steel draftsmen; men familiar with mill building design preferred. State age, nationality, education, experience, and salary expected. P-525, Eng. News-Record.

A YOUNG man for highway work; one having experience preferred; should be a fair draftsman. At once. P-508, Eng. News-Record, Chicago.

WANTED AT ONCE

Mechanical or Chemical Engineer and Chief Draftsman

wanted by important concern making raw celluloid film and photographic emulsions. Position with big future insured to right men, having a thorough, practical knowledge along these lines and the machinery used. Knowledge of foreign languages preferred, but not necessary. Applications will be held confidential. Address full particulars as to age, experience, salary, to

P496—Engineering News-Record
10th Ave. and 36th St., New York City

SPEED

Contractors—your busy season is here! Your contract bonds are important—and speed in getting them is just as vital.

Swart Engineering Service

is as different—as it is quick. Is as quick—as it is dependable.

Let's Get Together

HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS
Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

PROPOSALS FOR CONSTRUCTION, ETC.—Office of Constructing Quartermaster, Mexican Border Project, Camp Travis, Texas.—Sealed proposals will be received here until 10 A.M., June 2, 1919, and then opened, for constructing approximately nine hundred and ninety seven brick, adobe and frame buildings; water and sewer lines, wiring, etc., at approximately thirty posts and camps along Mexican Border in Texas, New Mexico and Arizona. Complete information, plans, specifications, etc., furnished on receipt of certified check for $50.00.

OFFICIAL PROPOSALS

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY
DEPARTMENT,
Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: June 10.

Cast-Iron Pipe

THE CORPORATION OF WATERFORD,
IRELAND

Tenders are hereby invited by the Corporation of the City of Waterford, Ireland, from American manufacturers for the supply of 13,000 lin.yd: of 15 in. diameter cast iron water pipes, to stand a vertical pressure of a column of water of 300 ft. The pipes to be delivered at the Quays, Waterford. Waterford is a free port.

Envelopes containing quotations to be endorsed "Water Pipes" and addressed to Thomas F. J. Higgins, Esq., Town Clerk, Town Hall, The Mall, Waterford, Ireland.

Dated this 2nd day of May, 1919.

Bids: June 17.

Highway Work

OFFICE OF THE STATE COMMISSION
OF HIGHWAYS, ALBANY, N. Y.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, June 17, 1919, for the improvement of the following highways:

CHENANGO—Three highways: 4.78, 5.57, 5.87.
ERIE—One highway: 5.78.
ESSEX—Two highways: 8.85, 1.09.
FULTON—Three highways: 2.80, 4.90, 1.06.
ONONDAGA—Two highways: 7.45, 3.75.
RENSSELAER—Two highways: 1.44, 4.95.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

BROOME—One highway: 4.70.
CATTARAUGUS—One highway: 2.17.
NASSAU—One highway: 1.57.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

FULTON—One contract, reconstruction.
HERKIMER—One contract, resurfacing.
MONROE—Two contracts, resurfacing.
MONTGOMERY—One contract, reconstruction.
ONEIDA—One contract, timber crib-stone fill.
WESTCHESTER — One contract, reconstruction.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.

R. K. FULLER, Secretary.

Bids: June 16.

Hydro-Electric Power Plant Construction

Marquette, Michigan.

Sealed proposals will be received by the City Commission of the City of Marquette at the office of the City Purchasing Agent, until 12 o'clock noon, June 16, 1919, for furnishing all equipment, tools, labor and material required for constructing the following specified improvements, such proposals to be publicly opened and read:

1. A hydroelectric power house, 40 x 97 of concrete and brick, including tail-race excavation in earth and rock;

2. A reinforced concrete surge tank thirty (30) feet diameter and sixty (60) feet high, including foundation;

3. Concrete foundations with timber saddles for a woodstave pipe line 90 in. inside diameter, 1800 ft. long, and 78 in. inside diameter, 285 ft. long.

Bids are to be submitted in two (2) ways:

First, on the work complete, contractor furnishing all materials.

Second, on labor and equipment, the City to furnish all materials, delivered f.o.b. Marquette, Michigan.

Separate proposals will be received for the power house building, embracing the superstructure above the main floor finished complete.

Proposals will be received for the foundation for the penstocks and separately for foundation of power house carried up to top of main floor ready to receive the brick superstructure and also including excavation for the tail-race.

Plans and specifications by Thomas W. Orbinson, Consulting Engineer, Appleton, Wisconsin, are on file at the office of Charles Retallic, Superintendent of the Department of Light and Power, Marquette, Michigan. Upon request, either or both sets will be mailed to prospective bidders on receipt of $25 for each set, which amount will be refunded on their return in good order.

Proposals for said improvement must be made in separate, sealed envelopes, marked so as to indicate improvement referred to and must be accompanied by a certified check or draft in the sum of $500, payable to the City of Marquette, as a guarantee that if bid is accepted, contract will be entered into and its performance properly secured.

The Commission reserves the right to accept or reject any or all bids.

Separate proposals will be received from pipe manufacturers for furnishing, erecting and connecting up the woodstave pipe.

CITY OF MARQUETTE.
J. F. ANDERSON,
City Purchasing Agent.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member,
Charleston, W. Va.

Bids: June 17.

School Construction

THE BOARD OF EDUCATION OF
NEWARK
IN THE COUNTY OF ESSEX

Sealed proposals will be received at the office of the Board between 4 and 4:15 o'clock P.M., Tuesday, June 17, 1919, and then publicly opened and read for the construction and completion of the

SEYMOUR VOCATIONAL SCHOOL,

to be located on Sussex Avenue between First and Second Streets.

Bids will be received for General Construction and Engineering Equipment; one for the general construction work and for one or more of the sub-divisions of the engineering equipment, namely, for heating, ventilating and power, engines and generators, electric work, plumbing, and vacuum cleaner.

Terms of proposal and surety required are fixed by the specifications. Blank proposals for the general construction work are obtainable at the offices of John H. and Wilson C. Ely, Architects, Room 1210, Firemen's Building, Newark, N. J., where contract and bond forms, drawings and specifications may be examined or procured.

Blank proposals for the engineering equipment work are obtainable at the Board's Engineering Department, fourth floor, City Hall, where contract and bond forms, drawings and specifications may be examined or procuerd.

The Board reserves the right to accept or reject any or all proposals, to waive informalities, and to award contracts for the whole or any part thereof at its discretion.

R. D. ARGUE,
Secretary.

May 23, 1919.

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF
PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON,
Com. of Light, Water and Sewers.

OFFICIAL PROPOSALS

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD
DISTRICT NO. 2

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 4 P.M., June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 52.00 miles of limestone macadam and 2 miles of bituminous macadam road, through the towns of Winslow, Fayetteville, and Goshen, Arkansas. Separate bids will be received on the steel bridges and the culvert tile. The item, hauling and placing tile will be included in the general bids, however. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Secretary.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Secretary, J. W. Reynolds, Fayetteville, Arkansas, and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District, in the sum of 5% of the amount of the bid. A construction bond of 25% of the contract will be required of the successful bidders. The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 2.

C. W. APPLEBY, President.
W. J. REYNOLDS, Secretary.
J. V. WALKER, Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 10.

Road Reconstruction

Wilmington, Del.

Proposals, addressed to the President of the Levy Court, Room 133, County Building, Wilmington, Delaware, will be received until 12 o'clock noon, Tuesday, June 10, 1919, for the reconstruction with a bituminous top surface (penetration or mixed method) of the following roads: Silverside Road, Brandywine Hundred, 2.87 miles. Glasgow-Cooch Road, Pencader Hundred, 2.7 miles. Hillside Mills, Christiana Hundred, 4.0 miles. Hockessin-Yorklyn, Mill Creek Hundred, 2.10 miles. Adam's Dam-State Line, Christiana Hundred, 2.74 miles Greenbank-Price's Corner, Christiana Hundred, 0.51 miles. Specifications may be secured at the office of the County Engineer, Room 133, County Building, on and after May 29, 1919, upon making a deposit of $5, which will be refunded upon their return on or before June 15, 1919.

A certified check or bond for $500 for each road must accompany every bid. The Levy Court reserves the right to reject any or all bids.

CHARLES E. GRUBB,
County Engineer.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000	sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000	lin.ft. of granite or concrete curb.
7,000	lin.ft. of concrete gutter.
9,000	sq.yd. of sidewalk.
18,000	cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.

GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD
DISTRICT NO. 1.

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.

W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 11.

Paving

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 11, 1919, for the construction of pavements on North Fourth Avenue, between Ann and Kingsley Streets; Catherine Street, between Main Street and Fifth Avenue, and Detroit Street, between Ann and Catherine Streets; Broadway, from Michigan Central Railroad bridge to the north line of Swift Street; Detroit Street, from Catherine Street to Michigan Central bridge; South University Avenue, between State and Oxford Road; East University Avenue, between North University Avenue and Hill Street, and on Thayer Street, between North University Avenue ana Huron Street; according to plans and specifications in City Engineer's office.

The approximate quantities are as follows: 38,000 sq.yd. pavement; 38,000 sq.yd. concrete foundation; 20,000 lin.ft. curb; 10,000 cu.yd. excavation, and 500 lin.ft. stone header. Alternate bids will be received on brick, asphaltic concrete and concrete pavements.

A certified check for $1000 must accompany all bids for the construction of pavements, as a guarantee of the good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Bids: June 17.

Drainage Ditches

BURLINGTON, DES MOINES
COUNTY, IOWA.

Burlington, Iowa.

Sealed proposals will be received at the office of the County Auditor at Burlington, Iowa, until one-thirty P.M., on the 17th day of June, A. D. 1919, for the construction of drainage channels and such other work, all of which are particularly described in the plans and specifications for the work, which consists of the excavation of 125,077 cu.yd. of ditch work and the laying of 1240 lin.ft. of 12 in. tile and the construction of one concrete bulk head.

The above work consists of one ditch 7000 ft. long with 12 to 20 ft. bottom and one ditch 8000 ft. long with 10 ft. bottom, all the other ditches 6 ft. bottom.

The work will have to be done with a drag line or caterpillar machine.

Monthly estimates will be given and paid as the work progresses.

The work shall begin on or before July 10, 1919, and completed on or before March 1, 1920. A deposit of 10 percentum of the proposal will be required.

The Board of Supervisors reserve the right to reject any and all bids and readvertise the work.

Proposal blanks and detailed information concerning the proposed work can be had at the County Auditor's office in Burlington, Iowa, or from the office of M. E. Bannon at Fort Madison, Iowa, who is the engineer for the work.

(Signed) J. F. WEBER,
County Auditor.

OFFICIAL PROPOSALS

Bids: June 10.

Highway Construction

Schoharie Co., N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 10, 1919, for Contract 202, for the construction of about 7⅜ miles of highways, including clearing, grading, draining, building of culverts and guard-rails, around the Schoharie reservoir, in the Towns of Gilboa and Conesville, Schoharie county, Prattsville, Greene county, and Roxbury, Delaware county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Comimssioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: June 4.

Storm Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 4, 1919, for the construction of storm water sewers on Detroit Street, from Kingsley Street to Fifth Avenue; on Catherine Street, from Main Street to Fifth Avenue; on South University Avenue, from Linden Street to Oxford Road; on East University Avenue, from South University Avenue to North University Avenue, from Linden Street to the Huron River southwesterly about 300 ft.; according to plans and specifications in the City Engineer's office.

Approximate quantities are as follows: 1200 lin.ft. of 15 in. vitrified sewer pipe; 3500 lin.ft. of 12 in. vitrified sewer pipe; 47 inlets; 18 manholes; 1800 cu.yd. excavation.

A certified check for $500 must accompany all bids for the construction of storm water sewers, as a guarantee of good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By the Order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Curb, Gutter, Etc.

Strong City, Kan.

City Council of Strong City, Kansas, asks for bids on

8566 lineal feet curb and gutter, 782 lineal feet to be repaired and raised, and 21,296.49 square yards bituminous Macadam Street.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

OFFICIAL PROPOSALS

Bids: June 5.

Brick Paving

Fort Edward, N. Y.

Sealed proposals, addressed to the Clerk of the Village of Fort Edward, N. Y., and endorsed "Proposals for building sections of Brick Paving in the Village of Fort Edward, N. Y.," will be received by the Board of Trustees of said Village at their office until June 5th, 1919, at 2 o'clock P.M. and at that time and place will be publicly opened and read.

DESCRIPTION

Paving with brick McCrea St. from the westerly end thereof to West Broadway and Lower Broadway, from the Aqueduct to the point where the tracks of the Hudson Valley Railway leaves the same; together with the necessary grading, curbing and guttering of said streets.

All bids must be made on the regular forms furnished by the Village and all prices must be plainly stated in ink both in words and figures.

Plans and specifications are on file in the office of the Board of Trustees and the office of R. G. Gibson, Engineer, and may be obtained for the price of five dollars ($5), said price to be refunded on the return of the plans and specifications in good condition.

No bid shall be allowed to be withdrawn for any reason whatsoever after it has been presented to the Village Clerk.

Bidders are required to state in their bids their names and places of residence and the names of all persons interested with them in said bids.

A certified check in an amount equal to at least five per cent. (5%) of the bid, payable to the Treasurer of the Village of Fort Edward, N. Y., must accompany each bid. All these checks except that of the bidder whose bid is accepted will be returned to the persons making them within three (3) days after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within ten (10) days after the notice that the contract has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the Village of Fort Edward as liquidated damages for such neglect or refusal. But if he or they shall execute the contract in the time aforesaid, said deposit shall be returned to him or them.

A bond, with some reliable Surety Company, equal in amount to fifty per cent (50%) of the price bid will be required of the successful bidder for the faithful performance of the contract.

The contract will be awarded to the bidder whose prices, reputation, experience and standing in the contracting business are regarded as most advantageous for and to the best interest of the Village, and whose plant and equipment and financial ability are regarded as adequate to promptly and efficiently perform the work. The Board of Trustees reserves the right to reject any or all bids and to award the whole or any part of the work.

WILLARD ROBINSON,
President.

FRED J. BETTS,
Clerk.

OFFICIAL PROPOSALS

Bids: June 14.

Sewers, Sewage Sedimentation Tank and Screen Chamber

Port Jefferson, New York.

Sealed proposals for furnishing all labor and materials required for constructing Sewers, Sewage Sedimentation Tank and Screen Chamber, for the Port Jefferson Sewer District, Town of Brookhaven, Suffolk County, New York, addressed to the Sewer Commissioners of the Sewer District, Port Jefferson, New York, and endorsed "Proposal for Constructing Sewers, Sedimentation Tank and Screen Chamber," will be received by the Sewer Commissioners at the office of Thos. O'Donnell, Room 8, Post Office Bldg., Port Jefferson, New York, until two o'clock P.M., on June 14th, 1919.

Proposals must be made on the blank form of proposal prepared by the Sewer Commissioners. Plans and specifications may be obtained from A. J. Provost, Jr., Consulting Engineer, 39 West 38th Street, New York City, or from Thos. O'Donnel, Port Jefferson, N. Y., upon depositing $10, which will be refunded if said plans and specifications are returned in good condition within thirty days after bids have been received and acted upon by the said Sewer Commissioners.

Proposals must be accompanied by cash or a certified check on a solvent Bank or Trust Company, drawn to the order of Thomas O'Donnell, Chairman, for One Thousand Dollars ($1000.00) and a bond in the sum of Three Thousand Dollars ($3000.00) for the proper execution of the contract.

The bidder to whom the contract is awarded will be required to execute the same and to furnish a surety bond in the sum of Fifteen Thousand Dollars ($15,000).

The Sewer Commissioners reserve the right to reject any and all bids.

C. W. DARE, Secretary.

Bids: June 18.

Water Filtration Plant

Beggs, Oklahoma.

Bids will be received by the Board of Trustees of the Town of Beggs, Oklahoma, for one mechanical filter plant, capacity 500,000 gallons per 24 hours, to be erected at the waterworks plant of the town of Beggs; also for one 7 x 8 truplex pump and 25 H.P. electric motor.

Bids to be in the hands of the Town Clerk of the Town of Beggs on or before 11.30 A.M., June 18th, 1919.

Plans and specifications are on file with the Town Clerk and may be seen upon application to him.

All bids must be accompanied by a certified check for $500.00 made payable to the Town Treasurer of the Town of Beggs without condition as a guarantee that bidders will sign contract and make bond for the consetruction of the work provided their proposition is accepted. The right is reserved to reject any or all bids.

W. K. ENOCH,
Town Clerk.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., 2 o'clock P.M., June 12, 1919, for furnishing and placing rip rap stone at Craney Island Light Station, Va. Information upon application to the above Supt.

OFFICIAL PROPOSALS

Bids: June 12.

Brick Pavement

Olean, N. Y.

Notice is hereby given that sealed proposals will be received by the Commissioners of Public Works of the City of Olean, N. Y., at the office of the Superintendent of Streets in the City Building until 8 o'clock P.M., on the 12th day of June, 1919, for the construction of Brick Pavement upon concrete foundation with necessary sanitary and storm sewers and appurtenances in the following streets:

GROUP ONE

Fulton Street, from East State Street to P. R. R. switch.

South Clinton Street, from East State Street to East Green Street.

East Henley Street, from South Barry Street to Fulton Street.

East Green Street, from South Barry Street to South Clinton treet.

Approximate amount of pavement, 7700 square yards.

GROUP TWO

North Eighth Street, from Buffalo Street to Lincoln Street.

North Ninth Street, from Buffalo Street to Wayne Street.

North Sixth Street, from Washington Street to Sullivan Street.

Buffalo Street, from Washington Street. to Reed Street.

Winters Avenue, from Washington Street to Sullivan Street.

Approximate amount of pavement 15,790 square yards.

GROUP THREE

Eleventh Street, from Irving Street to Reed Street.

North Twelfth Street, from West State Street to viaduct.

South Twelfth Street, from West Henley Street to West State Street.

Approximate amount of pavement 15,970 square yards.

Fifth Street, from Irving Street to Putnam Street.

Approximate amount of pavement 3640 square yards.

Plans and specifications may be seen and bid sheets procured at the office of the Superintendent of Streets, City Building, Olean, N. Y.

The right is reserved to reject any or all bids.

S. M. GAYLOR,
Permanent Commissioner of Public Works.
E. E. ALLEN,
Superintendent of Streets.

Dated: May 22, 1919.

Bids: June 9.

Concrete Bridge Construction

Montgomery, Ala.

Sealed bids will be received by the Board of Revenue of Montgomery County, Alabama, until noon, Monday, June 9, 1919, and at that time publicly opened for the construction of a reinforced concrete bridge, one thousand two hundred and eighty-eight feet long, with an eighteen foot roadway, over Catoma Creek on the Norman Bridge Road, five miles south of Montgomery.

A certified check for four hundred dollars will be required to accompany each bid. Plans and specifications are on file in the office of the State Highway Engineer and the County Engineer, Montgomery, Alabama. The right is reserved to reject any or all bids.

W. S. KELLER,
State Highway Engineer,
Montgomery, Alabama.

OFFICIAL PROPOSALS

Bids: July 9.

Classification and Appraisal of Loads

Toole County, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana

H. E. MOODY, Clerk.

Bids: June 3.

Paving

Auburn, N. Y.

Notice is hereby given that it is proposed to pave Grover Street with asphalt, stone filled asphalt, vitrified brick or bitulithic and John Street with asphalt, stone filled apshalt, vitrified brick, bitulithic or concrete.

Plans and specifications for said pavings are on file in the office of the City Engineer where they may be seen and examined, and copies of the plans and specifications and blank proposals for doing the work may be obtained of said City Engineer upon the payment of the sum of $10, said sum to be refunded upon the return of the plans and specifications to the City Engineer.

Sealed proposals to contract for said pavings will be received by the Mayor up to 8o'clock P.M., June 3, 1919, and at the meeting of the Common Council to be held on the evening of that day, said proposals will be opened and considered.

Each sealed proposal shall be accompanied by a certified check in the sum of $500 for Grover Street and $200 for John Street, payable to the order of the City of Auburn, to become and be the property of the city if such proposal be acepted, and the person, persons or corporation making it does not within fifteen days after notice of its acceptance enter into and execute a contract to do such paving in conformity with the specifications and proposals accepted and execute and deliver concurrently therewith a bond in the penal sum of one and one-quarter times the amount for which the person, persons or corporation proposes to do the work with two or more sureties, each surety justifying in the penal sum of said bond to be approved by the Mayor conditioned for the faithful performance of such contract in all its particulars by the contractor.

Instead of such certified check each sealed proposal may be accompanied by a bond in the penal sum equal to ten per cent. of the gross amount of the contract, signed by the person, persons or corporation so proposing and by two or more sureties, each surety justifying in the penal sum of said bond, or a surety company bond in the penal sum of ten per cent. of the gross amount of the contract to be approved by the Mayor, conditioned upon the same requirements as heretofore stated.

By Order of the Common Council.

C. A. DAYTON, City Clerk.

Dated: Auburn, N. Y., May 23, 1919.

OFFICIAL PROPOSALS

Bids: June 12.

Pipe Sewers—Pumping Machinery and Pumping Stations Sewerage System

WESTERLY, RHODE ISLAND

Westerly, R. I.

The Board of Water Commissioners of the Town of Westerly, Rhode Island, will receive sealed proposals for furnishing materials and doing all other work required to complete the construction of about eight (8) miles of pipe sewers from six (6) to twenty-four (24) inches in diameter, with manholes complete; also one (1) main pumping station and one (1) sub-pumping station.

CONTRACT NO. 1

Proposals for Sewer Pipe and Specials will be received until 12 o'clock noon, Tuesday, June 10, 1919.

CONTRACT NO. 2

Proposals for Manhole Frames and Covers will be received until 12 o'clock noon, Tuesday, June 10, 1919.

CONTRACT NO. 3

Proposals for Pumping Machinery will be received until 12 o'clock noon, Thursday, June 19, 1919.

CONTRACT NO. 4

Proposals for Laying the Pipe System will be received until 12 o'clock noon, Thursday, June 12, 1919.

CONTRACT NO. 5

Proposals for Pumping Stations will be received until 12 o'clock noon, Thursday, June 12, 1919.

Plans may be seen and Specifications and Forms of Proposal obtained at the office of the Board of Water Commissioners, Town Hall, Westerly, Rhode Island, or at the office of the Consulting Engineer, Samuel M. Gray, Grosvenor Building, Providence, Rhode Island.

Proposals must be submitted on the form furnished by the Board and a certified check in amount called for on proposal form must accompany each bid.

The Board of Water Commissioners reserve the right to accept or reject any and all proposals and to accept any proposal which they deem to be most favorable to the interests of the town.

LOUIS W. ARNOLD,
Chairman, Board of Water Commissioners.
THOMAS McKENZIE, Engineer.

Bids: June 3.

Sanitary Sewer System and Sewage Disposal Plant

Aurelia, Iowa.

Separate sealed proposals will be received by the Town Clerk of the Town of Aurelia, Iowa, at his office in said Town, until three o'clock P.M., on the 3rd day of June, A. D. 1919, for the construction of a Sanitary Sewer System and Sewage Disposal plant in said town.

Dated this 16th day of May, A. D. 1919, at Aurelia, Iowa.

L. E. CHRISTENSEN,
Town Clerk.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

OFFICIAL PROPOSALS

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

Bids: June 3.

Paving and Sewering

Butler, Pa.

Sealed proposals directed to the City Clerk of Butler, Pa., will be received at the City Hall until 3 P.M., Tuesday, June 3, 1919, for the paving and sewering of the following streets:

Oak Street, south property line of Polk to Charles Street, approximately 1152 sq.yd.

Summit Street, Fulton to Polk, approximately 1365 sq.yd.

Jefferson Street, Main to east side of Monroe, approximately 6915 sq.yd.

Wayne Street, Main to Viaduct, approximately 1917 sq.yd.

Center Avenue, bridge to west curb line of Lookout Avenue, approximately 4175 sq.yd.

Jefferson Street, sewer approximately 1840 lin.ft. of main sewer and 1150 lin.ft. of laterals.

Wayne Street, sewer, approximately 550 lin.ft. of main sewer and 324 lin.ft. of laterals.

Specifications, proposal blanks and detailed information can be obtained by applying to the City Engineer.

A deposit of five ($5) dollars is required for each complete set of plans and specifications sent out, which will be refunded upon the return of the plans in good condition.

A certified check in the sum of ten (10%) per cent. of the gross bid must accompany the proposal.

The City reserves the right to reject any and all bids.

H. O. CARSON,
City Engineer.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District Engineer, P. O. Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Construction, Heating, etc.

Ossining, N. Y.

CONSTRUCTION WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8) and Pump House and Reservoir;

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

ELECTRIC WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.: at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: May 14, 1919.

OFFICE OF THE QUARTERMASTER, Fort Hancock, N. J.—Sealed proposals in triplicate will be received at this office until 2 P.M., June 7, 1919, and then opened, for surfacing and constructing approximately three and one-half (3½) miles of bitulite macadam or concrete road at this Fort. Plans and specifications furnished at this office, indorse envelopes "Proposals for Roads." MAJOR W. L. CONRAD, Quartermaster.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass and Head of Passes, Mississippi River. Further information on application.

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40	cu.yd. dry excavation.
155	cu.yd. wet excavation.
1240	lin.ft. wood piles under foundation piers.
880	lin.ft. creosoted piles under foundation piers.
3720	lin.ft. 14 x 14 in. reinforced concrete piles.
812	lin.ft. 10 x 10 in. reinforced concrete piles.
904.37	cu.yd. Class "A" concrete.
463.15	cu.yd. Class "B" concrete.
94,520	lb. reinforcing steel.
3363	sq.ft. hog wire.
6	cast-iron rockers.
12	steel rocker plates.
18	3 x 3 in. metal drains.
120	2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

Bids: June 5.

Water and Tarvia Bound Macadam Roadway's with Stone Curbs and Brick Gutters

Swarthmore, Pa.

Sealed proposals will be received by the undersigned until 7:30 P.M., Thursday, June 5, 1919, at Council Chamber, Borough Hall, Swarthmore, Pa.

32700	sq.yd. tarvia bound macadam.
2800	lin.ft. curbs and brick gutters.
2100	sq.yd. water bound macadam.
1800	lin.ft. stone curbs and brick gutters.

The Borough Council reserves the right to reject any or all bids. For further information inquire of F. M. VARRELL, Borough Secretary, Borough Hall, Swarthmore, Pa.

Bids June 2

ROAD WORK

Osceola, Arkansas

203½ Miles Graded Roads, 1,448,660 Cu. Yds. of Excavation, as described in the following advertisements. For further information address Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 12½ miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of Osceola & Little River Road Improvement District No. 1, Mississippi County, Ark., and publicly opened at Osceola Ark., for the construction of the following approximate quantities:

90,000	cubic yards of earth excavation
7	acres clearing and grubbing
300	feet of 18 inch pipe in place
600	" " 24 " " " "
180	" " 35 " " " "
48	cubic yards concrete in place in headwalls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 75 miles of graded earth roads, will be received at Osceola, Ark., until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Luxora & Little River Road Improvement District No. 2, Mississippi County, Arkansas, for the construction of the following approximate quantities:

650,000	cubic yards of earth excavation
197	acres clearing and grubbing
107	acres of grubbing
3,180	lineal feet pipe in place, 18 inch
1,230	" " 24 inch pipe in place
45	" " 36 " ' " "
223	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any or all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 26 miles of graded earth roads will be received until 2 o'clock P.M. on Monday, June 2, 1919, by the Board of Commissioners of the Burdette Road Improvement District No. 3, Mississippi County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000	cubic yards of earth excavation
45	acres of clearing and grubbing
5	acres of grubbing
20-18	inch pipe in place
30-24	" " " "
5	cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete or corrugated iron. Bids must be accompanied by a certified check or bidder's bond for at least five per cent. of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 25 miles of graded earth roads will be received until 2 o'clock P.M., Monday, June 2, 1919, by the Board of Commissioners of Poinsett County Road Improvement District No. 3, Poinsett County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000	cubic yards of earth excavation
20	acres of clearing and grubbing
25	acres of grubbing
5-35	inch pipe in place
10-30	" " " "
15-24	" " " "
32-18	" " " "
95	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid.* Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 45 miles of graded earth roads, will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Road Improvement District No. 5, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

140,000	cubic yards of earth excavation
136	acres clearing and grubbing
1,530	lineal feet 18 inch pipe in place
480	" " 24 " " " "
70	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 20 miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Cimmissioners of Etowah Road Improvement District No. 2, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

125,000	cubic yards of earth excavation
75	acres of clearing and grubbing
60	acres of grubbing
35-18	inch pipe in place
20-24	" " " "
2-36	" " " "
100	cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Grifflin, Georgia.

G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

OFFICIAL PROPOSALS

Bids: June 9.

Sewage Treatment Works

Pontiac, Michigan.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., June 9, 1919, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4.078 cu.yd.
Filter stone	15,700 cu.yd.
C. I. piping	35 tons

Plans and Specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbel, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of fifteen dollars ($15) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer. A certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewer only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., June 9, 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

Bids: June 9.

Water Main and Sewer Construction

WASHINGTON SUBURBAN SANITARY DISTRICT
CONTRACT NO. 1

Washington, D. C.

Sealed proposals will be received at the office of the Washington Suburban Sanitary Commission, 611 F Street, N. W., Washington, D. C., until Monday, June 9, 1919, at 3 P.M., and then and there opened, for water main and sewer construction in the Hyattsville, Maryiand Water and Sewer District, approximately as follows:

6500 lin.ft. 6 in. and 8 in. cast-iron water mains.
7200 lin.ft. 6 in., 8 in. and 10 in. vitrified pipe sewers.
16 fire hydrants.
22 manholes.

Water service and sewer house connections.

Bids must be accompanied by certified check in sum equal to 5% of the amount of the bid.

On and after May 26, plans and specifications may be seen at the Washington office of the Commission, and may be obtained at the office of the Chief Engineer of the Commission, Hyattsville, Maryland, for the sum of two dollars, which will not be refunded.

WASHINGTON SUBURBAN SANITARY COMMISSION
(By) WILLIAM T. S. CURTIS,
Chairman.

OFFICIAL PROPOSALS

Bids: June 5

Concrete Bridges

BUREAU OF HIGHWAYS, PHILADELPHIA, PA.

Sealed bids will be received by the Director of the Department of Public Works up to noon Thursday, June 5th, 1919, and then publically read, for one concrete arch bridge, 86 foot span and 78 feet wide and one flat slab construction bridge, 24 Is incased in concrete, 32 feet clear span and 82 feet wide.

Plans, specifications and proposal sheets may be seen at Room 232 City Hall; a deposit of Twenty Dollars will be required of those taking out plans to be refunded upon return.

The attention of bidders is called to the special requirements contained in the proposal sheet.

GEORGE E. DATESMAN,
Director, Department of Public Works.

Bids. June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission
Dated: May 12, 1919.

Bids: June 10

Pumping Plant

MUSCATINE LOUISA DRAINAGE DISTRICT NO. 13

Wapello, Ia.

Sealed bids will be received until one o'clock P.M., June 10, 1919, by the Muscatine-Louisa Drainage District No. 13, at the office of the County Auditor of Louisa County, Wapello, Iowa, for a steam driven pumping plant containing one 36 in and one 24 in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in **ENGINEERING NEWS-RECORD?**

In the answers to the foregoing questions you will find unquestionable proof that

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Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

OFFICIAL PROPOSALS

Bids: June 10.

Road Roller

OFFICE OF THE COMMISSIONER OF
PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals for

1. An approximately 10-ton road roller. Complete specifications to be furnished by the bidder.

2. Road roller bid upon in accordance with detailed information on file in the office of the Commissioner of Public Works.

Delivery shall be made not later than July 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in the sum of $1000, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

GEORGE HOLCOMB,
Commissioner of Public Works.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 21, 1919.—Sealed proposals will be opened in this office at 3 p.m., June 18, 1919, for furnishing the labor required in the construction complete, with materials that will be furnished by the Government, of the United States Post Office Building at Clinton, S. C. Drawings and specifications may be obtained from the custodian of the site at Clinton, S. C., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

SUB-GRADING CONTRACTS DESIRED

Our equipment consists of the following: 3—No. 3 Keystone Excavators; 1—No. 6 Keystone Excavator, Koppel Cars, Track, Plymouth Locomotive, and team outfit.

DANIEL J. LYNCH CO., Inc.
201-2 Colonial Trust Bldg., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: June 3.

Bituminous Material

Manchester, N. H.

Sealed proposals for furnishing and delivering Bituminous Material to the Department of Public Works of Manchester, N. H., will be received at the office of the Department until 2.00 o'clock P.M., June 3, 1919, at which time all proposals will be opened and read and no proposal will be received after that time.

Proposals must be enclosed in an envelope, sealed, addressed to the Department of Public Works, Manchester, N. H., and marked "Proposal, Bituminous Material."

Information as to specifications and requirements may be had upon application at this office.

Each bidder must enclose a certified check or deposit for One Hundred ($100.00) Dollars with is proposal, said check or deposit to be returned unless the party to whom the contract is awarded refuses to sign said contract upon notification of award, in such case the check or deposit shall be forfeited to the City of Manchester.

The Department of Public Works hereby reserve the right to reject any, any part of any or all proposals should they deem it to be for the best interest of the City of Manchester.

DEPARTMENT OF PUBLIC WORKS
SAMUEL J. LORD,
Director.
Manchester, N. H., May 26th, 1919.

In Replying to "Blind" Ads

be careful to put on envelope the key number in the ad. and also local address of office to which reply is sent.

10th Ave. at 36th St., New York.
935 Real Estate Trust Bldg., Phila.
657 Leader-News Bldg., Cleveland.
1570 Old Colony Bldg., Chicago.
501 Rialto Bldg., San Francisco.

Important

Original letters of recommendation or other papers of value should not be enclosed to unknown correspondents—send copies.

POSITIONS VACANT

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

A REINFORCED concrete draftsman wanted with company selling reinforcing bars, Minneapolis. P-576, Eng. News-Record, Chicago.

POSITIONS VACANT

AN industrial firm in western Massachusetts wants competent structural steel draftsmen; men familiar with mill building design preferred. State age, nationality, education, experience, and salary expected. P-525, Eng. News-Record.

A YOUNG man for highway work; one having experience preferred; should be a fair draftsman. At once. P-505, Eng. News-Record, Chicago.

CENTRAL West university would consider applicants for vacancy in faculty of civil engineering department. Position open this fall. Salary about $1800 per annum. Prospects for advancement. Applicants must hold degree from a reputable college and have general practical experience in engineering work. P-571, Eng. News-Record, Chicago.

CIVIL engineers wanted for highway work, to make surveys, prepare plans and supervise construction. Salary $100 to $140 per month and expenses when in field. State age, education, experience, physical condition, salary expected and when able to report. Must be U. S. citizen. G. F. Burch, Assistant Highway Engineer, Division of Highways, Springfield, Illinois.

DRAFTSMAN wanted, technical graduate, experienced detail and design railroad bridge superstructures and masonry. State in full education, experience, when will report. Salary, $195. Address P-594, Eng. News-Record, Leader-News Bldg., Cleveland.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-568, Eng. News-Record.

DRAFTSMEN—Structural and reinforcing steel detailers wanted. To be considered applications must state age, nationality, education, past experience and salary desired; also how soon you can report. Vanderstucken Engineering Co., Reading, Pa.

DRAFTSMEN wanted—Designing draftsmen on fortification construction; positions permanent; knowledge of reinforced concrete and steel framing necessary; knowledge of electrical installation desirable. Salary, $100 per month and upward, in accordance with qualifications. State experience, qualifications, age and salary desired. Address District Engineer, Room 305 Southern Bldg., Washington, D. C.

ENGINEERS wanted; one transitman and one draftsman, with some experience in highway work. Permanent employment if services satisfactory. P-216, Eng. News-Record, Chicago.

ESTIMATOR wanted for structural steel and ornamental iron work. Give experience, salary expected and how soon could report. Apply Richmond Structural Steel Company, Richmond, Va.

EXPERIENCED estimator wanted on tank and general steel plate work. Give full details in first letter as to age, education, experience, references, salary expected, and earliest date available. P-608, Eng. News-Record, Philadelphia.

EXPERIENCED designer and estimator wanted of all classes of railway freight cars. Give full details in first letter as to age, education, references, salary expected, and earliest date available. P-603, Eng. News-Record, Philadelphia.

S. S. JOHNSON & BRO.

312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

CONTRACTORS

I am at your service

Let me handle your Contract Bonds and Insurance. My service will enable you to secure larger bonds—secure them promptly—no delay.

Swart Service Really Serves

There is no extra charge

HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: June 12.

Brick Pavement

Olean, N. Y.

Notice is hereby given that sealed proposals will be received by the Commissioners of Public Works of the City of Olean, N. Y., at the office of the Superintendent of Streets in the City Building until 8 o'clock P.M., on the 12th day of June, 1919, for the construction of Brick Pavement upon concrete foundation with necessary sanitary and storm sewers and appurtenances in the following streets:

GROUP ONE

Fulton Street, from East State Street to P. R. R. switch.

South Clinton Street, from East State Street to East Green Street.

East Henley Street, from South Barry Street to Fulton Street.

East Green Street, from South Barry Street to South Clinton treet.

Approximate amount of pavement, 7700 square yards.

GROUP TWO

North Eighth Street, from Buffalo Street to Lincoln Street.

North Ninth Street, from Buffalo Street to Wayne Street.

North Sixth Street, from Washington Street to Sullivan Street.

Buffalo Street, from Washington Street to Reed Street.

Winters Avenue, from Washington Street to Sullivan Street.

Approximate amount of pavement 15,790 square yards.

GROUP THREE

Eleventh Street, from Irving Street to Reed Street.

North Twelfth Street, from West State Street to viaduct.

South Twelfth Street, from West Henley Street to West State Street.

Approximate amount of pavement 15,970 square yards.

Fifth Street, from Irving Street to Putnam Street.

Approximate amount of pavement 3640 square yards.

Plans and specifications may be seen and bid sheets procured at the office of the Superintendent of Streets, City Building, Olean, N. Y.

The right is reserved to reject any or all bids.

S. M. GAYLOR,
Permanent Commissioner of Public Works.
E. E. ALLEN,
Superintendent of Streets.

Dated: May 22, 1919.

Bids: June 16.

Sewer and Funding Bonds

Maryville, Tenn.

City of Maryville, Tennessee, offers for sale to the highest bidder the following bonds:

$50,000 30-year Sewer Bonds.
$50,000 30-year Funding Bonds.

Said bonds to bear interest at the rate of 5½%, payable semi-annually.

Bids will be opened at 2 o'clock P.M., June 16, 1919.

Certified check for $3000 a guarantee of the good faith of the bidder must accompany each bid.

Address all bids to D. F. Young, Mayor, Maryville, Tennessee.

OFFICIAL PROPOSALS

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40	cu.yd. dry excavation.
155	cu.yd. wet excavation.
1240	lin.ft. wood piles under foundation piers.
880	lin.ft. creosoted piles under foundation piers.
3720	lin.ft. 14 x 14 in. reinforced concrete piles.
812	lin.ft. 10 x 10 in. reinforced concrete piles.
904.37	cu.yd. Class "A" concrete.
463.15	cu.yd. Class "B" concrete.
94,520	lb. reinforcing steel.
3363	sq.ft. hog wire.
6	cast-iron rockers.
12	steel rocker plates.
18	3 x 3 in. metal drains.
120	2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

U. S. ENGINEER OFFICE, Florence Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

OFFICIAL PROPOSALS

Bids: June 14.

Sewers, Sewage Sedimentation Tank and Screen Chamber

Port Jefferson, New York.

Sealed proposals for furnishing all labor and materials required for constructing Sewers, Sewage Sedimentation Tank and Screen Chamber, for the Port Jefferson Sewer District, Town of Brookhaven, Suffolk County, New York, addressed to the Sewer Commissioners of the Sewer District, Port Jefferson, New York, and endorsed "Proposal for Constructing Sewers, Sedimentation Tank and Screen Chamber," will be received by the Sewer Commissioners at the office of Thos. O'Donnell, Room 8, Post Office Bldg., Port Jefferson, New York, until two o'clock P.M., on June 14th, 1919.

Proposals must be made on the blank form of proposal prepared by the Sewer Commissioners. Plans and specifications may be obtained from A. J. Provost, Jr., Consulting Engineer, 39 West 38th Street, New York City, or from Thos. O'Donnel, Port Jefferson, N. Y., upon depositing $10, which will be refunded if said plans and specifications are returned in good condition within thirty days after bids have been received and acted upon by the said Sewer Commissioners.

Proposals must be accompanied by cash or a certified check on a solvent Bank or Trust Company, drawn to the order of Thomas O'Donnell, Chairman, for One Thousand Dollars ($1000.00) and a bond in the sum of Three Thousand Dollars ($3000.00) for the proper execution of the contract.

The bidder to whom the contract is awarded will be required to execute the same and to furnish a surety bond in the sum of Fifteen Thousand Dollars ($15,000).

The Sewer Commissioners reserve the right to reject any and all bids.

C. W. DARE, Secretary.

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000 sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000 lin.ft. of granite or concrete curb.
7,000 lin.ft. of concrete gutter.
9,000 sq.yd. of sidewalk.
18,000 cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.
GILBERT C. WHITE, Engineer,
Durham, N. C.

OFFICIAL PROPOSALS

Bids: June 18.

Water Filtration Plant

Beggs, Oklahoma.

Bids will be received by the Board of Trustees of the Town of Beggs, Oklahoma, for one mechanical filter plant, capacity 500,000 gallons per 24 hours, to be erected at the waterworks plant of the town of Beggs; also for one 7 x 8 truplex pump and 25 H.P. electric motor.

Bids to be in the hands of the Town Clerk of the Town of Beggs on or before 11.30 A.M., June 18th, 1919.

Plans and specifications are on file with the Town Clerk and may be seen upon application to him.

All bids must be accompanied by a certified check for $500.00 made payable to the Town Treasurer of the Town of Beggs without condition as a guarantee that bidders will sign contract and make bond for the consetruction of the work provided their proposition is accepted. The right is reserved to reject any or all bids.

W. K. ENOCH,
Town Clerk.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member.
Charleston, W. Va.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information or application.

OFFICIAL PROPOSALS

Bids: June 11.

Paving

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 11, 1919, for the construction of pavements on North Fourth Avenue, between Ann and Kingsley Streets; Catherine Street, between Main Street and Fifth Avenue, and Detroit Street, between Ann and Catherine Streets; Broadway, from Michigan Central Railroad bridge to the north line of Swift Street; Detroit Street, from Catherine Street to Michigan Central bridge; South University Avenue, between State and Oxford Road; East University Avenue, between North University Avenue and Hill Street, and on Thayer Street, between North University Avenue and Huron Street; according to plans and specifications in City Engineer's office.

The approximate quantities are as follows: 38,000 sq.yd. pavement; 38,000 sq.yd. concrete foundation; 20,000 lin.ft. curb; 10,000 cu.yd. excavation, and 500 lin.ft. stone header. Alternate bids will be received on brick, asphaltic concrete and concrete pavements.

A certified check for $1000 must accompany all bids for the construction of pavements, as a guarantee of the good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.
ISAAC G. REYNOLDS,
City Clerk.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD
DISTRICT NO. 1.

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.
W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.
HAMILTON & SHREVE, Engineers.
Fayetteville, Ark.

Bids: June 17.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS, ALBANY, N. Y.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, June 17, 1919, for the improvement of the following highways:

CHENANGO—Three highways: 4.78, 5.57, 5.87.
ERIE—One highway: 5.78.
ESSEX—Two highways: 8.85, 1.09.
FULTON—Three highways: 2.80, 4.90, 1.06.
ONONDAGA—Two highways: 7.45, 3.75.
RENSSELAER—Two highways: 1.44, 4.95.
ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:
BROOME—One highway: 4.70.
CATTARAUGUS—One highway: 2.17.
NASSAU—One highway: 1.57.
AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:
FULTON—One contract, reconstruction.
HERKIMER—One contract, resurfacing.
MONROE—Two contracts, resurfacing.
MONTGOMERY—One contract, reconstruction.
ONEIDA—One contract, timber crib-stone fill.
WESTCHESTER — One contract, reconstruction.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.
R. K. FULLER, Secretary.

Bids: July 9.

Classification and Appraisal of Lands

Toole County, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana.

H. E. MOODY, Clerk.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

Bids: June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 12, 1919.

Bids: June 17.

Drainage Ditches

BURLINGTON, DES MOINES COUNTY, IOWA.

Burlington, Iowa.

Sealed proposals will be received at the office of the County Auditor at Burlington, Iowa, until one-thirty P.M., on the 17th day of June, A. D. 1919, for the construction of drainage channels and such other work, all of which are particularly described in the plans and specifications for the work, which consists of the excavation of 125,077 cu.yd. of ditch work and the laying of 1240 lin.ft. of 12 in. tile and the construction of one concrete bulk head.

The above work consists of one ditch 7000 ft. long with 12 to 20 ft. bottom and one ditch 8000 ft. long with 10 ft. bottom, all the other ditches 6 ft. bottom.

The work will have to be done with a drag line or caterpillar machine.

Monthly estimates will be given and paid as the work progresses.

The work shall begin on or before July 10, 1919, and completed on or before March 1, 1920. A deposit of 10 percentum of the proposal will be required.

The Board of Supervisors reserve the right to reject any and all bids and readvertise the work.

Proposal blanks and detailed information concerning the proposed work can be had at the County Auditor's office in Burlington, Iowa, or from the office of M. E. Bannon at Fort Madison, Iowa, who is the engineer for the work.

(Signed) J. F. WEBER,
County Auditor.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 2

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 4 P.M., June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 52.00 miles of limestone macadam and 2 miles of bituminous macadam road, through the towns of Winslow, Fayetteville, and Goshen, Arkansas. Separate bids will be received on the steel bridges and the culvert tile. The item, hauling and placing tile will be included in the general bids, however. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Secretary.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Secretary, J. W. Reynolds, Fayetteville, Arkansas, and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District, in the sum of 5% of the amount of the bid. A construction bond of 25% of the contract will be required of the successful bidders. The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 2.

C. W. APPLEBY,
President.
W. J. REYNOLDS,
Secretary.
J. V. WALKER,
Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 4.

Storm Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 4, 1919, for the construction of storm water sewers on Detroit Street, from Kingsley Street to Fifth Avenue; on Catherine Street, from Main Street to Fifth Avenue; on South University Avenue, from Llinden Street to Oxford Road; on East University Avenue, from South University Avenue to North University Avenue, from Linden Street to the Huron River southwesterly about 300 ft.; according to plans and specifications in the City Engineer's office.

Approximate quantities are as follows: 1200 lin.ft. of 15 in. vitrified sewer pipe; 3500 lin.ft. of 12 in. vitrified sewer pipe; 47 inlets; 18 manholes; 1800 cu.yd. excavation.

A certified check for $500 must accompany all bids for the construction of storm water sewers, as a guarantee of good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By the Order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON,
Com. of Light, Water and Sewers.

Bids: June 14.

Pavement Construction

Willoughby, Ohio.

Sealed bids will be received by C. C. Jenkins, Village Clerk, for the construction of approximately 47,000 sq.yd. brick pavement 6 in. concrete foundation, cement grout filler, 33,000 lin.ft. concrete curbing and gutter, combined 12,000 lin.ft. storm sewers, 6 in. to 18 in. in said village until 12 o'clock noon, June 14, 1919, and publicly opened and read at the Council Chamber in said village.

Plans and specifications may be seen at the office of the Village Clerk, or may be obtained from the Village Engineer upon payment of ten dollars which will be refunded when same are returned in good condition. Certified check $500, payable to Village Treasurer. Council reserves the right to reject any and all bids.

C. C. JENKINS, Village Clerk.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District

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PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened, for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

Bids: June 17.

Branch Sewer

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
EMERGENCY WORK

Sealed proposals for building Fall Brook Branch Sewer, Section 3, and for building the Milliken Branch Sewer, will be received at the office of the Commissioner of Public Works, City Hall, until Tuesday June 17, 1919 at 12 o'clock M., when they will be publicly opened and read. The work includes the following approximate quantities:

1900 cu.yd. of earth excavation.
770 cu.yd. of ledge excavation.
340 cu.yd. of concrete masonry in trench.
13 manholes.
2680 lin.ft. of 24-in. pipe laying.
580 lin.ft. of 15-in. pipe laying.

Each bid must be accompanied by a certified check for $1000. Said check must be made payable to the order of the Treasurer of the City of Portland, Maine, and must not be enclosed with the proposal. A bond of some responsible surety company satisfactory to the Commissioner of Public Works, will be required from the successful bidder to ensure the faithful performance of the conditions of the contract. Blanks on which proposals must be made, specifications and further information may be obtained at the office of the said Commissioner. Bids should be marked, "Proposal for Building Fall Brook Branch Sewer, Section 3, and Milliken Branch Sewer," and addressed to Edward M. Hunt, Commissioner of Public Works, who reserves the right to reject any or all bids, should he deem it for the interest of the City so to do.

Bids: July 5.

Paving

Brunswick, Ga.

Proposals will be received by the Mayor and Aldermen of the City of Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for paving certain streets in the City of Brunswick, Ga., approximating one hundred and five thousand (105,000) square yards.

Specifications can be had free; plans, upon the payment of eight ($8) dollars, by addressing the Clerk of Council, Brunswick, Georgia.

For further information, apply to N. D. Russell, Clerk of Council, Brunswick, Ga., or E. R. Conant, Consulting Engineer, Brunswick, Georgia.

Bids: June 16.

Concrete and Structural Work

FREEPORT WATER WORKS COMPANY
Freeport, Pa.

Bids will be received between the hours of 10 A.M. and 1 P.M., June 16, 1919, at the office of the Freeport Water Works Company, Freeport, Pa., for the completion of the concrete work and structural work in connection with the proposed water plant. Detailed specifications and plans can be secured from the engineer, Leo Hudson, 801 House Bldg., Pittsburgh, Pa., or from J. R. Taylor, Manager, Freeport, Pa.

The right is reserved to reject any or all bids.

(Signed) J. R. TAYLOR.
Manager.

OFFICIAL PROPOSALS

Bids: June 11.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M. of June 11, 1919, for constructing and erecting complete a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th and Holmes Streets, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

The approximate quantities involved are as follows:

Reinforced concrete	1500 cu.yd.
Reinforcing steel	180 tons.
Earth excavation	420 cu.yd.

Copies of instructions to bidders, plans and specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specification and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside, "Proposal for 1,000,000 gallon reinforced concrete stand pipe at 75th and Holmes Streets."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $750, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: June 17.

Constructing Two Bridges

Pineville, W. Va.

Sealed proposals will be received by the Clerk of the County Court of Wyoming County, at Pineville, West Virginia, up to 9 A.M., on Tuesday, June 17, 1919, for the construction of two bridges on West Virginia Project 1054, the Elmore-Herndon Road.

Proposals must be made upon standard forms, and must be accompanied by a certified check for at least 5 per cent. of the total amount bid.

Plans and specifications may be seen and proposals obtained at the office of the County Engineer, Pineville, W. Va., and at the office of the Division Engineer of the State Road Commission, Robson Prichard Bldg., Huntington, W. Va.

Proposals must be made upon the State Standard form.

The right is reserved to reject any and all bids.

WILL P. COOK,
County Clerk.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Sealed proposals will be received by the County Commissioners of Glynn County, Ga., at the Court House, Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for the paving of four and four-tenths (4.4) miles, or approximately 46,400 sq.yd. of highway, extending from the City of Brunswick to the Picric Acid Plant, for which Federal Aid has been allotted.

Plans and specifications are on file in this office, in the office of the State Highway Engineer, Atlanta, Ga., and in the office of E. R. Conant, Brunswick, Ga. Copies of plans may be obtained from the engineer upon payment of $5.

Proposals shall be submitted on regular forms which will be supplied, together with specifications, upon application to Mr. Paul E. Twitty, Clerk of the County Commissioners, Brunswick, Ga. Proposals must be accompanied by a certified check, or money deposit, for five thousand ($5000) dollars, checks to be made payable to the County Commissioners of Glynn County.

The right is reserved to reject any or all bids and to waive all informalities.

(Signed) Commissioners of Glynn County.
By P. E. TWITTY,
Clerk to Commissioners.

Brunswick, Georgia, May 31, 1919.
E. R. CONANT, Consulting Engineer.
Brunswick, Georgia.

Bids: July 2.

School Equipment

Fargo, N. D.

Sealed proposals will be received by the Board of Education, Fargo, N. D., for the equipment of the New Combination School, covering the following lettings:

1. Cabinet work.
2. Miscellaneous furniture.
3. Metal book stacks.
4. Metal locks.
5. Gymnasium equipment.
6. Kitchen equipment.
7. Pupils' desks and opera chairs.
8. Cork carpet.
9. Art drawing tables.
10. Window shades.
11. Printing equipment.
12. Wood working equipment.
13. Ash hoist.
14. Machine shop equipment.
15. Traverse curtains.
16. Stage scenery.
17. Clocks, bells, telephones and fire alarm system.
18. Electric light fixtures.

Proposals to be delivered to E. G. Guthrie, Secretary, Board of Education, Fargo, N. D., on or before 3 P.M., July 2, 1919.

Plans and specifications may be secured by application to Secretary Guthrie or Wm. B. Ittner, Architect, Board of Education Bldg., St. Louis, Mo.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

OFFICIAL PROPOSALS

Bids: June 11.

Bridge Construction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Providence, R. I.

Sealed proposals for the construction of State Bridges numbered 32, 72, 77 and 144, commonly known as Washington Bridge, Coventry Center Bridge, and Fairbanks Bridge in the Town of Coventry, R. I., and the Woonasquatucket River Bridge in the Town of Smithfield, R. I., will be received at the office of the State Board of Public Roads, Room 12, State House, Providence, R. I., until twelve o'clock noon, on Wednesday, June 11, 1919, at which time the proposals will be publicly opened and read. Each proposal must be submitted upon a blank form furnished by the Board and accompanied by a certified check for two hundred dollars ($200), payable to the State of Rhode Island.

The contract will include the erection of new concrete structures containing approximately 585, 90, 200 and 150 cu.yd. of concrete respectively.

Plans and specifications for this construction will be available on and after 10 A.M., Tuesday, June 3, 1919, and may be obtained from the office of the State Board of Public Roads by making a deposit of $10, which will be refunded upon return of plans and specifications complete and in good condition.

BENJAMIN F. ROBINSON,
ABRAM L. ATWOOD,
FRANK COLE,
MICHAEL VAN BEUREN
J. HENRY WOODARD,
State Board of Public Roads.

Bids: June 18.

Channel Construction

Portland, Oregon.

Sealed bids will be received by the City Council of the City of Portland, Oregon, until 10 o'clock A.M., June 18, 1919, for the construction as a district improvement of a channel from Columbia River to Columbia Slough, to serve as an outlet for sewers of the Peninsula Sewer District.

Plans and specifications for this work may be reviewed in the office of the City Engineer of Portland, or a copy will be sent on receipt of a deposit of twenty-five ($25) dollars.

The work consists of excav-

ating	1,325,000 cu.yd.
Furnishing and placing riprap	20,000 cu.yd.

A certified check for 10 per cent. of aggregate bid must accompany each proposal.

The Council reserves the right to reject any and all bids.

O. LAURGAARD, City Engineer.

Bids: June 19.

Road Construction

Attleboro, Mass.

Sealed proposals for approximately one mile of bituminous road will be received at the office of the Mayor until 11 A.M., Thursday, June 19, 1919, where they will be publicly opened and read. Bids will be asked for both asphalt penetration and gravel mixed surfacing. A certified check for $250 must accompany each bid.

Further information may be obtained at the office of the Superintendent of Public Works, 27 Park St., Attleboro, Mass.

PHILIP E. BRADY, Mayor.
H. J. GOODALE, Supt. Public Works.

OFFICIAL PROPOSALS

Bids: June 23.

Road Work

Wichita, Kansas.

Bids will be received at the oece of the County Clerk, Sedgwick County, Wichita, Kansas, until 11 A.M., June 23, 1919, for the construction of 12 Miles of Road to be paved with brick or concrete base 18 ft. wide including the following quantities:

49,545	Cubic Yards Earth Excavation
3,802	Cubic Yards Earth Barrow
119,794	Square Yards Brick Pavement
1,114	Cubic Yards Concrete in Culverts
2,935	Linear Feet of Guard Fence
540	Linear Feet of Piling in place
968	Square Yards Concrete Shoulders
245	Square Yards of store Rip Rap in place
800	Linear Feet Concrete Gutter.

All Cement Coarse aggregate Brick reinforced Steel and Bitumen to be furnished by Sedgwick County F.O.B. nearest station. Detail plans and specifications are on file at the Office of County Engineer, Wichita, Kansas, the office of Engineering News-Record, 10th Ave. at 3th Street, New York City ,also Chicago Office of Engineering News-Record, 1570 Old Colony Bldg., or will be sent on application accompanied by deposit of $20 to M Rosebury, County Engineer of Sedgwick, Wichita, Kansas.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

OFFICE OF THE COMMISSIONERS, D. C., May 27, 1919.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

OFFICIAL PROPOSALS

Bids: June 25.

Steel Water Tower and Tank

Fountain Inn, S. C.

Bids are invited by the Town of Fountain Inn, South Carolina, for furnishing and delivering all material and constructing a steel water tower and tank for the municipal water-works system, upon foundations built by the town.

The capacity of the tank to be 50,000 gallons, and the height of the tower 110 ft. from top of foundation piers to floor of balcony.

Bidders will be required to furnish with their bids a certified check in the sum of $200, which will become a forfeit to the Town of Fountain Inn, if contract is not entered upon and bond executed promptly after the award.

The successful bidder will be required to execute a bond in an amount equal to 25% of his bid, with some satisfactory guarantee company, to safeguard the performance of the contract.

Bids will be opened at three o'clock P.M., June 25.

The Board of Public Works reserves the right to reject any or all bids.

Copies of specifications may be had by depositing $5, to be returned upon delivery of the specifications in good order to:

D. M. GARRETT,
Chairman, Board of Public Works,
Fountain Inn, S. C.

Bids: June 24.

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Highway Work

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 m., June 20, 1919, and then opened, for removing wreck of "Steamship Lord Dufferin," sunk in upper bay, New York Harbor. Information on application.

Bids: June 19.

Dam Construction

Gilboa, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Thursday, June 19, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie County, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts: An overfall masonry portion about 1300 ft. in length and having a maximum height of about 160 ft., and an earthen section approximately 1000 ft. long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering News-Record
10th Ave. at 36th St.
New York

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OFFICIAL PROPOSALS

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Proposals will be received by the Mayor and Aldermen of the City of Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for paving certain streets in the City of Brunswick, Ga., approximating one hundred and five thousand (105,000) square yards.

Specifications can be had free; plans, upon the payment of eight ($8) dollars, by addressing the Clerk of Council, Brunswick, Georgia.

For further information, apply to N. D. Russell, Clerk of Council, Brunswick, Ga., or E. R. Conant, Consulting Engineer, Brunswick, Georgia.

Bids: June 19.

Road Construction

Attleboro, Mass.

Sealed proposals for approximately one mile of bituminous road will be received at the office of the Mayor until 11 A.M., Thursday, June 19, 1919, where they will be publicly opened and read. Bids will be asked for both asphalt penetration and gravel mixed surfacing. A certified check for $250 must accompany each bid.

Further information may be obtained at the office of the Superintendent of Public Works, 27 Park St., Attleboro, Mass.

PHILIP E. BRADY, Mayor.
H. J. GOODALE, Supt. Public Works.

Bids: June 16.

Concrete and Structural Work

FREEPORT WATER WORKS COMPANY
Freeport, Pa.

Bids will be received between the hours of 10 A.M. and 1 P.M., June 16, 1919, at the office of the Freeport Water Works Company, Freeport, Pa., for the completion of the concrete work and structural work in connection with the proposed water plant. Detailed specifications and plans can be secured from the engineer, Leo Hudson, 801 House Bldg., Pittsburgh, Pa., or from J. R. Taylor, Manager, Freeport, Pa.

The right is reserved to reject any or all bids.

(Signed) J. R. TAYLOR,
Manager.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

OFFICIAL PROPOSALS

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD
DISTRICT NO. 1.
Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.
W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.
HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District

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PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M. June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened, for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: June 23.

Road Work

Wichita, Kansas.

Bids will be received at the office of the County Clerk, Sedgwick County, Wichita, Kansas, until 11 A.M., June 23, 1919, for the construction of 12 Miles of Road to be paved with brick or concrete base 18 ft. wide including the following quantities:

49,545	Cubic Yards Earth Excavation
3,802	Cubic Yards Earth Barrow
119,794	Square Yards Brick Pavement
1,114	Cubic Yards Concrete in Culverts
2,935	Linear Feet of Guard Fence
540	Linear Feet of Piling in place
968	Square Yards Concrete Shoulders
245	Square Yards of store Rip Rap in place
800	Linear Feet Concrete Gutter.

All Cement Coarse aggregate Brick reinforced Steel and Bitumen to be furnished by Sedgwick County F.O.B. nearest station. Detail plans and specifications are on file at the Office of County Engineer, Wichita, Kansas, the office of Engineering News-Record, 10th Ave. at 3th Street, New York City ,also Chicago Office of Engineering News-Record, 1570 Old Colony Bldg., or will be sent on application accompanied by deposit of $20 to M. Rosebury, County Engineer of Sedgwick, Wichita, Kansas.

Bids: June 24.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

OFFICIAL PROPOSALS

Bids: June 16.

Hydro-Electric Power Plant Construction

Marquette, Michigan.

Sealed proposals will be received by the City Commission of the City of Marquette at the office of the City Purchasing Agent, until 12 o'clock noon, June 16, 1919, for furnishing all equipment, tools, labor and material required for constructing the following specified improvements, such proposals to be publicly opened and read:

1. A hydroelectric power house, 40 x 97 of concrete and brick, including tail-race excavation in earth and rock;

2. A reinforced concrete surge tank thirty (30) feet diameter and sixty (60) feet high, including foundation;

3. Concrete foundations with timber saddles for a woodstave pipe line 90 in. inside diameter, 1800 ft. long, and 78 in. inside diameter, 285 ft. long.

Bids are to be submitted in two (2) ways:

First, on the work complete, contractor furnishing all materials.

Second, on labor and equipment, the City to furnish all materials, delivered f.o.b. Marquette, Michigan.

Separate proposals will be received for the power house building, embracing the superstructure above the main floor finished complete.

Proposals will be received for the foundation for the penstocks and separately for foundation of power house carried up to top of main floor ready to receive the brick superstructure and also including excavation for the tail-race.

Plans and specifications by Thomas W. Orbinson, Consulting Engineer, Appleton, Wisconsin, are on file at the office of Charles Retallic, Superintendent of the Department of Light and Power, Marquette, Michigan. Upon request, either or both sets will be mailed to prospective bidders on receipt of $25 for each set, which amount will be refunded on their return in good order.

Proposals for said improvement must be made in separate, sealed envelopes, marked so as to indicate improvement referred to and must be accompanied by a certified check or draft in the sum of $500, payable to the City of Marquette, as a guarantee that if bid is accepted, contract will be entered into and its performance properly secured.

The Commission reserves the right to accept or reject any or all bids.

Separate proposals will be received from pipe manufacturers for furnishing, erecting and connecting up the woodstave pipe.

CITY OF MARQUETTE,
J. F. ANDERSON,
City Purchasing Agent.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

OFFICIAL PROPOSALS

Bids: June 25.

Steel Water Tower and Tank

Fountain Inn, S. C.

Bids are invited by the Town of Fountain Inn, South Carolina, for furnishing and delivering all material and constructing a steel water tower and tank for the municipal water-works system, upon foundations built by the town.

The capacity of the tank to be 50,000 gallons, and the height of the tower 110 ft. from top of foundation piers to floor of balcony.

Bidders will be required to furnish with their bids a certified check in the sum of $200, which will become a forfeit to the Town of Fountain Inn, if contract is not entered upon and bond executed promptly after the award.

The successful bidder will be required to execute a bond in an amount equal to 25% of his bid, with some satisfactory guarantee company, to safeguard the performance of the contract.

Bids will be opened at three o'clock P.M., June 25.

The Board of Public Works reserves the right to reject any or all bids.

Copies of specifications may be had by depositing $5, to be returned upon delivery of the specifications in good order to:

D. M. GARRETT,
Chairman, Board of Public Works,
Fountain Inn, S. C.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member.
Charleston, W. Va

OFFICIAL PROPOSALS

Bids: June 27.

Flood Prevention Project

CONTRACT NO. 4

City of Lebanon, Pa.

Sealed proposals directed to the City Clerk will be received by the Mayor and Council of the City of Lebanon, Pa., at the City Hall until 5 P.M., Friday, June 27th, for the furnishing of all labor and materials required to construct Contract No. 4 of Lebanon's Flood Prevention Project.

The work consists of building a reinforced concrete culvert approximately 2,200 feet in length.

The approximate quantities involved are:

6,000 cubic yards of Excavation
2,000 cubic yards of Concrete
63,000 pounds of Reinforcement

Plans, proposal blanks and information concerning the manner of submitting bids can be obtained at the office of the City Engineer of Lebanon, Pa., by making a deposit of $5.00. This deposit will be refunded upon return, to the City Engineer, of the plans and specifications in good condition.

A certified check for $2,000 must accompany each proposal.

Mayor and Council distinctly reserve the right to reject any or all bids and to award the contract as is deemed to the best interests of the City of Lebanon, Pa.

PAUL A. VOLDNER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 1, Jefferson and Lincoln Counties, Arkansas, at the Office of the State Highway Department, Little Rock, Arkansas, up to 2 o'clock P.M., on June 26th, 1919, and there will be publicly opened and read, for the construction of 19 miles of gravel roads, 14 feet wide.

The approximate quantities are as follows:

47	acres Clearing & Grubbing
13	miles Fence Moving
85,600	cu.yds. earth excavation
1.45	miles Grading Machine Work (on old road)
696	lin.ft. 16" Reinforced concrete pipe, laid
168	lin.ft. 20" Reinforced concrete pipe, laid
392	lin.ft. 24" Reinforced concrete pipe, laid
72	lin.ft. 30" Reinforced concrete pipe, laid
1,025	cu.yds. Class A concrete in culverts
392	" " B " in abutments and headwalls
80,200	lbs. Steel reinforcing bars
3	80 ft. Steel Truss spans, erected
1,655	lin.ft. wooden pile bridges
40,250	cu.yds. gravel on which the haul is as follows:

6,450	cu.yds. haul	0-1	mile
6,450	" "	1-2	miles
6,450	" "	2-3	"
6,450	" "	3-4	"
7,010	" "	4-5	"
4,040	" "	5-6	"
2,150	" "	6-7	"
2,150	" "	7-8	"

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, f.o.b. cars, Tamo or Furth, Ark.

OFFICIAL PROPOSALS

Concrete in culverts, abutments and headwalls.

Steel trusses, erected.

Wooden bridges.

Gravel, f.o.b. cars, Tamo and Furth, Ark.

Plans and specifications are on file with the State Highway Department, Little Rock, Ark., and copies of same together with proposal forms can be obtained from the district engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00 of which $8.00 will be refunded on their return.

A certified check to the amount of 5% of the bid must accompany all proposals, check to be to the order of C. P. Clemmons, Sec'y of the district.

Successful bidders will be required to execute construction bond to the amount of 50% of their bids.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 1,
Jefferson & Lincoln Counties, Ark.
By E. P. LADD, President
C. P. CLEMMONS, Sec'y.

Bids: June 16.

Sewer Construction

Lansing, Mich.

The City of Lansing, Michigan, will receive sealed proposals for the construction of a sewer in West and Memphis Streets in accordance with the plans and specifications on file in the office of the city engineer of said city. Said sewer is 3000 ft. of 54 inch to 73 inch trunk sewer.

Bids will be received up to 4 o'clock p.m., June 16, 1919, at the office of the city clerk of the city of Lansing.

Each proposal must be accompanied with a certified check in the sum of $2000.00.

Right is rseserved to reject any or all bids.

J. A. PARSONS, City Clerk.

Bids: June 19.

Road Work

New Hampton, Ia.

Sealed bids will be received at the office of the County Auditor, New Hampton, Iowa, until 2 o'clock p.m., June 19th, 1919, for grading and incidental work on Sections F, G, and the west one-half of H, of the New Hampton and Lawler County Road.

Bids will be opened at the above office promptly after the time for receiving same has closed.

The proposed work consists of constructing two miles to finish grade requiring about 6585 cubic yards of dirt excavation.

Plans and specifications for the work may be seen and information may be secured at the above office or at the office of the County Engineer, New Hampton, Iowa, or at the office of the State Highway Engineer, Ames, Iowa. The County reserves the right to waive all technicalities and to reject any or all bids.

W. R. GARLAND,
County Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 4, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 9, 1919, for furnishing and delivering at the site the materials required for the construction of the United States Post Office building at Montevideo, Minn., including materials for concrete, reinforced concrete, stone, granite, brick, structural terra cotta, structural steel, miscellaneous iron and steel work, composition roofing, slate roofing, sheet metal work, skylights, plastering, interior marble, sanitary slate, lumber, millwork, painting, glazing, hardware, plumbing, heating, electric work, etc. Bills of quantities and specifications may be obtained from the Custodian of the site at Montevideo, Minn., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: June 19.

Dam Construction

Gilboa, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Thursday, June 19, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie County, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts: An overfall masonry portion about 1300 ft. in length and having a maximum height of about 160 ft., and an earthen section approximately 1000 ft. long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: June 23.

Sewer Construction

Lansing, Mich.

The city of Lansing, Mich., will receive sealed proposals for the construction of a sewer in the forty-third sewer and drain district in said city, consisting of about 25,000 feet of trunk and lateral sewers 8 inch to 42 inches, in accordance with plans and specifications on file in the office of the city engineer of said city.

Proposals will be received up to 4 o'clock p.m., June 23, 1919, at the office of the city clerk of said city.

Each proposal to be accompanied with a certified check in the sum of $1000.00.

Right is reserved to reject any or all bids.

J. A. PARSONS, City Clerk.

Bids: June 16.

Dredging

Dover, Del.

Sealed proposals will be received by the Indian River Inlet Commission at the Office of the State Highway Department, Dover, Delaware, until one P.M., June 16, 1919, and publicly opened for dredging an inlet to Indian River Bay, in Sussex County, Delaware, involving approximately (20,000) twenty thousand cubic yards of excavation.

Monthly payments will be made for ninety per cent. (90%) of the work completed.

The right is reserved to reject any and all bids.

Detailed information may be obtained at the office of the State Highway Department, Dover, Delaware, Indian River Inlet Commission. Chas. M. Upham, Chief Engineer.

OFFICE OF THE COMMISSIONERS, D. C.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the Luzon Ave. Trunk Sewer, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

OFFICIAL PROPOSALS

Bids: June 20.

Paving and Curbing

Newton, Iowa.

The City of Newton, Iowa, will receive bids until June 20th, 1919, for paving and curbing. Approximately 75,000 square yards. Brick, asphalt, concrete and asphaltic concrete being considered. Specifications and bidding blanks furnished on request to contractors.

E. G. FINCH,
City Clerk.

Bids: June 19.

Road Work

New Hampton, Iowa.

Sealed bids will be received at the office of the County Auditor, New Hampton, Iowa, until 2 o'clock p.m., June 19th, 1919, for grading, tiling, surfacing with gravel and incidental work on the Iowa Federal Aid Project No. 35, part of New Hampton-Waterloo and New Hampton-Cresco Roads.

Bids will be opened at the above office promptly after the time for receiving same has closed.

The proposed work consists of constructing 13 and 1-10 miles to finished grade requiring about 61,654 cubic yards of earth excavation, the construction of about 27,443′ of 6 in. tile, 2109′ of 8 in. tile and 220 of 12 in. tile, 32,925 cubic yards of gravel loading and 66,000 cubic yard miles of gravel hauling.

Plans and specifications for the work may be seen and information may be secured at the above office or at the office of the County Engineer, New Hampton, Iowa, or at the office of the State Highway Commission, Ames, Iowa. The county reserves the right to waive all technicalities and to reject any and all bids.

June 3, 1919

H. W. TANK, Auditor.

Bidding blanks for the above may be procured at the office of W. R. Garland, County Engineer.

Bids will be taken on tiling and road work separately.

Bids: June 20.

Sewers

Roselle Park, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Roselle Park, N. J., at 8:15 P.M., Friday, June 20, 1919 at the Borough Hall, for the construction of sanitary sewers in Colfax Avenue, Roselle Avenue, Lincoln Avenue, Filbert Street and Elm Street.

Approximate quantities are as follows:

5442 lin.ft. of 8-in. sewer.
23 Manholes.
352 Branches.

Each proposal must be accompanied by a certified check for $1000, drawn to the order of the Treasurer of the Borough.

Plans, specifications and forms of proposal may be obtained at the office of the Borough Engineer, 52 Vanderbilt Avenue, New York City and Roselle Park, N. J., upon payment of $3 per set. No refund for plans returned.

The Council reserves the right to reject any or all bids, to waive any or all defects or informalities, or to accept any bids as they may deem for the best interest of the Borough.

J. WALLACE HIGGINS,
Borough Engineer

Roselle Park, N. J.
June 6, 1919.

OFFICIAL PROPOSALS

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been received therefore on June 2, 1919, and rejected. A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: June 18.

Water Main Extensions

Dearborn, Michigan.

Sealed bids will be received at the office of the Village Clerk, Dearborn, Mich., up to eight P.M., of the 18th day of June, 1919.

The work consists of the furnishing of all material and labor to construct the following amount of cast iron water mains:

27,600 feet of 6 inch
7,100 feet of 8 inch
7,150 feet of 10 inch, including all necessary valves and fittings, and hydrants, according to plans and specifications on file at the office of the Village Clerk and in the office of C. W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, from who mcopies may be obtained upon deposit of $5, which amount will be refunded upon the return of the plans and specifications in good condition within 10 days after opening bids.

No bids will be received unless accompanied by a certified check for the sum of $7000, payable to the Village of Dearborn, to insure the signing of contract and the furnishing of proper and acceptable bonds for the full amount of the contract price within 10 days from time of notification of the award of contract.

The right is reserved to reject any or all bids.

By order of the Village Commission.

FRED C. ROAMER,
Village Clerk,
Dearborn, Mich.

OFFICIAL PROPOSALS

Bids: June 23.

Street Paving

Coatesville, Penn.

Sealed proposals addressed to the City Clerk of the City of Coatesville, Penn., and endorsed, "Bids for Paving Streets," will be received by the City Council at the City Hall, Coatesville, Penn., up to eight o'clock P.M., on Monday, June 23, 1919, and there publicly opened and read.

The work to be done consists of approxmiately:

28,625 sq.yd. of bituminous pavement on a cement concrete base.
1,375 sq.yd. of bituminous pavement on existing base.
4,500 sq.yd. of vitrified brick pavement to be relaid.
4,300 sq.yd. of vitrified brick pavement or stone block pavement along tracks.
3,000 lin.ft. cement concrete curb.

Bids will be received on sheet asphalt, asphaltic concrete, Warrenite, Filbertine, Amiesite and Bito-slag.

Each proposal must be accompanied by a certified check in an amount equal to five (5) per cent. of the highest amount bid, made payable to the Treasurer of the City of Coatesville, Pa.

A surety bond in an amount equal to fifty (50) per cent. of the total amount of the contract will be required from the successful bidder.

Plans and specifications are on file in the office of the City Engineer at Coatesville and copies of the same may be obtained by application and by the deposit of five (5) dollars which deposit will be returned if plans are returned in good condition within ten days after the opening of bids.

The City Council reserves the right to reject any or all bids or to award the contract as may be deemed for the best interests of the City.

The contractor must comply with all the requirements of the Workmen's Compensation Act of the State of Pennsylvania.

WILLIAM S. G. COOK,
City Clerk,

CHAS. A. NILES,
City Engineer.

Bids: June 16.

Motors and Pumps

Galesburg, Ill.

Sealed bids will be received by the City Clerk of the City of Galesburg, Ill., until five o'clock P.M., Monday, June 16, A. D. 1919, for the following:

1—30 hp., 220 volts, three-phase, 60-cycle, slip-ring type motor, 1800 r.p.m.
3—40 hp., 220 volts, three-phase, 60-cycle, slip-ring type motor, 1800 r.p.m.
3—600 g.p.m., motor driven, direct connected, centrifugal pumps.

Specifications can be obtained at the office of F. M. Connolly, City Engineer.

Each bid must be accompanied by cash or certified check for the amount of not less than 10% of the aggregate of each bid.

The City of Galesburg reserves the right to reject any or all bids.

By order of the City Council.

WM. L. BOUTELLE,
City Clerk.

GATE-OPERATING MACHINERY.—U. S. Engineer Office, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., July 8, 1919, and then opened, for furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Paving, Sewers, Pipe, Etc.

Murfreesboro, Tenn.

Sealed proposals will be received at the office of the Secretary of the Board of Commissioners, Murfreesboro, Tennessee, until 11 o'clock A.M., of the 17th day of June, 1919, then and there to be publicly opened and read by the Secretary for furnishing all labor, tools and certain materials for paving and other improvements. Separate bids will be entertained on the approximate quantities, as follows:

1—15,500 sq.yd. of asphaltic-concrete pavement.
400 lin.ft. vitrified brick headers.
500 cu.yds. earth excavation.
1,000 sq.yds. new macadam foundation.
2— 110 lin.ft. 30" concrete combination curb and gutter.
3,100 lin.ft. 24" concrete combination curb and gutter.
2,300 lin.ft. 18" concrete combination curb and gutter.
4,000 sq.ft. 24" concrete gutter.
500 sq.ft. concrete sidewalk.
12 catch basins.
60 ft. storm water culverts (without cast iron covers).
3— 850 ft. 8" vitrified clay pipe sewer.
200 ft. 10" vitrified clay pipe sewer.
900 ft. 6" vitrified clay pipe sewer relaid.
900 ft. 20" vitrified clay pipe sewer relaid.
4— 570 ft. 2" galvanized pipe laid.
1,600 ft. No. 6 B. & S. single conductor 5000-volt, armored cable, installed.
16 sidewalk outlets for cable.

All bids must be accompanied by a certified check or bond in the amount of 10% of the bid, made payable to the Treasurer of the City of Murfreesboro, Tennessee.

Plans and specifications may be obtained, upon deposit of $10.00, from C. B. Howard & Company, Engineers, 148 Fourth Ave., North, Nashville, Tennessee, which sum will be refunded on surrender of the plans and specifications in good condition.

The Board reserves the right to reject any or all bids.

J. T. RATHER,
Secy. Board of Commissioners,
City of Murfreesboro, Tenn.

Bids: June 14.

Pavement Construction

Willoughby, Ohio.

Sealed bids will be received by C. C. Jenkins, Village Clerk, for the construction of approximately 47,000 sq.yd. brick pavement 6 in. concrete foundation, cement grout filler, 33,000 lin.ft. concrete curbing and gutter, combined 12,000 lin.ft. storm sewers, 6 in. to 18 in. in said village until 12 o'clock noon, June 14, 1919, and publicly opened and read at the Council Chamber in said village.

Plans and specifications may be seen at the office of the Village Clerk, or may be obtained from the Village Engineer upon payment of ten dollars which will be refunded when same are returned in good condition. Certified check $500, payable to Village Treasurer. Council reserves the right to reject any and all bids.

C. C. JENKINS, Village Clerk.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Sealed proposals will be received by the County Commissioners of Glynn County, Ga., at the Court House, Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for the paving of four and four-tenths (4.4) miles, or approximately 46,400 sq.yd. of highway, extending from the City of Brunswick to the Picric Acid Plant, for which Federal Aid has been allotted.

Plans and specifications are on file in this office, in the office of the State Highway Engineer, Atlanta, Ga., and in the office of E. R. Conant, Brunswick, Ga. Copies of plans may be obtained from the engineer upon payment of $5.

Proposals shall be submitted on regular forms which will be supplied, together with specifications, upon application to Mr. Paul E. Twitty, Clerk of the County Commissioners, Brunswick, Ga. Proposals must be accompanied by a certified check, or money deposit, for five thousand ($5000) dollars, checks to be made payable to the County Commissioners of Glynn County.

The right is reserved to reject any or all bids and to waive all informalities.

(Signed) Commissioners of Glynn County.
By P. E. TWITTY,
Clerk to Commissioners.

Brunswick, Georgia, May 31, 1919.
E. R. CONANT, Consulting Engineer.
Brunswick, Georgia.

Bids: June 26.

24 Inch Out-Fall Sewer

Greenwich, Conn.

Pursuant to a resolution adopted June 4, 1919, the Joint Sewerage Commission of the Borough of Greenwich and the Town of Greenwich, Connecticut, will receive at its meeting to be held at the Town Hall, Greenwich, Connecticut, on Thursday evening, June 26, 1919, at eight (8) o'clock P.M., sealed proposals for furnishing all materials and doing all work required to complete the construction of a new 24 in. Out-Fall Sewer from the junction of the east side and west side trunk sewers to the Joint Sewerage Disposal Plant upon Grass Island for the Borough of Greenwich, and Sewer District No. 6, of the Town of Greenwich, Connecticut, including the necessary piping, piling, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Joint Sewerage Commissioners, Room No. 2, Town Building, Greenwich, Connecticut, or at the Office of Mr. S. E. Minor, Civil Engineer, No. 96 Greenwich Avenue, Greenwich, Connecticut. Plans may be taken away upon the payment of ten ($10) dollars, the same to be refunded if plans are returned within fourteen (14) days in good condition.

Each bid must be accompanied by a certified check on a solvent bank for one thousand ($1000) dollars.

The said Joint Sewerage Commissioners reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which it deems to be most favorable to the interest of the Borough and Town.

HARRY C. FROST, Chairman.
JOSEPH P. CROSBY, Warden.
ALBERT S. MEAD, Clerk.

OFFICIAL PROPOSALS

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON
Com. of Light, Water and Sewers

Bids: June 23.

Furnishing Oil and Asphalt

Woonsocket, R. I.

Sealed proposals will be received by the Aldermanic Committee on Streets and Bridges of the City of Woonsocket, R. I., at the Aldermen's Chambers, City Hall, Woonsocket, R. I., until 8:15 P.M., Monday, June 23, 1919, at which time and place proposals will be publicly opened and read. Said Committee will be in session at 8 P.M. on said date for the purpose of receiving proposals for the following:

NO. 1. OIL—For furnishing 100,000 gallons, more or less, of oil for the City of Woonsocket, R. I., suitable for street oiling and containing not less than 45 per cent. asphalt. Specification for oil to be furnished by the bidder. Agreement and City Specifications may be seen at the office of the City Engineer.

NO. 2. ASPHALT—For furnishing five hundred (500) barrels, more or less, of asphalt binder for macadam roadways, penetration method. The bid must specifically state the name, nature and analysis of the asphalt binder and bid must be accompanied with a sample of at least one pound. Specification must accompany proposal.

Certified check for $100 must accompany proposal for oil, and certified check for $100 must accompany proposal for asphalt, as surety that if proposal is accepted a contract will be entered into.

The right is hereby reserved to reject any or all bids as the interest of the City may appear.

ADRIAN H. SYLVESTRE, Chairman,
JAMES F. CARROLL,
ANTHONY BELANGER,
Aldermanic Committee on
Streets and Bridges.
FRANK H. MILLS, City Engineer.

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000 sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000 lin.ft. of granite or concrete curb.
7,000 lin.ft. of concrete gutter.
9,000 sq.yd. of sidewalk.
18,000 cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: June 23.

Paving

Geneva, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Geneva, N. Y., at its office in the City Hall, until 7:30 o'clock P.M., Monday, June 23, 1919, for paving High, West and Brook Streets. The work for which proposals are invited consists of the following approximate quantities:

5,400 cu.yd. of excavation.
8,750 lin.ft. of curb and gutter.
175 lin.ft. of header.
8,750 lin.ft. of 3 in. drain tile.
3,000 lin.ft. of vitrified pipe.
30 catch basins.
10,000 sq.yd. of brick, asphalt or concrete pavement.

Each proposal must be accompanied by a certified check for five (5%) per cent. of the amount of the proposal.

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Specifications and blank forms of proposals can be obtained upon application to the Board of Public Works. Plans may be seen at the office of the City Engineer.

The right is reserved to reject any or all bids.

H. K. SEYBOLT,
Superintendent.

Bids: July 2.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the Camden County line, Marlton-Medford Road, in the township of Evesham, in the county of Burlington, with a sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 31,680 sq.yd., and opened and read in public at the Court House, Mount Holly, N. J., on Wednesday, July 2, 1919, at 11 A.M.

Specifications and form of bid, contract and bond for the proposed work prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at No. 11 Main St., Mt. Holly, N. J., and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a Surety Company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal forms are attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 29, 1919.

Bids: June 16.

Electrifying Pumping Station

DEPARTMENT OF PUBLIC WORKS

Lackawanna, N. Y.

Sealed proposals for work, materials and supplies for electrifying the Pumping Station, will be received by the Board of Common Council of the city of Lackawanna, at the city building until 8 o'clock in the afternoon of Monday, June 16, 1919, at which place and hour the said bids will be publicly opened and read. No proposals will be considered unless it be accompanied by a duly certified check, payable to the order of the City Clerk, of the City of Lackawanna, such check to represent 25 per cent. of the amount named in the proposal or by a bond to represent 50 per cent. of the sum named in the proposal.

The Common Council reserves the right to reject any and all bids and waive any informalities or to divide said contract if in the judgment of the Common Council, the interest of the city requires it.

TO ELECTRIFY THE PUMPING STATION

Plans and specifications and extent of quantities can be seen and any desired information can be had and obtained on application to the office of the Commissioner of Public Works, of the city of Lackawanna, on and after this date.

By order of the Common Council of the city of Lackawanna, as set forth in its proceedings at a meeting held June 2, 1919.

Dated: Lackawanna, N. Y., June 3, 1919.

JOSEPH O'CONNOR,
City Clerk.
Pub. June 5, 1919.

OFFICIAL PROPOSALS

Bids: June 18.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 10 o'clock A.M., June 18, 1919, for the road work on the Natoinal, Chicago-Joliet, Dixie and Peoria-Springfield Highways, designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the offices of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans for the sections in the County of Effingham may be examined in the office of District No. 6, Chas. M. Slaymaker, District Engineer, 510 Metropolitan Bldg., E. St. Louis. Plans for the sections in the Counties of Cook and Will may be examined in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the section in Iroquois County may be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Bldg., Paris, Illinois. Plans for the work in Mason Co. may be examined in the office of District No. 5, Fred Tarrant, District Engineer, 506½ East Monroe Street, Springfield, Illinois.

Route	County	Sec.	Width Feet	Approximately Length-Feet
National Highway	Effingham	I	16	22,445
National Highway	Effingham	J	18	7,724
National Highway	Effingham	K	18	10,425
National Highway	Effingham	L*	30	22,459
National Highway	Effingham	M	16	17,994
National Highway	Effingham	N	16 and 18	27,887
National Highway	Effingham	G-15d	18 and 16	21,000
Chicago-Joliet Highway	Cook	B	20 and 18	30,635
Chicago-Joliet Highway	Cook	C	18	35,847
Chicago-Joliet Highway	Will	D	18 and 20	27,450
Dixie Highway	Iroquois	3	16	27,304
PeorisPeoria-Springfield Highway	Mason	M-†	16	4,678

*No pavement on this section—Earth work and culverts.

Plans will not be sent to prospective bidders but upon making a deposit with the District Engineer having the plans, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Except as noted,

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3, or CT).

†In addition, bids will be received on the same date at Mason City, Illinois, by Mason City for certain street paving that will widen Section M considerably. Section M and the additional paving to be awarded by Mason City will not be let separately from one another, and consequently bidders wishig o submit proposals for Section M should obtain from Mason City proposal forms upon which to submit proposals for the city paving.

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer having the plans.

By Order of The Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: July 16.

Water Mains and Appurtenances

Decorah, Iowa.

Sealed proposals will be received by the Mayor and City Council of the City of Decorah, Iowa, at 7:30 P.M., July 16, 1919, at the office of the City Clerk, in the said City, for laying approximately 11,400 lin.ft. 4 in. water main, and making necessary connections, as to valves, T's, L's and fire hydrants; also connecting with old mains where they intersect, the contractor to furnish labor, lead and oakum; bids will also be received for relaying of approximately 600 ft. of 10 in. vitrified sewer pipe.

Specifications showing schedule of streets, together with blank forms for bidders can be obtained at the office of the City Clerk, City Hall, Decorah, Iowa.

All bids must be accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workmen's Compensation Act of Iowa.

The Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interests of the city.

MARK D. WELLS,
City Clerk.

Bids: June 25.

Street Paving

DEPARTMENT OF STREETS AND PUBLIC IMPROVEMENTS
Reading, Pa.

Sealed proposals will be received at the office of the City Clerk, Reading, Pa., until 10 A.M., Wednesday, June 25, 1919, for the construction of paving and appurtenances on various streets in the City of Reading.

Approximate quantities are 17,000 sq.yd. sheet asphalt, 9000 sq.yd. vitrified block and 650 sq.yd. wood block.

All necessary forms for bidding, plans, specifications and any other information may be obtained at the office of the City Engineer, City Hall, Reading, Pa. A deposit of five dollars ($5) will be required for each set of asphalt or block plans and specifications taken from the office, which deposit will be remitted to bidders upon return of plans before July 1, 1919.

Proposals must be endorsed as to the character of paving bid on and addressed to the Superintendent of the Department of Streets and Public Improvements, in care of the City Clerk, Reading, Pa.

The right is reserved to reject any or all bids.

JACOB H. McCONNELL,
Superintendent.
EDMUND B. ULRICH, City Engineer.

OFFICIAL PROPOSALS

Bids: June 23.

Waterworks Improvements

Lusk, Wyoming, June 3, 1919.

Sealed bids for improvements and extensions to the Municipal Water System will be received by the Town Council of the Town of Lusk, Wyoming, up until 8 o'clock P.M., June 23, 1919, and then and there publicly opened and read.

The plan embraces the furnishing and installing of approximately 12,850 ft. of four inch, 1700 ft. of six inch, 3300 ft. of eight inch, 1330 ft. of ten inch and 4950 ft. of twelve inch cast iron pipe Class "B" American Waterworks Standard, according to plans and specifications on file in the offices, or the Town Engineer. Of the twelve inch pipe, 1750 ft. may be replaced by fourteen inch.

Hydrants and valves will be furnished by the Town, separate bids on which will be received at the same time as the foregoing. Forty-five fire hydrants and sixty valves, four to fourteen inch, with valve boxes, American Waterworks Standards will be required.

Bids for the principal work must be accompanied by certified check for five thousand dollars ($5000), made payable to the Town Treasurer, without recourse. Bids for hydrants and valves must be accompanied by certified check for at least ten per cent. of the gross bid.

Plans, specifications, proposal forms, form of contract and form of bond can be procured from R. F. Gray, Town Engineer, upon deposit of ten dollars ($10.00) which will be refunded upon their return in good condition not later than the day after opening of bids.

The Town Council reserves the right to reject any and all bids, to waive irregularities and to award the contract as may be deemed best for the interests of the Town.

GEORGE H. HOWES,
Mayor.
D. E. GODDARD,
Clerk.
R. F. GRAY,
Engineer.

Bids: June 23.

Street Improvement

North Adams, Mass.

Sealed bids will be received by the Commissioner of Public Works, City Hall, North Adams, Mass., until 4 P.M., June 23, 1919, for the following street improvements, consisting of about:

4600 sq.yd. of concrete roadway on Zylonite Road.
1700 sq.yd. of concrete roadway with 600 sq.yd. of brick paving on Beaver Street.
4500 sq.yd. of bituminous macadam top surface, to be laid over old water bound macadam on Beaver Street.
1300 lin.ft. of concrete combination curb and sidewalk on Beaver Street.

Each bid must be marked, "Proposals for Street Improvement," and to be accompanied by a certified check for not less than 5% of the price bid, payable to the Treasurer of the City of North Adams, Mass., as a guarantee that if the contract is awarded, it will be executed within ten days of notice of award.

Specifications may be had at the office of the Commissioner.

The right is reserved to reject any or all bids.

JACKSON L. TEMPLE,
Commissioner of Public Works.
June 9, 1919.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.39.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
ROYAL K. FULLER, Commissioner.
Secretary.

Bids: June 23.

Centrifugal Pump

City of Bethlehem, Pa.

Bids will be received by the Bureau of Water for the furnishing and installation of a two million gallon electrically driven centrifugal pump, on or before June 23, 1919.

The right is reserved to reject any or all bids.

R. L. FOX,
City Engineer.

OFFICIAL PROPOSALS

Bids: June 23.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES,
550 Bourse Building,
Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Penn Treaty Recreation Pier, No. 57, North Delaware River, will be received until 12 o'clock noon, Monday, June 23, 1919, in room No. 550, Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned upon the deposit of a certified check in the sum of $25, to cover costs of blue prints, which check will be returned upon the receipt of the plans and specifications in good condition.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation insurance, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500 have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER, Director.

Bids: June 17.

Paving

Fort Collins, Colo.

The City of Fort Collins, Colo., will receive until 1 P.M., June 17, 1919, sealed bids for the following work, (more or less):

37,710	sq.yd. of reinforced concrete pavement.
5,984	cu.yd. of earth excavation.
4,469	lin.ft. of concrete curb and other incidentals.

Plans and specifications may be seen at the Engineer's Office or secured upon deposit of $5, which will be refunded to unsuccessful bidder upon their return.

W. B. CHEECK,
City Engineer.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: June 19.

Harrisburgh, Pa.

Bridge Construction

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., June 19, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the construction of the following bridges:

County	Township	Route	Station	Span in Ft.
Adams	Franklin	43	202	30
Adams	Franklin	43	183	2/28
Adams	Cumberland	43	79	30
Adams	Cumberland	44	108	14
Adams	Mt. Joy	375	207	20
Centre	Potter	307	774	16
Centre	Boggs	219	1993	10
Centre	Patton	346	1339	12
Clinton	Beech Creek	219	2792	10
Clinton	Beech Creek	219	2865	18
Cumberland	Middlesex	40	265/60	8
Dauphin	Mifflin	336	1320	10
Dauphin	Upper Paxtang	339	200	6
Huntingdon	Logan	55	1827	4
Huntingdon	Morris	260	1188	6
Huntingdon	West	352	289	10
Huntingdon	Logan	55	1846	4
Juniata	Fermanagh	194	236	8
Juniata	Delaware	275	32	24
Juniata	Delaware	275	188	20
Juniata	Delaware	275	180	20
Juniata	Monroe	194	743	20
Juniata	Fayette	194	440	30
Juniata	Delaware	275	18	30
Lancaster	Sadsbury	215	806/25	12
Lancaster	Earl	137	1592	12
Lebanon	Union	140	225	5
Lebanon	South Londonderry	280	558	24
Lebanon	South Annville	280	358	8
Lebanon	East Hanover	140	930	16
Lebanon	Bethel	141	1116	10
Lebanon	Bethel	141	1081/10	12
Lebanon	Bethel	140	1059	12
Perry	Carroll	40	532	24
Snyder	Washington	149	1530	12
Snyder	Perry	195	2293	12
Snyder	Spring	28	521	12
Snyder	Beaver	28	426	12
Snyder	Beaver	28	497	12
Snyder	Washington	194	1564	16
Snyder	Washington	194	1554	16
Snyder	Washington	194	1607	8
Snyder	Washington	194	1642	8

Plans and specifications will be furnished upon application to the State Highway Department, Harrisburg, Pa. They can also be seen at the office of the State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER.
State Highway Commissioner

My Specialty Is—

Good service in securing contract bonds and contractors' insurance for contractors whose record will stand inspection. Swart Service increases your standing and prestige with the surety companies. It does.

Swart Service Really Serves

TRY ME OUT

HARMON V. SWART
19 Liberty Street, New York

SUB-GRADING CONTRACTS DESIRED

Our equipment consists of the following: 3—No. 3 Keystone Excavators: 1—No. 6 Keystone Excavator, Koppel Cars, Track, Plymouth Locomotives and team outfit.

DANIEL J. LYNCH CO., Inc.
201-2 Colonial Trust Bldg., Philadelphia, Pa.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids.

LOUIS C. ANDREW,
Clerk of the Board of Public Works
of the City of Elmira, N. Y.

Bids: June 20.

Highway Work

DEPARTMENT OF PUBLIC WORKS

Manchester, N. H.

Sealed proposals for paving certain highways will be received at the office of the Department of Public Works, City Hall, Manchester, N. H., until 2 o'clock P.M., June 20, 1919, and at that time and place all proposals will be publicly opened and read and no proposal will be received after that time.

DESCRIPTION OF WORK

Proposals are hereby called for on sheet asphalt, Topeka or bitulithic surface laid on concrete or broken stone foundation, including all excavation, grading, incidental work, etc., on the following highways together with the approximate amount to be expended and not to be exceeded on the several locations.

Elm St., between Orange St. and Webster St.	$28,787.59
Bridge St., between Belmont St. and Highland St.	$17,635.18
Stark St., between Elm St. and Canal St.	$13,153.69
Cedar St., between Elm St. and Pine St. and Birch St., between Lowell St. and Bridge St.	$14,953.92
Spruce St., between Union St. and Maple St. and Beech Street., between Spruce St. and Auburn St.	$14,932.61
Second St., between Granite St. and Cleveland St.	$15,291.80
South Main St., A St. to Bedford Line	$11,545.84

All proposals shall be submitted on blank forms which may be obtained at the office of the Department of Public Works. Each proposal shall be accompanied by a certified check of a responsible bank or trust company for Seventy-five hundred $(7500) Dollars payable to the City Treasurer of the City of Manchester, N. H., said check to be returned to the bidder unless he fails to execute the contract should it be awarded to him.

Information and specifications may be had upon application at the office of the Department, plans and profiles may be seen at the office of the City Engineer.

A bond will be required for the faithful performance of the contract in a sum to be fixed by the Director after the bids are opened, said sum to be approximately one-third (⅓) of the estimated amount of the contract, the sureties to be satisfactory to the Commissioners of Public Works.

The contractor to whom the contract may be awarded shall appear at the office of the Department of Public Works with the surety offered by him within three (3) days after the awarding of the contract, and execute the same and in case of failure or neglect to do so, he will be considered as having abandoned the same and shall forfeit the check accompanying his proposal.

The Director of the Department of Public Works expressly reserved the right to reject any or all proposals.

DEPARTMENT OF PUBLIC WORKS,
SAMUEL J. LORD, Director.

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 2, Cleveland County, Arkansas, at the office of the State Highway Dept., Little Rock, Ark., up to 4 o'clock P.M., on June 26th, 1919, for the construction of 10½ miles of road. Bids are asked on Clearing and Grubbing, Culverts, Bridges and Grading, only, at this time.

The approximate quantities are as follows:

28	acres Clearing and Grubbing.
4	miles Fence Moving.
35,000	cu.yds. Earth Excavation.
1.5	miles grading machine work.
216	cu.yds. Class A concrete.
119	" " B concrete.
504	lin.ft. Concrete or Corr. Iron Pipe, 18 inch.
622	lin.ft. Concrete or Corr. Iron Pipe, 24 inch.
3	40 ft. Steel Truss spans erected.
1	60 ft. " " " "
1	80 ft. " " " "
260	lin.ft. Wooden Pile Bridges.

Separate bids may be submitted for any one or all of the following items:

Concrete or Corrugated Iron Pipe, Concrete in culverts and bridge abutments, Steel bridges erected, Wooden bridges erected.

Plans and specifications are on file with the State Highway Dept., Little Rock, Ark., and copies of same, together with proposal forms may be obtained from the District engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00, of which amount $8 will be refunded upon their erturn.

A certified check to the amount of 5% of the amount bid msut accompany each proposal, check to be made to the order of the President of the Board of Commissioners of said district.

Successful bidders will be required to furnish a construction bond to the amount of 25% of their contract price.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 2,
Cleveland County, Arkansas.
By M. F. STANFIELD, President.

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor, width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: June 23.

Street Improvement

Jackson, Tenn.

Sealed proposals will be received by the undersigned until 10 o'clock A.M., on June 23rd, 1919, for improving certain streets and alleys in the city of Jackson, Tennessee, in accordance with ordinances Nos. 48 to 62 inclusive, all in accordance with plans, profiles and specifications prepared and on file in the Office of the City Commissioners approximating 52,000 square yards of Street Asphalt on a Concrete Base, 3350 Square Yards of Sheet Asphalt on a Macadam Base, 5300 Square Yards of Concrete Pavement, 1200 Lineal Feet of Concrete Curb, 3300 Square Yards of Brick Gutter, 6000 Lineal Feet of 12" to 24" Vitrified Pipe, and necessary inlets and manholes. Each bid must be accompanied by a certified check made payable to the City Recorder of Jackson, Tenn., for not less than Ten (10) per cent. of the cost of the entire work computed on the basis of the bid submitted. The right is reserved to reject any or all bids. Specifications and additional information can be obtained at the office of the City Commissioners, Jackson, Tenn. At 10 o'clock on said date, June 23, 1919, all bids will be opened and publicly read.

J. T. McCUTCHEN, Commissioner of Street.s

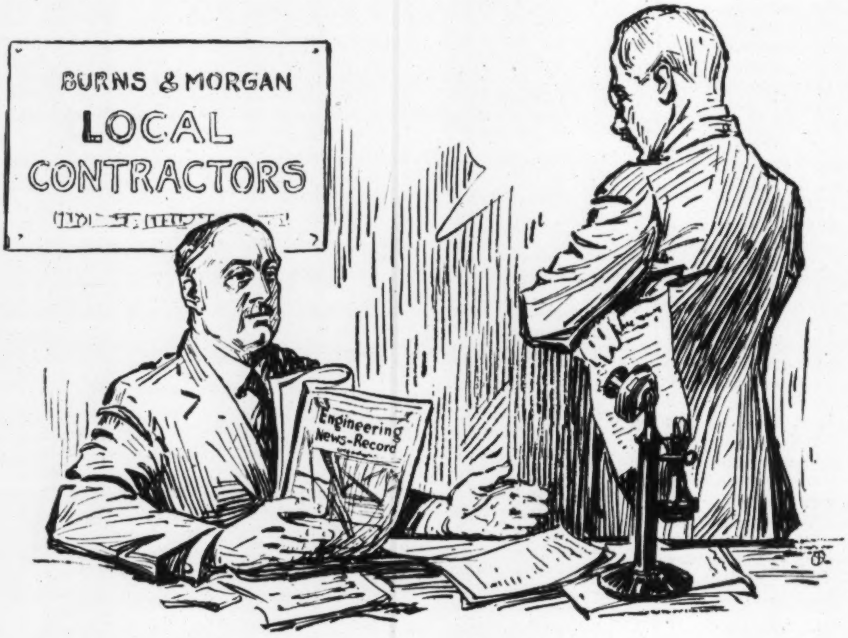
Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County, for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used. haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.



We'll have to figure closer, Jim—
they're advertising that contract in the

Engineering News-Record

Local bidders figure closer when they find that the letting of a contract is being advertised in the ENGINEERING NEWS-RECORD. Through its 33,000 circulation, ENGINEERING NEWS-RECORD reaches the worthwhile contractors all over the country. Numberless municipalities have saved thousands of dollars on contracts through very small investments in NEWS-RECORD Official Proposal advertising. The publication of such advertising is an official notice that bids are wanted from both local and OTHER contractors. Contractors who bid on work outside of their own city look for such contracts in the NEWS-RECORD, because they know it to be

For Official Proposals

The One Dominant Paper

OFFICIAL PROPOSALS

Bids: July 1.

Grading and Draining Road

Lewisburg, W. Va.

Until noon, July 1st, sealed bids will be received by the County Court of Greenbrier County, West Virginia, for grading and draining proposed road leading from Ronceverte, west to the Fort Spring District line, or so much thereof as funds available will permit. $70,000 has been appropriated.

The bulk of this work is on a new location with which traffic will not interfere.

Plans and specifications will be supplied to applicants sufficiently interested to look over the work.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER, County Engineer.

Bids: July 2.

School Equipment

Fargo, N. D.

Sealed proposals will be received by the Board of Education, Fargo, N. D., for the equipment of the New Combination School, covering the following lettings:

1. Cabinet work.
2. Miscellaneous furniture.
3. Metal book stacks.
4. Metal locks.
5. Gymnasium equipment.
6. Kitchen equipment.
7. Pupils' desks and opera chairs.
8. Cork carpet.
9. Art drawing tables.
10. Window shades.
11. Printing equipment.
12. Wood working equipment.
13. Ash hoist.
14. Machine shop equipment.
15. Traverse curtains.
16. Stage scenery.
17. Clocks, bells, telephones and fire alarm system.
18. Electric light fixtures.

Proposals to be delivered to E. G. Guthrie, Secretary, Board of Education, Fargo, N. D., on or before 3 P.M., July 2, 1919.

Plans and specifications may be secured by application to Secretary Guthrie or Wm. B. Ittner, Architect, Board of Education Bldg., St. Louis, Mo.

Bids: June 25.

Concrete Pavement

Greenwich, Conn.

Sealed proposals, for about 15,000 square yards of concrete pavement, will be received by the Highway Commission of the Town of Greenwich, Conn., at the office of the Superintendent of Highways in the Town Hall, until 3 P.M., on Wednesday, June 25, 1919.

Plans and specifications can be seen and blank forms of proposal obtained at the office of the Engineer, Room 5, No. 96 Greenwich Avenue, Greenwich, Conn. The right is reserved to reject all bids.

LUKE VINCENT LOCKWOOD,
Chairman.
WILLIAM F. DECKER
ROBERT L. CHAMBERLAIN
F. HARRIS NICHOLS
JOHN MAHER
NATHANIEL A. KNAPP
Highway Commission.

Bids: July 1.

Pumping Plants, Transformers, Re-formers, Etc.

Stockholm, Sweden.

For account of the City Water Works of Stockholm, Sweden, the following estimates are asked for:

A high pressure pumping plant:
Capacity, 600 liters per second, with direct coupled steam turbine.
A high pressure pumping plant:
Capacity, 600 liters per second, with direct coupled electric motor.
A filter pumping plant:
Capacity, 400 liters per second, with direct coupled electric motor.
A speedy firing steam boiler.
A transformer plant.
A re-former.
Electric wires, conduits for water and steam, etc.

Estimates to be furnished at the Office of Stockholms Vattenledningsverk, Torsgatan 30, Stockholm, on Tuesday, July 1, 1919, at 2 P.M., at the latest.

Particulars necessary for delivering estimates will be given at the address aforesaid, where necessary drawings, programs and formula for contracts also are handed out, against the deposit Sw. Krs. 25, which sum will be refunded on delivery of estimate and restitution of documents in a sound condition.

Bids: June 23.

Auto Sprinkler and Oiler

Woonsocket, R. I.

Sealed proposals will be received by th Aldermanic Committee on Streets a Bridges of the City of Woonsocket, R. at the Aldermen's Chambers, City H Woonsocket, R. I., until 8.15 Monday, J 23, 1919, at which time and place [illegible] posals will be publicly opened and r Said Committee will be in session at 8 on said date for the purpose of recei proposals for the following.

For a Combination Auto Sprinkler [illegible] Oiler. Bidders to furnish their ow[illegible] spe fications. Certified check for $1[illegible].00 mus accompany proposal, as suret[illegible] that if proposal is accepted a co[illegible]t will be entered into.

The right is hereb reserved to reject any or all bids as the interest of the City may appear.

Aldermanic Committee on Streets and Bridges.

ADRIAN H. SYLVESTRE,
Chairman.
JAMES F. CARROLL
ANTHONY BELANGER
FRANK H. MILLS,
City Engineer.

POSITIONS VACANT

C. E. DRAFTSMAN wanted, highway and drainage a specialty. Furnish reference and sample of lettering. Good opportunity for right man. State salary expected. Jno. M. Harbert, Eng. Co., Indianola, Miss.

COMPETENT structural engineer wanted for position of contracting engineer with old established company doing principally industrial building and railroad work. Must be a man of good address who has had some experience in estimating and selling. Location Middle West. Give full details of experience, references and salary expected. Address P-615, Eng. News-Record, Chicago.

POSITIONS VACANT

DRAFTSMEN wanted for the Panama Canal—One electrical draftsman, experienced in underground power distribution and building illumination, $168 month to $179 month. Three hull and marine machinery draftsmen, $168 to $231 month. One draftsman capable of handling municipal engineering work, $189 month. Must be thoroughly experienced in special lines above indicated, American citizens, under 50 years of age, in good health. Free steamship transportation from New York or New Orleans, salary beginning date of sailing. Write Chief of Office, The Panama Canal, Washington, D. C.

CONCRETE DESIGNER wanted by reinforced concrete builders in Rocky Mountains. The applicant must have a solid experience as a concrete designer, and will have to work out independently intricate problems, such as rigid frames, long span arches, etc. First-class opportunity for a good man. P-690, San Francisco, Calif.

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28 acres Clearing and Grubbing.
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1.5 miles grading machine work.
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ESTIMATOR wanted for structural and miscellaneous iron and one for plate work; must be qualified to take items from plans. Write, giving age, experience in detail, references and salary expected. Mosher Mfg. Co., Dallas, Tex.

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Large company located in Middle West, engineering and constructing industrial buildings needs men who can produce results in following capacities:

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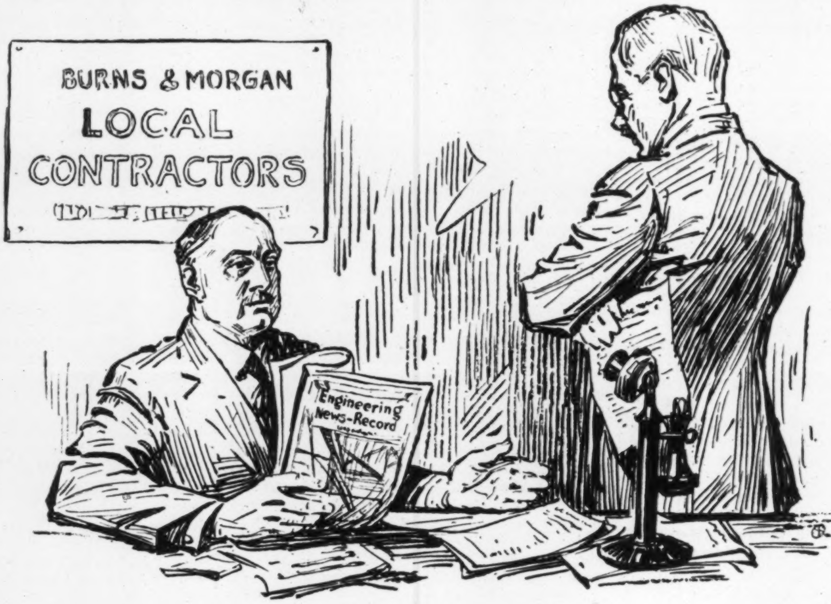
P 717 Eng. News-Record, 1570 Old Colony Bldg., Chicago, Ill.



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Aldermanic Committee on Streets and Bridges.

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H. R. CARPENTER
Chief Engineer
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P 717 Eng. News-Record, 1570 Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

ESTIMATOR and draftsman on reinforced concrete work wanted in steel warehouse in Philadelphia. Apply in writing, stating experience and salary wanted. Lewis N. Lukens, 2215 Race St., Philadelphia.

FOREMAN to erect structural steel work. Only those with experience should apply. State age, references and salary. P-720, Eng. News-Record.

HEATING, ventilating and electrical draftsmen wanted by a consulting engineer in New York City. State in full experience and salary expected. P-689, Eng. News-Record.

EXPERIENCED designer and estimator wanted of all classes of railway freight cars. Give full details in first letter as to age, education, references, salary expected and earliest date available. P-712, Eng. News-Record, Philadelphia.

EXPERIENCED foreman wanted for concrete road work. Must be A-1 man. [illegible] experience and salary expected. [illegible] Pipe & Construction Co., [illegible]

[illegible] ted on tank [illegible]

[illegible] Newport News, Virginia.

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

LEVEL man and transitmen wanted on highway work; state age, experience, education, nationality and salary desired; no replies to rejected applicants. Morgan Engineering Co., 622 Goodwyn Institute, Memphis, Tenn.

ONE structural steel and highway bridge detailer wanted and one first-class checker and designer on the above class of work. Location, Ohio. P-706, Eng. News-Record, Leader-News Bldg., Cleveland.

RAILROAD draftsman, technically educated preferred, for buildings, track and yard layouts, general railroad drafting and estimating. Give details of education, experience, age. Salary, $150 to $180. P-707, Eng. News-Record, Philadelphia.

EMPLOYERS

Send us your inquiries for men of technical training and experience. We are obtaining employment for soldiers, sailors and marines released from the service.
Re-Employment Bureau of New York City for Soldiers, Sailors and Marines, 505 Pearl Street, north of Municipal Building, Professional Section, Worth 9250.

Chief Engineer

thoroughly familiar with the Design and Manufacture of Dredges, Excavators, Derricks, Cranes, and similar work, wanted for a large Eastern company. Salary $5000 to $7000 per year. Write fully, stating experience in detail.
We have over 200 other *very good positions open for*

Engineers, Designers and Draftsmen

H. H. HARRISON & CO.
Confidential Employment Service
Association Building, Chicago, Ill.

POSITIONS VACANT

RAILROAD draftsman, expert on track layouts, yard design and estimating required. Give details as to experience, age, etc. Salary, $180 per month. P-595, Eng. News-Record, Leader-News Bldg., Cleveland.

STRUCTURAL engineer, capable of taking entire charge of structural drafting room in Central West. An exceptional opportunity for the right man. P-613, Eng. News-Record, Philadelphia.

STRUCTURAL steel detailers wanted; reply by mail, stating age, nationality, experience and salary expected. The George A. Just Company, Long Island City.

STRUCTURAL steel draftsmen wanted, capable of making designs and calculations for railroad structures. Applicants must state in full technical college education, experience, age, nationality, salary expected and when available. Address P-721, Eng. News-Record, Philadelphia.

TWO good engineers wanted at once with experience in municipal work and highway work; 25 to 30 years of age; preferably unmarried. Address P-705, Eng. News-Record, Philadelphia.

POSITIONS VACANT

SUPERINTENDENTS wanted for country elevator construction and reinforced concrete. Men familiar with draw-form work and who can handle job from start to finish. Apply, giving references and salary expected, to Simon Construction Company, Columbia, Mo.

TECHNICAL graduate draftsman wanted; experience not necessary, but good mathematical ability with speed and accuracy and sterling qualities of manhood essential. Permanent and every opportunity for advancement. Give complete information and references. Canadian preferred. Canadian Des Moines Steel Co., Ltd., Chatham, Ontario.

TRACERS, draftsmen and computers on highway and reclamation work. Men with highway experience preferred. State age, experience, education, nationality, and salary desired, in the order named. Give two references. Typewrite applications where possible. Tracers must submit sample of work showing lettering. No replies to rejected applicants. Morgan Engineering Company, 622 Goodwyn Institute, Memphis, Tennessee.

DO YOU LIVE IN

Carson City, Nev.	**Miami, Fla.**
Erie, Pa.	**Montgomery, Ala.**
El Paso, Tex.	**Pierre, So. Dak.**
Galveston, Tex.	**Sacramento, Calif.**
Halifax, N. S.	**San Francisco, Calif.**
Houston, Tex.	**Santa Fe, N. M.**
Jackson, Miss.	**Winnipeg, Man.**
Keokuk, Ia.	**Worcester, Mass.**

If so, you can *make some money* by devoting an hour or so *during business hours,* to calling on engineers, contractors, etc., gathering construction reports for the construction news section of Engineering News-Record.

Write, telling all about your present work and how much time you have available, to

L. V. FLETCHER, Engineering News-Record
10th Ave. at 36th St., New York

STUDY BY MAIL

Reinforced Concrete Engineering
Structural Steel Designing
Structural Drafting

Are you able to design and estimate the cost of any and all types of structures in Reinforced Concrete, Steel or Wood? And are your designs safe, economical and up to the minute? If not, WHY NOT?

Special courses of HOME STUDY have been arranged by well known engineer with 30 years' experience in this country and abroad; they are meeting a long felt want.

Men with a High School education are as qualified to take up these courses of work as are technical graduates. Ideal work for the man who wants to "brush up" after being away.

These are courses in experience. You learn to do the work by *actually doing it.* A chance for the ambitious man to get ahead.

Descriptive literature sent free upon request.
Write for it today.

M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 15.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, June 16th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until 12 o'clock noon of Tuesday, July 15, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 43

For constructing a Barge Canal terminal and a frame freighthouse at Flushing, Borough of Queens, New York City.

Contract plans, sheets 1 to 10, inclusive.

—2—

TERMINAL CONTRACT NO. 112.

For furnishing, delivering and testing industrial freight-handling trailers and stevedore freight-handling trucks for Barge Canal terminals in New York City:

Contract plans, sheets 1 and 2.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at office of State Engineer, Hall of Records, New York City.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

E. S. WALSH,
Superintendent of Public Works.

Special price for Official Proposals, $3.60 an inch — Copy for Official Proposals can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, 725 Central Bldg., Los Angeles, Cal. Sealed proposals for constructing silt diversion works near Los Angeles and Long Beach Harbors, California, will be received here until 11 A.M., July 18, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 2, Cleveland County, Arkansas, at the office of the State Highway Dept., Little Rock, Ark., up to 4 o'clock P.M., on June 26th, 1919, for the construction of 10½ miles of road. Bids are asked on Clearing and Grubbing, Culverts, Bridges and Grading, only, at this time.

The approximate quantities are as follows:

28	acres Clearing and Grubbing.
4	miles Fence Moving.
35,000	cu.yds. Earth Excavation.
1.5	miles grading machine work.
216	cu.yds. Class A concrete.
119	" " B concrete.
504	lin.ft. Concrete or Corr. Iron Pipe, 18 inch.
622	lin.ft. Concrete or Corr. Iron Pipe, 24 inch.
3	40 ft. Steel Truss spans erected.
1	60 ft. " " " "
1	80 ft. " " " "
260	lin.ft. Wooden Pile Bridges.

Separate bids may be submitted for any one or all of the following items:

Concrete or Corrugated Iron Pipe, Concrete in culverts and bridge abutments, Steel bridges erected, Wooden bridges erected.

Plans and specifications are on file with the State Highway Dept., Little Rock, Ark., and copies of same, together with proposal forms may be obtained from the District engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00, of which amount $8 will be refunded upon their erturn.

A certified check to the amount of 5% of the amount bid msut accompany each proposal, check to be made to the order of the President of the Board of Commissioners of said district.

Successful bidders will be required to furnish a construction bond to the amount of 25% of their contract price.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 2,
Cleveland County, Arkansas.
By M. F. STANFIELD, **President.**

Bids: July 1.

Grading and Draining Road

Lewisburg, W. Va.

Until noon, July 1st, sealed bids will be received by the County Court of Greenbrier County, West Virginia, for grading and draining proposed road leading from Ronceverte, west to the Fort Spring District line, or so much thereof as funds available will permit. $70,000 has been appropriated.

The bulk of this work is on a new location with which traffic will not interfere.

Plans and specifications will be supplied to applicants sufficiently interested to look over the work.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

Bids: July 9.

Paving

Halifax, N. S.

Sealed tenders, addressed to His Worship the Mayor and endorsed "Tender for Paving" will be received at the office of the Clerk of Works, City Hall, Halifax, Nova Scotia, until 10 o'clock a.m., on Wednesday, July 9th, 1919, for paving certain streets in the City of Halifax.

The approximate quantities are:

23,000 sq.yds. of granite block pavement on concrete base; 133,000 sq.yds. of bituminous pavement on concrete base; 30,000 sq. yds. of bituminous pavement on macadam base; 33,000 lineal feet of concrete curb and gutter.

Each tender must be accompanied by a certified cheque payable in Halifax to the City Treasurer for the amount set forth in the forms of tender for each street, which cheque will be forfeited to the City if the bidder fails to execute the contract if awarded to him, within five days of the notice of such award.

The successful bidder will be required to furnish a bond to the amount of 25% of the amount of the contract as estimated by the City Engineer for the faithful performance of the contract.

Plans and specifications may be seen and forms of tender and all other information obtained at the City Engineer's office, City Hall, Halifax.

The City reserves the right to reject any or all tenders or to accept any tender which it deems best.

F. W. W. DOANE,
City Engineer.

Halifax, Nova Scotia.
June 18th, 1919.

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids.

LOUIS C. ANDREW,
of the City of Elmira, N. Y.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been received therefore on June 2, 1919, and rejected. A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: July 8.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., July 8, 1919, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of the following pavements: 45,051 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick on a Concrete Foundation or Reinforced Concrete in Bradford County; 14,883 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Bucks County; 41,673 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Butler County; 12,355 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 30,995 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Clearfield County; 2903 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Clinton County; 24,900 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Delaware County; 30,197 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Fayette County; 46,297 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Lehigh County; 22,705 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Luzerne County; 80,363 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 30,335 linear feet of Reinforced Concrete in Susquehanna County; 17,412 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick or Reinforced Concrete in Sullivan County; 28,831 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete in Tioga County; 32,047 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Westmoreland County; 71,063 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lackawanna and Wyoming Counties, and 32,744 linear feet of Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER
State Highway Commissioner

Bids: July 1

Jail Construction, Etc.

Toms River, N. J.

For the erection and completion of alterations and additions to jail and new wardens' house at Toms River, Ocean County, N. J. will be received on July 1st, 1919, at 12 o'clock noon and then publicly opened, each "bid" to be accompanied with a certified check or bid bond for $1000 to guarantee faithful execution of contract. All "bids" to be addressed to E. R. Yoder, chairman of building committee of the Ocean County Board of Freeholders. Plans are on file at the office of Thomas Stephen, architect, Room 304, Temple Building, Camden, N. J.

Rights reserved to reject any or all "bids."

Bids: June 23.

Well for Water Supply

Hoffman Island, N. Y.

Sealed proposals for new well for water supply, Quarantine Station, Hoffman Island, N. Y., will be received by Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y., until 12 o clock noon, on Monday, June 23, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the state architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specification No. 3269. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y.; at the New York office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated June 9, 1919.

Bids: July 2.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 1, Section No. 3 (Robbinsville to Windsor), Mercer County, concrete surface, estimated 26,843 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 2 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10), to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: June 28.

Highway Construction

ERIE COUNTY, PENNSYLVANIA

North East, Pa.

Sealed proposals will be received by the North East Township Road Supervisors, at their office at North East, Pa., until 10 A.M., June 28, 1919, when bids will be opened and scheduled, and contracts awarded as soon thereafter as possible, for the construction of approximately 8000 ft. of reinforced concrete pavement, in North East Township, on the road leading from North East Boro. to Findley Lake. Construction to be according to Pennsylvania State specifications. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application at the office of Hill & Hill, Engineers, Marine Bank Bldg., Erie, Pa., or at their North East, (Pa.) office. They also can be seen at either of the above offices. The right is reserved to reject any or all bids and to waive defects in forms.

NORTH EAST TOWNSHIP,
Road Supervisors.

Bids: June 25.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 10 o'clock A.M., June 25, 1919, for the road work designated below. All bids shall be on regular forms furnished by the Department.

Except as noted below, alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

Cement will be furnished for all sections by the State or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer having the plans.

Route	County	Sec.	Width, Feet	Approximate Length, Feet
Springfield, East St. Louis	Sangamon	G	16 and 18	26,205
Springfield, East St. Louis	Sangamon	H	16 and 18	29,982
Springfield, East St. Louis	Sangamon	C	16	30,011
Springfield, East St. Louis	Sangamon	P-15d	16	24,508
Springfield, East St. Louis	Macoupin	D	16	34,940
Springfield, East St. Louis	Macoupin	L-15d	16	9,525
Springfield, East St. Louis	Macoupin	E	16	33,040
Springfield, East St. Louis	Macoupin	F	16	29,109
Henry-Morris	Marshall	A1	16	22,714 8
Henry-Morris	Marshall	A2	16	12,598 7

Plans for all the work may be examined in the office of the Division of Highways, Springfield, Illinois. Plans for the sections in the counties of Sangamon and Macoupin may be examined in the office of Fred Tarrant, District Engineer, 506½ East Monroe Street, Springfield, Illinois. Plans for the section in Marshall County may be examined in the office of A. H. Hunter, District Engineer, 302 Apollo Theatre Bldg., Peoria, Illinois.

By order of The Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Room 424 Federal Bldg., Milwaukee, Wis., 2 o'clock p.m., June 23, 1919, for 4 skeleton 31 ft. steel towers, each with attached steel tank house. Proposal No. 6628. Information upon application to the above Supt.

Bids: July 2.

Bridge Construction

Pocahontas, Iowa

Bids will be received until 1 P.M., July 2nd, 1919, at office of County Auditor, by Board of Supervisors, Pocahontas County, for the construction of bridges as follows:

34 x 25 ft. concrete deck girder, 17 ft. concrete abutments
24 x 20 ft. skew concrete slab, 12 ft. concrete abutments
24 x 30 ft. skew concrete slab, 13 ft. concrete abutments
16 x 20 ft. concrete slab, 14 ft. concrete abutments
32 x 25 ft. I-beam with concrete floor and handrails, 14 ft. concrete abutments

Also the following light steel pony trusses to be moved and placed on pile abutments: One 55 x 16 ft.; two 45 x 16 ft.; one 40 x 16 ft.; one 35 x 16 ft.

Plans for above may be obtained from county engineer by deposit of $10, to be refunded on return of same.

Bids: June 24.

Concrete Bridge Construction

Menasha, Wisconsin.

Sealed proposals will be received by the Common Council of the city of Menasha, Wisconsin, until 7 P.M., on June 24th, 1919, for the construction of a reinforced concrete arch bridge over Fox River at Washington Street. The proposed bridge consists of seven arches, the total length being 430 ft. and the width 59 feet.

Plans, specifications, form of contract and bond will be sent to all prospective bidders making application to Parsons & Obert, Consulting Engineers, 627 M. & M. Bank Building, Milwaukee, Wisconsin, enclosing $2.00 to cover expense of blue prints.

Plans are open for inspection at above office and are on file in the office of the City Clerk, Menasha, Wisconsin.

Published by authority of the Common Council of the city of Menasha, Wisconsin.

S. S. LITTLE, City Clerk.

OFFICIAL PROPOSALS

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 29, 1919.

Bids: July 9.

Classification and Appraisal of Lands

Shelby, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana.

H. E. MOODY, Clerk.

Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used, haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

OFFICIAL PROPOSALS

Bids: June 23.

Waterworks Improvements

Lusk, Wyoming, June 3, 1919.

Sealed bids for improvements and extensions to the Municipal Water System will be received by the Town Council of the Town of Lusk, Wyoming, up until 8 o'clock P.M., June 23, 1919, and then and there publicly opened and read.

The plan embraces the furnishing and installing of approximately 12,850 ft. of four inch, 1700 ft. of six inch, 3300 ft. of eight inch, 1330 ft. of ten inch and 4950 ft. of twelve inch cast iron pipe Class "B" American Waterworks Standard, according to plans and specifications on file in the offices, or the Town Engineer. Of the twelve inch pipe, 1750 ft. may be replaced by fourteen inch.

Hydrants and valves will be furnished by the Town, separate bids on which will be received at the same time as the foregoing. Forty-five fire hydrants and sixty valves, four to fourteen inch, with valve boxes, American Waterworks Standards will be required.

Bids for the principal work must be accompanied by certified check for five thousand dollars ($5000), made payable to the Town Treasurer, without recourse. Bids for hydrants and valves must be accompanied by certified check for at least ten per cent. of the gross bid.

Plans, specifications, proposal forms, form of contract and form of bond can be procured from R. F. Gray, Town Engineer, upon deposit of ten dollars ($10.00) which will be refunded upon their return in good condition not later than the day after opening of bids.

The Town Council reserves the right to reject any and all bids, to waive irregularities and to award the contract as may be deemed best for the interests of the Town.

GEORGE H. HOWES,
Mayor.
D. E. GODDARD,
Clerk.
R. F. GRAY,
Engineer.

Bids: July 7.

Street Repairing

Woodstown, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council for the repair of streets in the Borough of Woodstown, with a seal coat surface upon a repaired bituminous concrete foundation; estimated amount of surface pavement required is 27,475 square yards; at Council Chamber, Woodstown, N. J., on Monday, July 7th, 1919, at 7.30 P.M.

Drawings, specifications and further information in regard to bids may be obtained of Keasbey & Sparks, Engineers, Mecum Bldg., Salem, N. J.

WALTER SYLVESTER, Clerk.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

OFFICIAL PROPOSALS

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor, width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: July 1.

Street Improvement

HACKENSACK AVENUE IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Hackensack Avenue in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Date June 12, 1919.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

OFFICIAL PROPOSALS

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

OFFICE OF THE COMMISSIONERS, D. C.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the Luzon Ave. Trunk Sewer, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

OFFICIAL PROPOSALS

Bids: June 26.

24 Inch Out-Fall Sewer

Greenwich, Conn.

Pursuant to a resolution adopted June 4, 1919, the Joint Sewerage Commission of the Borough of Greenwich and the Town of Greenwich, Connecticut, will receive at its meeting to be held at the Town Hall, Greenwich, Connecticut, on Thursday evening, June 26, 1919, at eight (8) o'clock P.M., sealed proposals for furnishing all materials and doing all work required to complete the construction of a new 24 in. Out-Fall Sewer from the junction of the east side and west side trunk sewers to the Joint Sewerage Disposal Plant upon Grass Island for the Borough of Greenwich, and Sewer District No. 6, of the Town of Greenwich, Connecticut, including the necessary piping, piling, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Joint Sewerage Commissioners, Room No. 2, Town Building, Greenwich, Connecticut, or at the Office of Mr. S. E. Minor, Civil Engineer, No. 96 Greenwich Avenue, Greenwich, Connecticut. Plans may be taken away upon the payment of ten ($10) dollars, the same to be refunded if plans are returned within fourteen (14) days in good condition.

Each bid must be accompanied by a certified check on a solvent bank for one thousand ($1000) dollars.

The said Joint Sewerage Commissioners reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which it deems to be most favorable to the interest of the Borough and Town.

HARRY C. FROST, Chairman.
JOSEPH P. CROSBY, Warden.
ALBERT S. MEAD, Clerk.

Bids: July 8.

Highway Construction

LENOIR COUNTY

Kinston, North Carolina.

Sealed bids for 3282 Cubic Yards Excavation, 18,820 square yards Concrete sheet Asphalt or Warrenite Pavement, 4356 pounds Reinforcement Steel, 242 Cubic Yards Box Culvert Concrete, on the Central Highway, in Lenoir County, North Carolina, will be received by Harvey C. Hines, Secretary at Kinston, North Carolina, at 2:30 o'clock P.M., on the eighth da yof July, 1919, opened and read publicly.

No bid will be considered unless accompanied by certified check, as specified in "Instructions to Bidders," for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the office of the State Highway Commission, at Raleigh, North Carolina, upon the payment of five dollars.

The right is reserved to reject ayn or all proposals or to accept the proposal or proposals deemed best for the State or County.

By order of the Highway Commission of Lenoir County.

This the 12th day of June, 1919.

E. V. WEBB,
Chairman of Highway Commission
of Lenoir County.
HARVEY C. HINES,
Secretary.

OFFICIAL PROPOSALS

Bids: June 23.

Street Paving

Coatesville, Penn.

Sealed proposals addressed to the City Clerk of the City of Coatesville, Penn., and endorsed, "Bids for Paving Streets," will be received by the City Council at the City Hall, Coatesville, Penn., up to eight o'clock P.M., on Monday, June 23, 1919, and there publicly opened and read.

The work to be done consists of approximately:

28,625	sq.yd. of bituminous pavement on a cement concrete base.
1,375	sq.yd. of bituminous pavement on existing base.
4,500	sq.yd. of vitrified brick pavement to be relaid.
4,300	sq.yd. of vitrified brick pavement or stone block pavement along tracks.
3,000	lin.ft. cement concrete curb.

Bids will be received on sheet asphalt, asphaltic concrete, Warrenite, Filbertine, Amiesite and Bito-slag.

Each proposal must be accompanied by a certified check in an amount equal to five (5) per cent. of the highest amount bid, made payable to the Treasurer of the City of Coatesville, Pa.

A surety bond in an amount equal to fifty (50) per cent. of the total amount of the contract will be required from the successful bidder.

Plans and specifications are on file in the office of the City Engineer at Coatesville and copies of the same may be obtained by application and by the deposit of five (5) dollars which deposit will be returned if plans are returned in good condition within ten days after the opening of bids.

The City Council reserves the right to reject any or all bids or to award the contract as may be deemed for the best interests of the City.

The contractor must comply with all the requirements of the Workmen's Compensation Act of the State of Pennsylvania.

WILLIAM S. G. COOK,
City Clerk,
CHAS. A. NILES,
City Engineer.

Bids: July 1.

Street Improvement

POPLAR STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Poplar Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

U. S. ENGINEER OFFICE, Pittsburgh, Pa.—Sealed proposals will be received at the U. S. Engineer Office, Pittsburgh, Pa., until 12 noon (Eastern time), July 7, 1919, and then opened, for constructing locks and fixed dams in the Ohio River, near Emsworth, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 1, Jefferson and Lincoln Counties, Arkansas, at the Office of the State Highway Department, Little Rock, Arkansas, up to 2 o'clock P.M., on June 26th, 1919, and there will be publicly opened and read, for the construction of 19 miles of gravel roads, 14 feet wide.

The approximate quantities are as follows:

47	acres Clearing & Grubbing
13	miles Fence Moving
85,600	cu.yds. earth excavation
1.45	miles Grading Machine Work (on old road)
696	lin.ft. 16" Reinforced concrete pipe, laid
168	lin.ft. 20" Reinforced concrete pipe, laid
392	lin.ft. 24" Reinforced concrete pipe, laid
72	lin.ft. 30" Reinforced concrete pipe, laid
1,025	cu.yds. Class A concrete in culverts
392	" " B " in abutments and headwalls
80,200	lbs. Steel reinforcing bars
3	80 ft. Steel Truss spans, erected
1,655	lin.ft. wooden pile bridges
40,250	cu.yds. gravel on which the haul is as follows:
6,450	cu.yds. haul 0-1 mile
6,450	" " 1-2 miles
6,450	" " 2-3 "
6,450	" " 3-4 "
7,010	" " 4-5 "
4,040	" " 5-6 "
2,150	" " 6-7 "
2,150	" " 7-8 "

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, f.o.b. cars, Tamo or Furth, **Ark**.

Concrete in culverts, abutments and headwalls.

Steel trusses, erected.

Wooden bridges.

Gravel, f.o.b. cars, Tamo and Furth, Ark.

Plans and specifications are on file with the State Highway Department, Little Rock, Ark., and copies of same together with proposal forms can be obtained from the district engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00 of which $8.00 will be refunded on their return.

A certified check to the amount of 5% of the bid must accompany all proposals, check to be to the order of C. P. Clemmons, Sec'y of the district.

Successful bidders will be required to execute construction bond to the amount of 50% of their bids.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 1,
Jefferson & Lincoln Counties, Ark.
By E. P. LADD, President
C. P. CLEMMONS, Sec'y.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

OFFICIAL PROPOSALS

Bids: June 24.

Highway Work

PENNSYLVANIA STATE HIGHWAY
DEPARTMENT, HARRISBURG, PA.

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

Bids: July 16.

Water Mains and Appurtenances

Decorah, Iowa.

Sealed proposals will be received by the Mayor and City Council of the City of Decorah, Iowa, at 7:30 P.M., July 16, 1919, at the office of the City Clerk, in the said City, for laying approximately 11,400 lin.ft. 4 in. water main, and making necessary connections, as to valves, T's, L's and fire hydrants; also connecting with old mains where they intersect, the contractor to furnish labor, lead and oakum; bids will also be received for relaying of approximately 600 ft. of 10 in. vitrified sewer pipe.

Specifications showing schedule of streets, together with blank forms for bidders can be obtained at the office of the City Clerk, City Hall, Decorah, Iowa.

All bids must be accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workmen's Compensation Act of Iowa.

The Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interests of the city.

MARK D. WELLS,
City Clerk.

GATE-OPERATING MACHINERY.—U. S. Engineer Office, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., July 8, 1919, and then opened, for furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION
OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.89.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
ROYAL K. FULLER, Commissioner.
Secretary.

Bids: June 23.

Auto Sprinkler and Oiler

Woonsocket, R. I.

Sealed proposals will be received by the Aldermanic Committee on Streets and Bridges of the City of Woonsocket, R. I., at the Aldermen's Chambers, City Hall, Woonsocket, R. I., until 8.15 Monday, June 23, 1919, at which time and place proposals will be publicly opened and read. Said Committee will be in session at 8 P.M. on said date for the purpose of receiving proposals for the following.

For a Combination Auto Sprinkler and Oiler. Bidders to furnish their own specifications. Certified check for $100.00 must accompany proposal, as surety that if proposal is accepted a contract will be entered into.

The right is hereby reserved to reject any or all bids as the interest of the City may appear.

Aldermanic Committee on Streets and Bridges.

ADRIAN H. SYLVESTRE,
Chairman.
JAMES F. CARROLL
ANTHONY BELANGER
FRANK H. MILLS,
City Engineer.

OFFICIAL PROPOSALS

Bids: June 27.

Paving

Ilion, N. Y.

Sealed proposals for the construction of about 14,000 Square Yards of Pavement, including the necessary Curbing, Catch Basins, Tile, etc., will be received by the Board of Trustees, and the Board of Street Commissioners, at their rooms in the Village Hall on Union Street, Ilion, N. Y., until 4 p.m. Friday, June 27th, 1919. Plans may be seen and specifications obtained at the Office of J. D. Ringwood Village Engineer, in the Village Hall. Bids will be received of Brick, Bitulithic, or reinforced concrete; a certified check for $100,00 must accompany each bid. The Boards reserve the right to reject any or all bids.

EDWARD BEDFORD, President.
SANGER M. HUBBARD, Clerk.
Ilion, N. Y., June 12th, 1919.

Bids: July 2.

High School

Sterling, Illinois.

Sealed proposals will be received at the office of Carl E. Sheldon, attorney, Sterling, Illinois, for the construction of an addition to the Sterling Township High School. Estimated cost, $50,000.00 to $60,000.00. Plnas and specifications, office of Fred W. Honens, Sterling, Illinois. Certified check for 5% to accompany bid.

D. L. MILLER.
Clerk.

PROPOSAL FOR STONE.—U. S. Engineer Office, Customhouse, New Orleans, La. —Sealed proposals will be received here until 11 A.M., July 15, 1919, and then opened, for furnishing and delivering stone for Head of Passes, South Pass, and Southwest Pass, Mississippi River. Further information on application.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

Bids: June 23.

Paving

Geneva, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Geneva, N. Y., at its office in the City Hall, until 7:30 o'clock P.M., Monday, June 23, 1919, for paving High, West and Brook Streets. The work for which proposals are invited consists of the following approximate quantities:

5,400 cu.yd. of excavation.
8,750 lin.ft. of curb and gutter.
175 lin.ft. of header.
8,750 lin.ft. of 3 in. drain tile.
3,000 lin.ft. of vitrified pipe.
30 catch basins.
10,000 sq.yd. of brick, asphalt or concrete pavement.

Each proposal must be accompanied by a certified check for five (5%) per cent. of the amount of the proposal.

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Specifications and blank forms of proposals can be obtained upon application to the Board of Public Works. Plans may be seen at the office of the City Engineer.

The right is reserved to reject any or all bids.

H. K. SEYBOLT,
Superintendent.

Bids: July 9.

Highway Construction

THE STATE OF DELAWARE
Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock, P.M., July 9, 1919, and at that place and time publicly opened, for the construction of 8.27 miles of State Highway (cement concrete) in New Castle and Kent Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 15—0.42 MILES

21,500 cu.yd. grading
10 cu.yd. concrete masonry
300 pounds reinforcement
50 lin.ft. 15-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
6 bounds
1,500 tons stone for macadam
600 sq.yd. penetration macadam

CONTRACT NO. 16—4.91 MILES

7.5 acres clearing and grubbing
56,000 cu.yd. grading
1,000 cu.yd. concrete masonry
32,000 pounds reinforcement
400 lin.ft. 15-in. reinforced concrete pipe
68 lin.ft. 18-in. reinforced concrete pipe
68 lin.ft. 24-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
136 lin.ft. 36-in. reinforced concrete pipe
50 Bounds
3,000 lin.ft. piles
3,500 lin.ft. wood guard rail
100 tons stone for macadam
9,380 cu.yds. cement concrete roadway
250 Joints
2,000 sq.yds. roadway reinforcement

CONTRACT NO. 17—2.94 MILES

1.00 acre clearing and grubbing
21,000 cu.yds. grading
200 cu.yds. concrete masonry
2,000 pounds reinforcement
240 lin.ft. 15-in. reinforced concrete pipe
68 lin.ft. 18-in. reinforced concrete pipe
34 lin.ft. 24-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
34 lin.ft. 36-in. reinforced concrete pipe
30 Bounds
75 tons stone for macadam
5,600 cu.yds. cement concrete roadway
150 Joints

Bids may be submitted for Contracts No. 16 and No. 17 separately or combined.

Performance of contract shall commence within ten (10) days after execution of contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 15, No. 16 and No. 17."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after June 23, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.
CHAS. M. UPHAM,
Chief Engineer.

Bids: July 1.

Boiler Stokers, Etc.

Central Islip, N. Y.

Sealed proposals for New Boiler, Stokers, etc., and Coal and Ash Handling Equipment, New Central Heating and Lighting Plant, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specifications Nos. 3276 and 3277. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, New York; at the New York Office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 10, 1919.

OFFICIAL PROPOSALS

Bids: July 10.

Bridge Construction

COUNTY OF WARREN
OFFICE OF SUPERINTENDENT OF HIGHWAYS
WARRENSBURGH, N. Y.

Lake George, N. Y.

Pursuant to the provisions of Chapter 30, Laws of 1909, as amended, sealed proposals will be received by the undersigned at the Supervisors' rooms, Lake George, N. Y., until 2 o'clock on the 10th day of July, 1919, for the construction of the New Riverside Bridge, over the Hudson river, at Riparius, N. Y., between the towns of Chester and Johnsburgh, Warren County, N. Y.

The bridge is to be one 300 foot clear span through truss steel bridge, 19 feet clear roadway of wood block pavement; with a live road capacity of 1235 lbs. per foot of bridge or 15 ton road roller, plus twenty-five per cent. impact.

New concrete abutments and wing-walls are to be built of third class concrete.

The new bridge is to be built on the upstream or north side of the existing suspension bridge.

The estimated cost of the work is $49,750.36.

Plans, specifications, estimates and proposals, etc., may be seen at the office of the county superintendent of highways, Warrensburgh, N. Y., or copies obtained upon the deposit of $5.00 which will be retained for their return in good condition.

The especial attention of bidders is called to the information to bidders contained in the itemized proposal, general specifications, and contract agreements, etc.

Proposals must be presented in a sealed envelope endorsed on the outside, "Proposal for construction of New Riverside Bridge."

Each proposal must be accompanied by cash or certified check payable at sight to the Warren County Treasurer for an amount equal to at least five per cent. of the amount of the proposal. This cash or check will be held by the Warren County Treasurer until the contract and bond are duly executed. The successful bidder will be required to give a performance bond for fifty per cent. of the amount of the contract, such bond to be executed by a surety company to be approved by the Board of Supervisors, or a bond secured by the deposit of collateral securities to be approved by the Board of Supervisors.

The right is reserved to reject any or all bids.

BEECHER GLASSBROOK,
Clerk, Warren County Board
of Supervisors,
Lake George, N. Y.

Dated June 16, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 4, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 9, 1919, for furnishing and delivering at the site the materials required for the construction of the United States Post Office building at Montevideo, Minn., including materials for concrete, reinforced concrete, stone, granite, brick, structural terra cotta, structural steel, miscellaneous iron and steel work, composition roofing, slate roofing, sheet metal work, skylights, plastering, interior marble, sanitary slate, lumber, millwork, painting, glazing, hardware, plumbing, heating, electric work, etc. Bills of quantities and specifications may be obtained from the Custodian of the site at Montevideo, Minn., or at this office, in the discretion of the Supervising Architect. Jas. A. Wet-

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OFFICIAL PROPOSALS

Bids: July 1.

Filtration Plant

Salem, Ill.

Sealed bids will be received by the City of Salem, Illinois, until 8 o'clock P.M. July 1, 1919, for a complete Mechanical Gravity Filter Plant, consisting of two (2) Units of a capacity of 300,000 gallons each per day.

Separate bids will be received, one for the mechanical equipment and one for the concrete construction work and building. Plans and specifications are on file with the Mayor of the City of Salem and at the office of the Engineers.

Any one desiring copies of the plans and specifications may secure the same by purchasing them from the engineers for the sum of $5.00. This amount will not be refunded and covers the cost of typing and blue printing. The City Council reserves the right to reject any and all bids.

J. E. McMACKIN,
Mayor Salem, Ill.

Caldwell Engineering Co., Engineers, Jacksonville, Illinois.

Bids: July 12.

Storm Sewers and Paving

Albuquerque, New Mexico.

Sealed proposals will be received by the City Manager of Albuquerque, New Mexico, through the City Clerk, on or before two o'clock P.M., Saturday, July 12, 1919, for the construction of storm sewers and paving in the City of Albuquerque, according to plans and specifications on file in the office of the City Engineer.

The approximate quantities are as follows:

105,000 square yards of pavement.
50,000 lineal feet of curb and gutter.
12,000 square yards of alley pavement.

And Storm Sewer Construction as follows:

6,000 feet of 8 inch Clay Vitrified Sewer
500 feet of 10 inch " " "
3,400 feet of 12 inch " " "
1,100 feet of 15 inch " " "
1,400 feet of 36 inch " " "

Also neecssary manholes and catch basins.

Bids will be received on three types of paving; Bitulithic, Asphaltic Concrete, and Reinforced Cement Concrete.

A Certified Check of 10% of the bid must accompany each proposal.

Specifications will be furnished free and plans will be furnished on a deposit of $25. $10 of which will be refunded when plans are returned to the City Engineer.

This is the first of a series of contracts, over a period of the next three years, which will be let in this city.

A. R. HEBENSTREIT,
City Manager.

PROPOSALS FOR CONSTRUCTING STEEL STORAGE BUILDINGS.—Office Chief Construction Div., Washington, D. C.—Sealed proposals will be received until 11 a.m., June 28, 1919, and then opened for constructing steel buildings at Camp Normoyle, San Antonio, Tex.; Camp Holabird, Baltimore, Md., and Camp Jesup, Fort McPherson, Ga. Further information on application to Room 2-327, Bldg. C., Washington, D. C.

United States Engineer Office, Galveston, Texas.—Sealed proposals for furnishing and delivering about 19,000 cubic yards of sharp freshwater sand, about 46,000 barrels of Portland cement, about 38,000 cubic yards of broken stone and about 1,070,000 pounds of reinforcing steel, at Galveston, Texas, will be received at this office until 12 o'clock M. July 7, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 15.

Concrete Bridge Construction

FIRST AVENUE BRIDGE

Cedar Rapids, Iowa.

Sealed proposals will be received by the City Council of the City of Cedar Rapids, Iowa, at the office of the City Clerk in the City Hall until 10 o'clock., on the 15th day of July, 1919, for the following described improvement as per plans and specifications now on file in the office of the City Clerk of Cedar Rapids, Iowa.

For the complete construction of a six (6) span concrete-steel arch highway bridge, over and across the Cedar River at its intersection with First Avenue in the City of Cedar Rapids, Iowa, including all appurtenances as described and shown in the plans and specifications for said bridge, and removal of present structure and its foundations. Payment for the work will be made in cash upon monthly estiamtes of the City Engineer.

Each bid must be accompanied by a certified check, enclosed in a separate envelope, said check to be drawn on some known responsible bank and made payable to the order of the City Treasurer of the City of Cedar Rapids, in the sum of Ten Thousand Dollars ($10,000). Such check must not contain any conditions, either in the body of the check or endorsement thereon. All envelopes must be addressed to the City Clerk and endorsed with the name of the bidder, and the improvement said check and proposals are for. Proposals must be submitted in forms as shown by specifications. Certified checks accomapnying proposals will be returned to the unsuccessful bidders, and also to the bidder to whom the contract is awarded, when he shall have entered into contract in the form prescribed, and given bond in sum required.

Bidders must submit, in the same envelope containing certified check, detailed evidence showing that they have a competent organization which has constructed work similar in character; that they have the necessary equipment available to prosecute the work with diligence and complete this improvement in a satisfactory manner. The evidence must also enumerate similar work constructed by bidder, and name of the owner or representatives of the owner who can give information and verification.

Copies of plans and specifications may be obtained from Marsh Engineering Company, consulting Engineers, Des Moines, Iowa, upon receipt of check for $25.00, $20.00 of which will be returned to aplicant when plans are returned in good condition.

The right is reserved to reject any and all bids, and to waive informalities. Proposals received will be acted upon by the City Council on same day they are received.

J. F. RALL,
Mayor.

Attest:
L. J. STOREY, City Clerk.

NOTE: The plans show a bridge about 700′ long and 90′ wide.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 11, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 7, 1919, for Gas Mains at the United States Marine Hospital, New York, N. Y. (Stapleton), in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian, New York, N. Y. (Stapleton), in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

Bids: July 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 8, Section No. 1 (Riverdale to Pompton River), Morris County, concrete surface, estimated 45,692 square yards.

State Highway Route No. 9, Section No. 3 (Westfield Cutoff), Union County, grading only, estimated 1772 cubic yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 9, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and at the office of Mr. Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by prospective bidders at either of these offices. Plans and specifications will be furnished on deposit of Ten Dollars ($10.00) upon application to the Division Engineer, 790 Broad Street, Newark, N. J. Bids must be made on the standard proposal forms in th emanner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: July 11.

Highway Work

Trenton, N. J.

Notiec is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 13, Section 3 (Three Mile Run to New Brunswick), Middlesex and Somerset Counties, ocncrete surface, estimated 41,000 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Friday, July 11, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on th eoutside addressed to State Highway Commission, Broad Street aBnk Bldg., Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of the materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER Chief Clerk.

Bids: June 28.

Street Paving

Oswego, N. Y.

Sealed proposals will be received until 2 P.M., June 28th, 1919, and tren opened by the Department of Works of the City of Oswego, N. Y., for the following pavement construction:

Approximately 6020 Cu.Yds. Reinforced Concrete.

Pavements including Integral Curb.

4400 Lin.Ft. Bituminous Macadam Penetration Method.

With the necessary Sewers, Catch basins, Culverts, etc.

Plans and specifications may be obtained from the City Engineer.

The work will be one contract and each bid must be accompanied by a certified check for ten per cent. (10%) of the amount of the bid.

The Department of Works reserves the right to reject any and all bids.

MICHAEL FITZGIBBONS,
Commissioner of Works.

Bids: June 30.

Road Construction

Elizabeth City, North Carolina.

Sealed proposals for approximately nine miles of hard surface roads will be received at the office of the Pasquotank County Highway Commission, at the court house, of Pasquotank County, Elizabeth City, N. C., until two o'clock P.M., June 30th, 1919.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications. Plans and specifications are on file in the office of T. L. Higgs, County Road Engineer, Room 336, Hinton Building, Elizabeth City, N. C., and will be ready for distribution on an dafter Saturday, June 21st, 1919. A deposit of $10 will be required which will be refunded when the specifications are returned in good condition.

Each proposal must be accompanied by a certified check on a basis of $600.00 per mile of road, which will be returned to the unsuccessful bidders on the day of letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Pasquotank-County Highway Commission.

The Commission reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the county.

At the same time separate bids will be received for all of the material to complete this job. Viz., brick, cement, sand, gravel or stone, etc.

Pasquotank County Highway Commission.
T. L. HIGGS, Engineer.
W. J. WOODLEY, Chairman.

Bids: July 2.

Paving

Hanover, Pa.

Sealed proposals will be received by the undersigned at his office No. 15 Carlisle St., Hanover, Pa., until 4 P.M., July 2nd, 1919, for Street Improvement.

The work will consist of about 23,000 sq.yds. of paving.

Bids will be received for various types of paving all on a six inch concrete base.

Proposals must be market "Proposal for street paving."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $600.00 as evidence of good faith.

Copies of the Specifications, form of proposal, etc., can be had upon application to the undersigned.

The right is reserved to reject any or all bids.

A. H. KOHR, Borough Engineer.
Hanover, Pa.

Bids: July 7.

Sanitary Sewerage System

Pleasantville, New Jersey.

Sealed proposals will be received by the Common Council of the City of Pleasantville, N. J., at the City Hall, on the 7th day of July, 1919, until 8 o'clock P.M., for the construction of a sanitary sewerage system, consisting of approximately 9.3 miles of 8", 10", 12" and 15" Terra Cotta Pine Sewers, 1260 "Y" Branches, 5" T. C. House Connections, 123 Manholes, 15 Lampholes and 12 Flush Tanks.

Each proposal must be accompanied by a certified check, made payable to the City of Pleasantville, for the sum of $5000.00. An indemnification bond for an amount equal to 100% of the contract price will be required.

Plans, specifications and contract form will be on file, and may be seen at the City Hall, Pleasantville, N. J., or at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, N. J. Complete sets of the plans and specifications may be obtained from the Engineers upon a deposit of $10.00, of which sum $5.00 will be refunded upon return, by July 20th, of the plans in good condition.

The City reserves the right to reject any or all bids.

NEHEMIAH ANDREWS,
City Clerk.

Bids: June 23.

Centrifugal Pump

City of Bethlehem, Pa.

Bids will be received by the Bureau of Water for the furnishing and installation of a two million gallon electrically driven centrifugal pump, on or before June 23, 1919.

The right is reserved to reject any or all bids.

R. L. FOX, City Engineer.

OFFICIAL PROPOSALS

Bids: July 14.

Sewer System Construction

North Mankato, Minn.

Sealed proposals for the construction of a sewer system will be received by the Recorder of the Village of North Mankato, Minnesota, till nine o'clock P.M., July 14th, 1919, and all proposals received will be opened and considered at, or as soon as possible after that time.

Each bid must be accompanied by a certified check or a satisfactory draft payable to the Treasurer of said Village for 15% of the amount of the bid.

The work to be done is approxiamtely as follows: 3 pumping stations or lifts; 75 manholes, 2-14" Valves, 24,100 feet of vitrified clay sewer pipe from 8" to 15", 24,200 feet of trench from 5 feet to 16 feet deep.

The work is divided tentatively into three sections numbered one, two and three as shown on the plan, and bids are desired for section one by itself, for sections one and two together and for the whole work.

Plans and specifications can be seen at the office of the Recorder or Engineer of said village. Copies of plan showing depths and sizes and quantities of pipe will be sent by mail for $1.50 each; Copies of details of lifts and manholes for $2.00 per set. Specifications are the usual form for sewers. Copies will be furnished at cost.

The right is reserved to reject any or all bids, or to accept any bid in whole or in part.

Bids: July 1.

Street Improvement

PARK STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Park Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: July 5.

Road Work

Pekin, Ill.

Sealed proposals will be received by the Highway Commissioner of Pekin Township, Tazewell County, Illinois, at the Office of the Co. Supt. of Highways, Court House, Pekin, Ill., until 2 P.M., July 5, 1919, for the construction of a 16 ft. pavement 8000 ft. long including rading and culverts. Alternate bids will be received on (1) Portland Cement Concrete, and (2) Monolithic brick.

Plans and specifications on file with R. E. Rollins, Town Clerk, Pekin, Ill. Plans may be taken out for temporary use while inspecting the proposed work. For further information, write F. S. Cook, Co. Supt. of Highways, Mackinaw, Ill.

A certified check for $200, made payable to the Highway Commissioner, must accompany each bid.

The right is reserved to reject any or all bids.

ADOLPH NIERSTHEIMER, JR.,
Highway Commissioner of Pekin
Township, Pekin, Ill.

Bids: June 30.

Water Filtration Plant

City of Salem, N. J.

Sealed proposals, marked "Proposal for Water Filtration Plant," and addressed to the "City of Salem," New Jersey, will be received until 8 o'clock P.M. on Monday evening, June 30, 1919, at the Council Chamber in the City of Salem, New Jersey, for furnishing all of the materials and labor and installing a Mechanical Filtration Plant including coagulating basin, chemical house, filter house, and all appliances and appurtenances complete.

Specifications and information may be obtained at the office of William H. Boardman, Engineer, 426 Walnut Street, Philadelphia, or at the office of N. S. Hires, Water Superintendent, Dunn Building, Salem, New Jersey.

A certified check for $500.00 drawn to the order of L. L. Sinnickson, Treasurer of the City of Salem, New Jersey, or equivalent Bidder's Bond, must accompany each proposal. Should contract for the work on which bids are sought be awarded on Monday evening, June 30, 1919, the checks of the unsuccessful bidders will be returned.

The City of Salem reserves the right to reject any and all bids, to readvertise if necessary and to accept that bid which in the judgment of the Mayor and Common Council is for the best interests of the City of Salem.

By order of Common Council,
W. E. DUNN,
Recorder.

Dated Salem, N. J., June 9, 1919.

POSITIONS VACANT

ASSISTANT superintendent or general foreman wanted on bridge work. Requirements, energy and good judgment. Address P-746, Eng. News-Record, Chicago.

C. E. DRAFTSMAN wanted, highway and drainage a specialty. Furnish reference and sample of lettering. Good opportunity for right man. State salary expected. Jno. M. Harbert, Eng. Co., Indianola, Miss.

COMPETENT structural engineer wanted for position of contracting engineer with old established comapny doing principally industrial building and railroad work. Must be a man of good address who has had some experience in estimating and selling. Location Middle West. Give full details of experience, references and salary expected. Address P-615, Eng. News-Record, Chicago.

COMPETENT structural and reinforced concrete engineer wanted by sales engineering and fabricating company in Philadelphia, to take charge estimating and engineering; one thoroughly familiar with building construction, competitive designing and estimating desired. Proper man will be given opportunity to secure interest in company. Give full description of yourself, experience, references, salary desired, etc., in first letter. Replies treated with strict confidence and acknowledged. Address P-745, Eng. News-Record, Philadelphia.

CONTRACTING engineer for large new structural steel fabricating plant. Applicants must be experienced in structural steel sales and be thoroughly competent to design and estimate steel structures. In reply state age, experience, if married, salary desired, and if possible inclose recent photo. Birmingham Steel Corporation, Birmingham, Ala.

CONCRETE DESIGNER wanted by reinforced concrete builders in Rocky Mountains. The applicant must have a solid experience as a concrete designer, and will have to work out independently intricate problems, such as rigid frames, long span arches, etc. First-class opportunity for a good man. P-690, San Francisco, Calif.

DESIGNING engineer, detailers and checkers wanted, experienced in crane and derrick work. Must know their business thoroughly and be thoroughly experienced. Not an opportunity to acquire experience. P-768, Eng. News-Record.

DRAFTSMAN wanted at once—First-class; state age, nationality, references and experience in first letter. Permanent position in central South if satisfactory. P-747, Eng. News-Record, Leader-News Bldg., Cleveland.

DRAFTSMAN with experience on design of industrial buildings, steel, reinforced concrete and mill construction. Give full details in first letter as to age, education, references, salary expected and earliest date available. Technical graduate preferred. P-744, Eng. News-Record.

DRAFTSMAN wanted—On construction work, New York City; technical graduate preferred; give past experience and salary desired. Addres P-742, Eng. News-Record.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-568, Eng. News-Record.

**Delay Is Dangerous
Don't Wait**

On public work it is absolutely necessary to provide your bond promptly. Some contractors, who wait till the last minute to secure their bond, "sweat blood"

IT CAN BE AVOIDED—USE SWART SERVICE—DON'T DELAY

It costs no more and you secure the personal service of a trained engineering expert on contractors' insurance.

HARMON V. SWART
19 Liberty Street, New York

WANTED

CONTRACTOR

to move one to two hundred thousand yards dirt

Sand overburden on clay. Will put in steam shovel, contractor to purchase and apply work in payment.

The Johnson-Porter Clay Co.
McKenzie, Tenn.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 15.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, June 16th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until 12 o'clock noon of Tuesday, July 15, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 43

For constructing a Barge Canal terminal and a frame freighthouse at Flushing, Borough of Queens, New York City.

Contract plans, sheets 1 to 10, inclusive.

—2—

TERMINAL CONTRACT NO. 112.

For furnishing, delivering and testing industrial freight-handling trailers and stevedore freight-handling trucks for Barge Canal terminals in New York City:

Contract plans, sheets 1 and 2.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at office of State Engineer, Hall of Records, New York City.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

Special price for Official Proposals, $3.60 an inch — Copy for Official Proposals can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

E. S. WALSH,
Superintendent of Public Works.

OFFICIAL PROPOSALS

Bids: July 8.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., July 8, 1919, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of the following pavements: 45,051 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick on a Concrete Foundation or Reinforced Concrete in Bradford County; 14,883 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Bucks County; 41,673 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Butler County; 12,355 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 30,995 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Clearfield County; 2903 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Clinton County; 24,900 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Delaware County; 30,197 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Fayette County; 46,297 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Lehigh County; 22,705 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Luzerne County; 80,363 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 30,335 linear feet of Reinforced Concrete in Susquehanna County; 17,412 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick or Reinforced Concrete in Sullivan County; 28,831 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete in Tioga County; 32,047 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Westmoreland County; 71,063 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lackawanna and Wyoming Counties, and 32,744 linear feet of Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

U. S. ENGINEER OFFICE, 725 Central Bldg., Los Angeles, Cal. Sealed proposals for constructing silt diversion works near Los Angeles and Long Beach Harbors, California, will be received here until 11 A.M., July 18, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 8, Section No. 1 (Riverdale to Pompton River), Morris County, concrete surface, estimated 45,692 square yards.

State Highway Route No. 9, Section No. 3 (Westfield Cutoff), Union County, grading only, estimated 1772 cubic yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 9, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and at the office of Mr. Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by prospective bidders at either of these offices. Plans and specifications will be furnished on deposit of Ten Dollars ($10.00) upon application to the Division Engineer, 790 Broad Street, Newark, N. J. Bids must be made on the standard proposal forms in th emanner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: July 1.

Street Improvement

POPLAR STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Poplar Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

OFFICIAL PROPOSALS

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 29, 1919.

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.39.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
ROYAL K. FULLER,
Secretary.

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids.

LOUIS C. ANDREW,
of the City of Elmira, N. Y.

OFFICIAL PROPOSALS

Bids: July 15.

Concrete Bridge Construction

FIRST AVENUE BRIDGE

Cedar Rapids, Iowa.

Sealed proposals will be received by the City Council of the City of Cedar Rapids, Iowa, at the office of the City Clerk in the City Hall until 10 o'clock., on the 15th day of July, 1919, for the following described improvement as per plans and specifications now on file in the office of the City Clerk of Cedar Rapids, Iowa.

For the complete construction of a six (6) span concrete-steel arch highway bridge, over and across the Cedar River at its intersection with First Avenue in the City of Cedar Rapids, Iowa, including all appurtenances as described and shown in the plans and specifications for said bridge, and removal of present structure and its foundations. Payment for the work will be made in cash upon monthly estiamtes of the City Engineer.

Each bid must be accompanied by a certified check, enclosed in a separate envelope, said check to be drawn on some known responsible bank and made payable to the order of the City Treasurer of the City of Cedar Rapids, in the sum of Ten Thousand Dollars ($10,000). Such check must not contain any conditions, either in the body of the check or endorsement thereon. All envelopes must be addressed to the City Clerk and endorsed with the name of the bidder, and the improvement said check and proposals are for. Proposals must be submitted in forms as shown by specifications. Certified checks accomapnying proposals will be returned to the unsuccessful bidders, and also to the bidder to whom the contract is awarded, when he shall have entered into contract in the form prescribed, and given bond in sum required.

Bidders must submit, in the same envelope containing certified check, detailed evidence showing that they have a competent organization which has constructed work similar in character; that they have the necessary equipment available to prosecute the work with diligence and complete this improvement in a satisfactory manner. The evidence must also enumerate similar work constructed by bidder, and name of the owner or representatives of the owner who can give information and verification.

Copies of plans and specifications may be obtained from Marsh Engineering Company, consulting Engineers, Des Moines, Iowa, upon receipt of check for $25.00, $20.00 of which will be returned to aplicant when plans are returned in good condition.

The right is reserved to reject any and all bids, and to waive informalities. Proposals received will be acted upon by the City Council on same day they are received.

J. F. RALL,
Mayor.

Attest:
L. J. STOREY, City Clerk.

NOTE: The plans show a bridge about 700′ long and 90′ wide.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 11, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 7, 1919, for Gas Mains at the United States Marine Hospital, New York, N. Y. (Stapleton), in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian, New York, N. Y. (Stapleton), in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor, width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: July 2.

High School

Sterling, Illinois.

Sealed proposals will be received at the office of Carl E. Sheldon, attorney, Sterling, Illinois, for the construction of an addition to the Sterling Township High School. Estimated cost, $50,000.00 to $60,000.00. Pinas and specifications, office of Fred W. Honens, Sterling, Illinois. Certified check for 5% to accompany bid.

D. L. MILLER,
Clerk.

PROPOSALS FOR CONSTRUCTING STEEL STORAGE BUILDINGS.—Office Chief Construction Div., Washington, D. C.—Sealed proposals will be received until 11 a.m., June 28, 1919, and then opened for constructing steel buildings at Camp Normoyle, San Antonio, Tex.; Camp Holabird, Baltimore, Md., and Camp Jesup, Fort McPherson, Ga. Further information on application to Room 2-327, Bldg. C., Washington, D. C.

United States Engineer Office, Galveston, Texas.—Sealed proposals for furnishing and delivering about 19,000 cubic yards of sharp freshwater sand, about 46,000 barrels of Portland cement, about 38,000 cubic yards of broken stone and about 1,070,000 pounds of reinforcing steel, at Galveston, Texas, will be received at this office until 12 o'clock M. July 7, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 10.

Bridge Construction

COUNTY OF WARREN
OFFICE OF SUPERINTENDENT OF HIGHWAYS
WARRENSBURGH, N. Y.

Lake George, N. Y.

Pursuant to the provisions of Chapter 30, Laws of 1909, as amended, sealed proposals will be received by the undersigned at the Supervisors' rooms, Lake George, N. Y., until 2 o'clock on the 10th day of July, 1919, for the construction of the New Riverside Bridge, over the Hudson river, at Riparius, N. Y., between the towns of Chester and Johnsburgh, Warren County, N. Y.

The bridge is to be one 300 foot clear span through truss steel bridge, 19 feet clear roadway of wood block pavement; with a live road capacity of 1235 lbs. per foot of bridge or 15 ton road roller, plus twenty-five per cent. impact.

New concrete abutments and wing-walls are to be built of third class concrete.

The new bridge is to be built on the upstream or north side of the existing suspension bridge.

The estimated cost of the work is $49,750.36.

Plans, specifications, estimates and proposals, etc., may be seen at the office of the county superintendent of highways, Warrensburgh, N. Y., or copies obtained upon the deposit of $5.00 which will be retained for their return in good condition.

The especial attention of bidders is called to the information to bidders contained in the itemized proposal, general specifications, and contract agreements, etc.

Proposals must be presented in a sealed envelope endorsed on the outside, "Proposal for construction of New Riverside Bridge."

Each proposal must be accompanied by cash or certified check payable at sight to the Warren County Treasurer for an amount equal to at least five per cent. of the amount of the proposal. This cash or check will be held by the Warren County Treasurer until the contract and bond are duly executed. The successful bidder will be required to give a performance bond for fifty per cent. of the amount of the contract, such bond to be executed by a surety company to be approved by the Board of Supervisors, or a bond secured by the deposit of collateral securities to be approved by the Board of Supervisors.

The right is reserved to reject any or all bids.

BEECHER GLASSBROOK,
Clerk, Warren County Board
of Supervisors,
Lake George, N. Y.

Dated June 16, 1919.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

Bids: July 1.

Street Improvement

HACKENSACK AVENUE IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Hackensack Avenue in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Date June 12, 1919.

Bids: July 9.

Paving

Halifax, N. S.

Sealed tenders, addressed to His Worship the Mayor and endorsed "Tender for Paving" will be received at the office of the Clerk of Works, City Hall, Halifax, Nova Scotia, until 10 o'clock a.m., on Wednesday, July 9th, 1919, for paving certain streets in the City of Halifax.

The approximate quantities are:

23,000 sq.yds. of granite block pavement on concrete base; 133,000 sq.yds. of bituminous pavement on concrete base; 30,000 sq. yds. of bituminous pavement on macadam base; 33,000 lineal feet of concrete curb and gutter.

Each tender must be accompanied by a certified cheque payable in Halifax to the City Treasurer for the amount set forth in the forms of tender for each street, which cheque will be forfeited to the City if the bidder fails to execute the contract if awarded to him, within five days of the notice of such award.

The successful bidder will be required to furnish a bond to the amount of 25% of the amount of the contract as estimated by the City Engineer for the faithful performance of the contract.

Plans and specifications may be seen and forms of tender and all other information obtained at the City Engineer's office, City Hall, Halifax.

The City reserves the right to reject any or all tenders or to accept any tender which it deems best.

F. W. W. DOANE,
City Engineer.

Halifax, Nova Scotia.
June 18th, 1919.

Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used, haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to **reject any and all bids.**

Bids: June 30.

Road Construction

Elizabeth City, North Carolina.

Sealed proposals for approximately nine miles of hard surface roads will be received at the office of the Pasquotank County Highway Commission, at the court house, of Pasquotank County, Elizabeth City, N. C., until two o'clock P.M., June 30th, 1919.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications. Plans and specifications are on file in the office of T. L. Higgs, County Road Engineer, Room 336, Hinton Building, Elizabeth City, N. C., and will be ready for distribution on an dafter Saturday, June 21st, 1919. A deposit of $10 will be required which will be refunded when the specifications are returned in good condition.

Each proposal must be accompanied by a certified check on a basis of $600.00 per mile of road, which will be returned to the unsuccessful bidders on the day of letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Pasquotank County Highway Commission.

The Commission reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the county.

At the same time separate bids will be received for all of the material to complete this job. Viz., brick, cement, sand, gravel or stone, etc.

Pasquotank County Highway Commission.
T. L. HIGGS, Engineer.
W. J. WOODLEY, Chairman.

Bids: June 28.

Highway Construction

ERIE COUNTY, PENNSYLVANIA

North East, Pa.

Sealed proposals will be received by the North East Township Road Supervisors, at their office at North East, Pa., until 10 A.M., June 28, 1919, when bids will be opened and scheduled, and contracts awarded as soon thereafter as possible, for the construction of approximately 8000 ft. of reinforced concrete pavement, in North East Township, on the road leading from North East Boro. to Findley Lake. Construction to be according to Pennsylvania State specifications. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application at the office of Hill & Hill, Engineers, Marine Bank Bldg., Erie, Pa., or at their North East, (Pa.) office. They also can be seen at either of the above offices. The right is reserved to reject any or all bids and to waive defects in forms.

NORTH EAST TOWNSHIP,
Road Supervisors.

U. S. ENGINEER OFFICE,. **Pittsburgh, Pa.**—Sealed proposals will be received at the U. S. Engineer Office, Pittsburgh, Pa., until 12 noon (Eastern time), July 7, 1919. and then opened, for constructing locks and fixed dams in the Ohio River, near Emsworth, Pa. Further information on application.

GATE-OPERATING MACHINERY.—U. S. Engineer Office, First District, Cincinnati, O.—**Sealed proposals will be received here until 2 P.M., July 8, 1919, and then opened, for furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39. Ohio River. Information on application.**

Bids: July 2.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 1, Section No. 3 (Robbinsville to Windsor), Mercer County, concrete surface, estimated 26,843 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 2, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10), to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission,

A. LEE GROVER,
Chief Clerk

Bids: July 5.

Road Work

Pekin, Ill.

Sealed proposals will be received by the Highway Commissioner of Pekin Township, Tazewell County, Illinois, at the Office of the Co. Supt. of Highways, Court House, Pekin, Ill., until 2 P.M., July 5, 1919, for the construction of a 16 ft. pavement 8000 ft. long including rading and culverts. Alternate bids will be received on (1) Portland Cement Concrete, and (2) Monolithic brick.

Plans and specifications on file with R. E. Rollins, Town Clerk, Pekin, Ill. Plans may be taken out for temporary use while inspecting the proposed work. For further information, write F. S. Cook, Co. Supt. of Highways, Mackinaw, Ill.

A certified check for $200, made payable to the Highway Commissioner, must accompany each bid.

The right is reserved to reject any or all bids.

ADOLPH NIERSTHEIMER, JR.,
Highway Commissioner of Pekin
Township, Pekin, Ill.

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been received therefore on June 2, 1919, and rejected. A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: July 8.

Street Construction

Nashville, N. C.

Sealed proposals will be received until 11 o'clock A.M. on Tuesday, the 8th day of July, 1919, by the undersigned for the Commissioners of the Town of Nashville, Nashville, North Carolina, for the construction of street, side walks and curbing on Washington and Depot Streets in the town of Nashville, consisting of about one and one-fourth miles. The street construction to be five inches; side walks and curbing to be in accordance with the usual requirements for cities and towns.

Certified check of 5% of total cost will be required with each bid. Bids will be opened at the office of Finch & Vaughan, in said town of Nashville, North Carolina, at 12 o'clock M., July 8th, 1919.

Right reserved to reject any and all bids.

LEON T. VAUGHAN, Town Clerk,
Nashville, N. C.

U. S. ENGINEER OFFICE, FIRST DISTRICT, NEW YORK CITY, Room 710, Army Building, 39 Whitehall Street, New York City. June 23, 1919.—To whom it may concern: Whereas, navigation is obstructed and endangered by wreck of steamship PORT PHILLIP sunk in the fairway of the main entrance to New York Harbor: Notice is hereby given that unless said vessel is removed by the owners within thirty days from June 23, 1919, it will be removed by the United States under authority of law. Sealed proposals will be received here until 12 M., July 23, 1919, and then opened, for removing wreck of steamship PORT PHILLIP. Information on application.

Bids: July 11.

Highway Work

Trenton, N. J.

Notiec is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 13, Section 3 (Three Mile Run to New Brunswick), Middlesex and Somerset Counties, ocncrete surface, estimated 41,000 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Friday, July 11, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on th eoutside addressed to State Highway Commission, Broad Street aBnk Bldg., Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of the materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER Chief Clerk.

Bids: July 9.

Highway Construction

THE STATE OF DELAWARE

Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock, P.M., July 9, 1919, and at that place and time publicly opened, for the construction of 8.27 miles of State Highway (cement concrete) in New Castle and Kent Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 15—0.42 MILES
21,500 cu.yd. grading
10 cu.yd. concrete masonry
300 pounds reinforcement
50 lin.ft. 15-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
6 bounds
1,500 tons stone for macadam
600 sq.yd. penetration macadam

CONTRACT NO. 16—4.91 MILES
7.5 acres clearing and grubbing
56,000 cu.yd. grading
1,000 cu.yd. concrete masonry
32,000 pounds reinforcement
400 lin.ft. 15-in. reinforced concrete pipe
68 lin.ft. 18-in. reinforced concrete pipe
68 lin.ft. 24-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
136 lin.ft. 36-in. reinforced concrete pipe
50 Bounds
3,000 lin.ft. piles
3,500 lin.ft. wood guard rail
100 tons stone for macadam
9,380 cu.yds. cement concrete roadway
250 Joints
2,000 sq.yds. roadway reinforcement

CONTRACT NO. 17—2.94 MILES
1.00 acre clearing and grubbing
21,000 cu.yds. grading
200 cu.yds. concrete masonry
2,000 pounds reinforcement
240 lin.ft. 15-in. reinforced concrete pipe
68 lin.ft. 18-in. reinforced concrete pipe
34 lin.ft. 24-in. reinforced concrete pipe
34 lin.ft. 30-in. reinforced concrete pipe
34 lin.ft. 36-in. reinforced concrete pipe
30 Bounds
75 tons stone for macadam
5,600 cu.yds. cement concrete roadway
150 Joints

Bids may be submitted for Contracts No. 16 and No. 17 separately or combined.

Performance of contract shall commence within ten (10) days after execution of contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 15, No. 16 and No. 17."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after June 23, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.
CHAS. M. UPHAM,
Chief Engineer.

Bids: July 1

Jail Construction, Etc.

Toms River, N. J.

For the erection and completion of alterations and additions to jail and new wardens' house at Toms River, Ocean County, N. J. will be received on July 1st, 1919, at 12 o'clock noon and then publicly opened, each "bid' to be accompanied with a certified check or bid bond for $1000 to guarantee faithful execution of contract. All "bids" to be addressed to E. R. Yoder, chairman of building committee of the Ocean County Board of Freeholders. Plans are on file at the office of Thomas Stephen, architect, Room 304, Temple Building, Camden, N. J.

Rights reserved to reject any or all "bids."

Bids: July 16.

Pumping Engine

OFFICIAL NOTICE C. P. NO. 32
OFFICE OF THE CENTRAL BOARD OF PURCHASES

City of Milwaukee, Wis.

Sealed proposals will be received at this office until Wednesday, July 16th, 1919, at 10:30 A.M., for furnishing and erecting in place complete and ready for use at the North Point Pumping Station of the Milwaukee Water Works, on the shore of Lake Michigan near the end of North Avenue, in the First Ward in the City of Milwaukee, one 20,000,000 gallon pumping engine, according to specifications on file in this office.

DELIVERY

Work to be completed within one year from the date of the award of the contract, failing in which the contractor shall pay to the City of Milwaukee as liquidated damages the sum of $1125.00 per day for each and every day's delay in completing the contract.

BONDS

Bonds to accompany bids required in the penal sum of Sixty-Seven Thousand and Five Hundred ($67,500.00) Dollars or in lieu thereof the bidder may deposit with the Central Board of Purchases the sum of Thirty-Three Thousand Seven Hundred and Fifty ($33,750.00) Dollars, in money or duly certified bank checks, drawn to the order of the Central Board of Purchases, failing in which his bid will be rejected. In case bonds are submitted with bids, local bondsmen or a surety company authorized to do business in Wisconsin will be required, said bonds to be approved as to form and execution by the City Attorney before being presented with bid.

All moneys and checks deposited will be returned to unsuccessful bidder when the contract is awarded and to the successful bidder when contract is entered into.

The Central Board of Purchases reserves the right to reject any or all bids.

Signed WM. R. CALLAHAN,
Purchasing Agent.
DANIEL W. HOAN,
Chairman,
Central Board of Purchases.
Countersigned A. P. PULICKER,
Deputy Comptroller.

Bids: July 1.

Street Improvement

PARK STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Park Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,

PROPOSALS FOR COAL.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock, noon, July 24, 1919, and then opened, for furnishing 5000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

Bids: July 1.

Boiler Stokers, Etc.

Central Islip, N. Y.

Sealed proposals for New Boiler, Stokers, etc., and Coal and Ash Handling Equipment, New Central Heating and Lighting Plant, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, seled and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance wit hthe terms of specifications Nos. 3276 and 3277. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, New York; at the New York Office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 10, 1919.

Bids: July 8.

Macadam Road

WASHINGTON COUNTY ROAD DISTRICT NUMBER TWO

Fayetteville, Ark.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 2 P.M., July 8, 1919, and there will be publicly opened and read, for the construction of 52 miles of gravel and limestone macadam road.

The approximate quantities are as follows:

11.5 acres clearing and grubbing.
155,282.00 cu.yd. unclassified excavation.
5000 cu.yd. solid rock excavation.
20 miles grading machine work (on old road.)
735 lin.ft. heavy steel bridges.
760 lin.ft. light steel bridges (short span.)
33,752 cu.yd. field stone base, 0 to 1 mile haul.
15,860 cu.yd. native gravel, 1 to 2 miles haul.
16,138 cu.yd. limestone top course, 1 to 2 mile haul.
10,800 cu.yd. native gravel, 1 to 2 mile haul.
943 cu.yd. concrete, reinforced.
297 cu.yd. concrete, plain.
72 lin.ft. 15 in. concrete pipe, hauling and placing.
696 lin.ft. 18-in. concrete pipe, hauling and placing.
24 lin.ft. 21-in. concrete pipe, hauling and placing.
528 lin.ft. 24-in. concrete pipe, hauling and placing.
648 lin.ft. 30-in. concrete pipe, hauling and placing.
20,000 sq.yd. scarifying and reshaping old macadam.
24,794 sq.yd. bituminous macadam, 2 inch top.

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, F.O.B. cars, Fayetteville, Ark.
Steel trusses and short spans, erected
Bituminous top.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark., and the office of the County Judge, B. F. Campbell, Fayetteville, Ark. Any additional information may be obtained from the Engineers, Hamilton and Shreve, Fayetteville, Ark.

A certified check to the amount of 5 per cent of the bid must accompany all proposals. Check to be made to the order of W. J. Reynolds, Secretary of the District. Usual rights reserved.

Successful bidders will be required to execute construction bond to the amount of 25 per cent. of their bids.

BOARD OF ROAD DISTRICT NO. 2
C. W. APPLEBY, President.
W. J. REYNOLDS, Secretary.
Fayetteville, Ark.

Hamilton and Shreve, Engineers, Fayetteville, Ark.

Bids: July 15.

Constructing Drainage Project

Marshall County, Iowa.

To whom it may concern: The Board of Supervisors of Marshall County, Iowa, will receive sealed bids for the construction, in accordance with the plans, drawings and specifications of the engineer, of the Iowa River Drainage Project located in Bangor, Marietta, Linn, Liscomb, Iowa and Taylor Townships, Marshall County, Iowa, said improvement being embraced wholly within one section.

The improvement will be the straightening, widening, deepening and changing of the channel of the Iowa River within the district as laid out by the engineer. Estimated yardage, 1,400,000. The work shall consist of all the necessary labor and material for the improvement. For further details see plans, profiles and specifications now on file in the office of the County Auditor, Marshall County, Iowa. Plans, profiles and specifications may be obtained from F. B. Ingersoll, Marshalltown, Iowa, engineer in charge, by sending deposit of $5.00, said amount to be returned when plans, profiles and specifications are returned.

Bids must be accompanied by a certified check of Ten Thousand Dollars ($10,000), check to be drawn on some Marshalltown bank. Successful bidder must furnish bond of 25% of contract price. Work must commence as soon as contract is entered into and be finished by January 1, 1922. Payments to be made on monthly estimates of the engineer, 20% reserved until final completion. Bids received up to 2 o'clock, P.M., July 15, 1919, at the office of the County Auditor, Marshalltown, Iowa. The Board of Supervisors reserves the right to reject any or all bids.

THE BOARD OF SUPERVISORS MARSHALL COUNTY, IOWA,
By W. H. JONES, Chairman.
GEO. ENDERLEY, County Auditor.

Worth While Bidders Know Where to Look for Public Works Contracts

Contractors, Manufacturers and Dealers all over the country *know* that the Official Proposal Advertising in Engineering News-Record is the best place to look for contracts of every description. They *know* that over 90% of the advertisements on which widespread competition is desired are published in the News-Record—over 3,000 Official Proposal advertisements annually. And that is why proposal advertising in the News-Record has saved many municipalities thousands of dollars—competitive bidders everywhere are on the lookout for this advertising and are ready to keep their prices down to the lowest figure possible. The nation-wide circulation of Engineering News-Record and the large number of announcements published each issue is what makes it

for Official Proposals

The DOMINANT Paper

Bids: **July 9.**

Storm Water Lateral Sewers

Dearborn, Michigan.

Sealed bids will be received at the office of the Village Clerk, Dearborn, **Mich.**, up to 8 P.M. of the 9th day of **July, 1919**, for furnishing all materials and labor to construct the following amounts of sewers:

12,068 ft. of 12-in. sewer.
8,840 ft. of 15-in. sewer.
2,933 ft. of 18-in. sewer.
1,343 ft. of 20-in. sewer.
428 ft. of 22-in. sewer.
1,708 ft. of 24-in. sewer.
1,098 ft. of 30-in. sewer.
660 ft. of 36-in. sewer.
85 manholes, all in accordance with the plans and specifications on file at the office of the Village Clerk and in the office of C. W. Hubbell Consulting Engineer, 2348 Penobscot Bldg., Detroit, Mich., from whom copies may be obtained upon deposit of $10.00, which amount will be refunded upon the return of the plans and specifications in good condition within 10 days after opening bids.

No bids will be received unless accompanied by a certified check for the sum of $7500.00 payable to the Village of Dearborn, to insure the signing of contract and the furnishing of proper and acceptable bonds for the full amount of the contract price within ten days from time of notification of the award of contract.

The right is reserved to reject any or all bids.

By order of the Village Commission.

FRED C. REAMER,
Village Clerk.

Bids: July 23.

School Building

Lorain, Ohio.

The Board of Education, Lorain, Ohio, will receive sealed proposals for the furnishing of all material and doing all the work necessary for the construction of a School Building, as per plans and specifications prepared by the architects, Perkins, Fellows and Hamilton, 814 Tower Court, Chicago, Ill., until 12 o'clock, noon, July 23, 1919.

Proposals must be made on **blanks furnished** by the Board of Education, which can be secured from the architects, must be accompanied by certified check in a sum equal to at least five (5) per cent of the amount of the bid and payable to the Board of Education, Lorain, O.

The Board reserves the right to reject **any, part of any or all bids or proposals.**

By order of the Board of Education, June 21, 1919.

E. BRUELL, Clerk.

Bids: **July 8.**

Paving

Cushing, Okla.

Bids will be received until 8 P.M., July 8, 1919, by C. H. Acklin, City Clerk, for 20,000 sq.yds. of brick paving together with necessary storm sewers, grading, curbing, etc.

CLARENCE A. WOOD,
Engineer.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

Bids: July 30.

Inlet Construction

Ft. Pierce, Fla.

Sealed proposals will be received at the **office of the Secretary** at Ft. Pierce, **Fla.**, until 2 P.M. on the 30th day of July, 1919, for the construction of an inlet cut and riprapping (inside work), and outside channel and certain jetties (outside work), all of which is particularly described in the plans and specifications for the proposed work, which consists of approximately 85,000 cubic yards of earth excavation, 1720 cubic yards of jetty hearting, 2200 tons of jetty capping and 1200 cubic yards of riprap.

The Board reserves the right to reject any and all bids. Plans and specifications may be seen at the office of the Secretary and may be obtained from the Chief Engineer of the District for the sum of three dollars, which will not be refunded.

MILLER HALLOWES, Chief Engnr.
Ft. Pierce Inlet District,
Ft. Pierce, Fla.
C. M. HORTON, Secretary,
Ft. Pierce, Fla.

Bids: July 10.

Highway Construction

Nashville, Tenn.

Sealed bids will be received by the State of Tennessee, Department of Highways, at the Office of the Department, No. 327 7th Ave., N. Nashville, Tennessee, Thursday, July 10, 1919, for the construction of 10.66 miles of State Highway No. 7, between Cowan Station and the Franklin-Marion County line, in Franklin County; and for the construction of 12.27 miles of State Highway No. 7 between Shelbyville and the Moore-Coffee County line, in Bedford and Moore Counties.

Bids will be opened publicly at 2 P.M. at the place and on the date above mentioned.

The principal items of construction, in Franklin County, are approximately as follows:

16,812	cu.yd. Common Excavation.
1,500	cu.yd. Solid Rock Excavation.
101,750	sq.yd. Waterbound Macadam, 8 in. in depth, 16 ft. wide.
8,533	sq.yd. Scarifying and Reshaping.
140	lin.ft. 15 in. Concrete or corrugated metal pipe.
60	lin.ft. 18 in. Concrete or corrugated metal pipe
320	lin.ft. 24 in. Concrete or corrugated metal pipe.
61	cu.yd. Class "A" Concrete.
53	cu.yd. Class "B" Concrete.
8,600	lb. Reinforcing Steel.
120	cu.yd. Stone Masonry.

In addition to the above excavation there is also an item of approximately 8500 cu.yd. of excavation between Sta. 0/00 and Sta. 300 covering the finishing of the grade between those two points, the rough grade having been previously done.

The principal items of construction, in Bedford and Moore Counties, are approximately as follows:

29,716	cu.yd. Common Excavation.
5,935	cu.yd. Solid Rock Excavation.
1.76	miles Grader Work.
17,865	sq.yd. Scarifying and Reshaping.
12,000	sq.yd. 8½ in. Waterbound Macadam, 16 ft. wide.
102,500	sq.yd. 8 in. Gravel Surfacing, 16 ft. wide.
596	lin.ft. 15 in. Concrete or Corrugated metal pipe.
1,075	lin.ft. 25 in. Concrete or Corrugated metal pipe.
300	cu.yd. Riprap.
28	cu.yd. "Special" Concrete.
335	cu.yd. Class "A" Concrete.
110	cu.yd. Class "B" Concrete.
36,500	lb. Steel.
2	REINFORCED CONCRETE BRIDGES, consisting of
160	cu.yd. Excavation.
15	cu.yd. "Special" Concrete.
97	cu.yd. Class "A" Concrete.
173	cu.yd. Class "B" Concrete.
15,000	lb. Steel.

Alternate bids will also be considered on 8½ in. Waterbound Macadam for the total 104,500 sq.yd. of surfacing.

Specifications and blank proposals will be furnished contractors upon application.

Plans and specifications are on file in the office of the Department of Highways, Nashville, Tennessee.

Any additional information may be secured from the Chief Engineer, at Nashville, Tennessee.

The right to reject any or all bids is reserved.

Certified check for the sum of $500.00 must accompany each bid as evidence of good faith and as a guarantee that if awarded contract, the bidder will execute contract and give surety bond as required.

STATE HIGHWAY COMMISSION,
W. P. MOORE, Chief Engineer.

Bids: July 1.

Grading and Draining Road

Lewisburg, W. Va.

Until noon, July 1st, sealed bids will be received by the County Court of Greenbrier County, West Virginia, for grading and draining proposed road leading from Ronceverte, west to the Fort Spring District line, or so much thereof as funds available will permit. $70,000 has been appropriated.

The bulk of this work is on a new location with which traffic will not interfere.

Plans and specifications will be supplied to applicants sufficiently interested to look over the work.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

Bids: July 7.

Street Repairing

Woodstown, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council for the repair of streets in the Borough of Woodstown, with a seal coat surface upon a repaired bituminous concrete foundation; estimated amount of surface pavement required is 27,475 square yards; at Council Chamber, Woodstown, N. J., on Monday, July 7th, 1919, at 7.30 P.M.

Drawings, specifications and further information in regard to bids may be obtained of **Keasbey & Sparks**, Engineers, **Mecum Bldg., Salem, N. J.**

WALTER SYLVESTER, Clerk.

PROPOSAL FOR STONE.—U. S. Engineer Office, Customhouse, New Orleans, La. —Sealed proposals will be received here until 11 A.M., July 15, 1919, and then opened, for furnishing and delivering stone for Head of Passes, South Pass, and Southwest Pass, Mississippi River. Further information on application.

OFFICIAL PROPOSALS

Bids: July 28.

Sewer Construction

Aberdeen, South Dakota

Notice is hereby given that sealed bids will be received by the Auditor of the City of Aberdeen, South Dakota, until 9 o'clock A.M. on Monday, July 28, 1919, for the furnishing of material and labor and constructing a storm sewer for the City of Aberdeen, South Dakota, at which meeting of the Board of Commissioners of said city all proposals will be opened.

All material and work must be in accordance with the plans and specifications on file at the office of the city engineer and city auditor.

The work to consist of approximately eight miles of vitrified, segmental block or concrete pipe running in diameter from ten inch to ninety-six inches, with one hundred manholes and two hundred and twelve catch basins.

Any prospective bidder, desiring a set of the plans for personal use may obtain same from the city engineer by making a deposit of Ten Dollars to cover the cost of the blue prints. Refund of one-half the amount deposited will be made on the return of the plans and specifications to the city engineer within five days following date of receiving bids.

Each bid must be accompanied by a certified check, payable to the City of Aberdeen, in the amount of One Thousand Dollars. Said check will be returned to unsuccessful bidders upon award of contract and to successful bidder when his bond has been approved for the faithful performance of the work.

The city reserves the right to reject any or all bids.

By order of the Board of Commissioners of the City of Aberdeen.

F. U. RAYMOND,
City Auditor.

PROPOSALS FOR JETTY CONSTRUCTION.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., July 24, 1919, and then opened, for jetty construction at the entrance to St. Johns River, Fla. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, July 25, 1919, and then opened, for dredging in Schuylkill River. Further information on application.

PROPOSALS FOR COAL.—U. S Engineer Office, Jacksonville, Fla.—Selaed proposals will be received here until 12 o'clock noon, July 24, 1919, and then opened, for furnishing 6000 short tons coal for U. S. dredges on Hillsboro Bay and tributary waters. Information on application.

PROPOSALS FOR DREDGING, U. S. Engineer Office, Baltimore, Md. Sealed proposals will be received here until 1:00 P.M., July 21, 1919, and then opened, for dredging in channel to Curtis Bay, Md. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Honolulu, Hawaii.—Sealed proposals for dredging in Honolulu Harbor, Hawaii, will be received in this office until 11 A.M., August 26, 1919, and then opened. Further information on application to this office or to U. S. Engineer Office, 401 Customhouse, San Francisco.

U. S. ENGINEER OFFICE, P. O. BUILDING, Savannah, Ga.—Sealed proposals will be received here until 12 noon July 21, 1919, and then opened, for dredging in Savannah Harbor. Information on application.

OFFICIAL PROPOSALS

Bids: July 30.

Hetch Hetchy Dam

San Francisco, California.

Sealed proposals will be received at the office of the Board of Public Works, City Hall, San Francisco, between 2 and 3 o'clock P.M., Wednesday, July 30, 1919, for the construction of the Hetch Hetchy dam and appurtenant works, in Tuolumne County, California.

The dam is to be of the arched gravity type, with a height above stream level of about 212 feet and an average depth to foundation of about 72 feet, and built of cyclopean masonry. The principal items of the work are estimated as follows: Excavation below stream level, 77,000 cu.yds.; excavation above stream level, 60,500 cu.yds.; cyclopean masonry, 298,800 cu.yds.; concrete not included in cyclopean masonry, 66,850 cu.yds. The dam site is accessible directly by railroad, and electric power for construction purposes will be available.

It is estimated that the cost to the City of this work will be about $4,000,000.

Specifications, plans and proposal form may be obtained from the City Engineer, City Hall, San Francisco, on deposit of $20.

M. M. O'SHAUGHNESSY,
City Engineer.

Bids: July 17.

Construction, Sanitary Work, Etc.

Malone, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Addition to State Armory, Malone, N. Y., will be received by Mr. Edward S. Walsh, Superintendent of Public Works, Capitol, Albany, N. Y., until 12 o'clock noon of Thursday, July 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the Superintendent of Public Works, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3251, 3266, 3267 and 3268. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the State Armory, Malone, N. Y.; at the office of the State Board of Armory Commissioners, 158 State St., Albany, N. Y.; at the office of the Superintendent of Public Works, Capitol, Albany, N. Y.; at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Departemnt of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Public Works, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of Edward S. Walsh, Superintendent of Public Works, Capitol, Albany, N. Y.

Dated: June 19, 1919.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., July 21, 1919, and then opened, for dredging in Passaic River, N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: July 11.

Sewage Disposal Plant

DIVISION I
SANITARY DISTRICT OF INDIANAPOLIS

Indianapolis, Ind.

Sealed proposals will be received at the office of the Board of Sanitary Commissioners of the Sanitary District of Indianapolis, at the City Hall, Indianapolis, Indiana, until 10 A.M., July 11, 1919, when bids will be publicly opened and schedules, and contract awarded as soon thereafter as possible, for the construction of Division 1 of the Sewage Disposal Plant for the Sanitnary District, which shall consist of 960 lineal feet of 84-inch Reinforced Concrete Intercepting Connecting Conduit, and 300 feet of 75-inch Reinforced Concrete Sewer Extenesion; Reinforced Concrete Grit Chambers and Overflow, one small Pump House, superstructure of brick, one 4-inch electric driven Drain Pump, Piping and Valves, seven Sluice Gates, Roughing Racks and Guard Racks with complete equipment; 1000 lineal feet of 60-inch Class A Cast-Iron Inverted Siphon under the river, and 7600 lineal feet of 78-inch Reinforced Concrete Sanitary Conduit. Detailed plans, drawings and specifications are on file at the office of the Board.

Proposal blanks and copies of specifications and plans may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis. A charge of $10.00 will be made for each complete set of plans and specifications, which will be refunded upon their return in good condition.

Each bidder shall be required to deposit with the Board of Sanitary Commissioners with his respective bid, a certified check payable to the Sanitary District of Indianapolis, in the amount of ten thousand dollars ($10,000) to insure the execution of the contract for which such bid is made.

The Board has the right to reject any and all bids.

FRANK C. LINGENFELTER,
President.
LUCIUS B. SWIFT,
Vice-Pres.
JAY A. CRAVEN,
Secretary.

Bids:

Bridge Construction

County of Camden, N. J.

Sealed proposals are invited for building a new reinforced concrete arch bridge on Nicholson Road over Newton Creek in the County of Camden, N. J., in accordance with plans and specifications on file in the office of the Clerk Board of Chosen Freeholders, Court House in Camden, N. J., and which will be mailed to any address on receipt of One Dollar.

Approximate quantities.
1400 cubic yards concrete.
292 piles (12-in.) 25 ft. long.
6000 cubic yards earth fill.
712 square yards amiesite road with concrete base.

Bids will be received, immediately opened and publicly read in the Freeholders' Room in Court House, Camden, N. J., Monday, July 7, 1919, at 11 A.M. The Board reserves right to reject any or all bids.

FRED W. GERCKE,
Chairman Bridge Committee.
J. J. ALBERTSON, County Engineer
Dated June 19, 1919.

Bids: June 30.

Storm Sewer

Raton, New Mexico.

Sealed proposals will be received at the office of the City Clerk of the City of Raton, New Mexico, until 8 o'clock P.M., June 30, 1919, for the construction of a storm sewer in Sewer District No. 3.

Approximate quantities: 1062 ft. 10 in. vitrified sewer pipe, 1936 ft. 12 in., 2007 ft. 15 in., 2342 ft. 18 in., 1936 ft. 21 in., 404 ft. 30 in. concrete conduit, 400 ft. 36 in., 400 ft. 42 in., 80 ft. 48 in.; 10 catch basins and 25 manholes.

All bids must be accompanied by a certified check payable to the City Treasurer in the sum of $500.00. Plans, specifications and proposal blanks can be obtained at the office of Vincent K. Jones, Consulting Engineer, E. Las Vegas, N. M., or at the office of the City Clerk.

Monthly payments of 85% of completed work. All payments to be made in Sewer Certificates bearing 6% interest and payable in from one to ten years. No conditional or informal bid will be considered. The City reserves the right to reject any or all bids.

City Council of the City of Raton, N. M.,
By J. J. SHULER, Mayor.

Attest:
PERRY TURNER, Clerk.

Bids: July 15.

Pumping Plant

MUSCATINE-LOUISA DRAINAGE DISTRICT NO. 13

Wapello, Ia.

Sealed bids will be received until 1 o'clock P.M., July 15, 1919, by the Muscatine-Louisa Drainage District No. 13, at the Office of the County Auditor of Louisa County, Wapello, Iowa, for a steam-driven pumping plant containing one 36-in. and one 24-in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

Bids: July 14.

Highway Construction

Ebensburg, Pa.

Sealed proposals addressed to the supervisors of Croyle township, Cambria County, Pa., in care of the country controller, Abensburg, Pa., will be received up until 10 a.m., and publicly opened and read in the commissioners' office at 10:30 a.m. on the 14th day of July, A.D., 1919, for the furnishing of all labor and materials for the reconstruction of 10¾ miles of highway in Croyle township, Cambria County, Pa., with a 16 foot roadway of vitrified brick paving block on a combination base and curb.

The work is in three contracts, viz.: (1) Jackson road from Summerhill borough line to the Cambria township line, a distance of 3.35 miles; (2) The Frankstown road from Lambs bridge to the Summerhill township line, a distance of four miles. (3) The Perkins hill road from the village of Lovett to the Summerhill township line, a distance of 2.9 miles.

Proposals must be made in accordance with the plans and specifications and on the blank forms furnshed by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, engineer for Croyle township, Leader building, Johnstown, Pa. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. Contractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required indemnity bond furnished and approved by the board of supervisors and county commissioners, amount of which must be equal to the gross amount of the contract.

The supervisors reserve the right to reject any or all bids to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 1,200,000 No. 1 repressed vitrified paving block, delivered f.o.b. cars, Summerhill, Pa.; 1,500,000. No. 1 repressed vitrified paving block delivered, f.o.b. cars Lambs bridge and Summerhill, Pa., and 1,050,000 No. 1 repressed f.o.b. cars, Lovett, Pa.

Plans, specification and bidding blanks will be ready for inspection and distribution to contractors on Thursday, July 3.

By order of Charles Stutzman, Stephen Haddon and D. G. Knepper, supervisors of Croyle township, Cambria County, Pa.

O. P. THOMAS, Engineer.

Bids: July 29.

Construction, Sanitary Work, Etc.

Utica, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Building for Chronic Patients (Male); Building for Chronic Patients (Female); Building for Acute Patients, Utica State Hospital (Marcy Division), Utica, N. Y., will be received by the tSate Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 29, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be acompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awars are made shall be required to furnish surety company bond in the sum of fifty per cent(50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3271, 3272, 3273, 3274, and 3275. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, New York; at the New York office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: June 18, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Sault Ste. Marie, Mich.—Sealed proposals will be received here until 4 P.M., July 22, 1919, and then opened, for dredging Grosse Pointe Channel, Lake St. Clair, Michigan. Further information on application.

Bridge Construction

ROUMANIAN GOVERNMENT

Roumania.

Proposals will be considered by the undersigned for submittal to the Roumanian Government for the furnishing and erection of all or part of the bridges destroyed in Roumania during the war. The total of steel needed for these bridges is about 25,000 tons, the largest and most urgent of these being the bridge across the Borcea branch of the Danube.

As arrangements for the cash payment for this work are not at present concluded, negotiations with firms capable of at least temporarily financing contracts are for the present most desired.

Arrange interview by amil.

ROUMANIAN BRIDGE COMMISSION,
Hotel Cumberland,
54th Street and Broadway,
New York.

Bids: July 7.

Paving

Bay City, Michigan

Bids will be received Monday, July 7th 1919, at 9 o'clock A.M., for constructing 24,500 yards of permanent pavements, including asphalt, concrete and brick.

WM. H. REID.
Comptroller.

Proposal Advertisements

can be received at our New York office **until**

10 A. M. Wednesday

for publication in the issue of Engineering News-Record out the

Next Morning

When there is any doubt as to copy reaching us by mail by Wednesday morning, telegraph both copy and instructions as a

Night Letter

forwarding confirmation, copy and order by mail.

ENGINEERING
NEWS-RECORD

10th Ave. at 36th St., New York

OFFICIAL PROPOSALS

Bids: **July 10.**

Sewer Construction

OFFICIAL NOTICE NO. 43

Milwaukee, Wis.

Published by authority of the Sewerage Commission of the City of Milwaukee.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2:00 P.M., the 10th day of July, A.D. 1919, at which time and place during the session of the said Commission the proposals will be publicly opened and read.

The work to be done embraces the building of approximately the following work:

6200	lineal feet 72 in. concrete sewer in tunnel.
430	vertical feet of standard manholes.
60	vertical feet of drop manholes.
8	manhole frames and covers.

Together with all other appurtenances.

The time allowed for the completion of this contract will be twelve (12) months from the date of the engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Five Thousand Dollars ($5,000.00).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned, upon application to the Secretary of the Sewerage Commission, after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and the Sewerage Commission.

Specifications and blank forms of proposals can be obtained, and detailed plans examined, at the office of the Sewerage Commission in the City Hall and a full set of plans will be sent to any contractor upon receipt of Five Dollars ($5.00). This sum will be returned upon surrender of the plans in good condition. The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES,
Secretary.

Countersigned:
A. P. PUELICHER, Deputy Comptroller.

OFFICIAL PROPOSALS

Bids: July 9.

Street Paving

Palmerton, Penna.

Sealed proposals will be received by the Secretary of the Borough of Palmerton, Carbon County, Pennsylvania, at No. 180 Delaware Ave., Palmerton, Penna., until 9 P.M. July 9th, 1919, for Street Improvements.

The work will consist of approximately:

12,830	cu.yd. Excavation for Roadway and Curbing.
30,260	sq.yd. of Broken Stone Sub-Base for all types of Pavement.
30,260	sq.yd. of Cement Concrete Base Course for Brick and Amiesite Pavement.
30,260	sq.yd. of Concrete, Brick and Amiesite Pavement.
740	lin.ft. Removal and Renewal of Old Curbing.
2,890	lin.ft. of Concrete Curbing.

Proposals must be marked "Proposals for Street Improvement."

All proposals must be upon blank forms provided by the Borough Council.

Plans, specifications and proposal forms can be procured from the Borough Council through the Borough Engineer at the office of the Palmer Land Co. Cor. Third and Delaware Ave., Palemrton, Penna., upon deposit of ten (10) dollars, which amount will be refunded upon their return in good condition not later than ten (10) days following the award of the contract.

Each bid must be accompanied by a certified check for $5000.00 as evidence of good faith.

The right is reserved to reject any or all bids.

BOROUGH OF PALMERTON,
A. C. SCHAEFER, Secretary.

Bids: July 8.

Concrete Girder Bridge

COUNTY CONTROLLER'S OFFICE

Reading, Penn.

Sealed proposals will be received in this office up to 10 o'clock A.M. Tuesday, July 8, 1919, for the erection of a reinforced concrete girder bridge across West Branch Creek in Washington Township, Berks County, Penn., about two miles from Barto Station. Material must be shipped on the P. & R. railroad.

Proposal blanks with plans and specifications can be obtained in the County Commissioners' Office by paying a deposit of five dollars, which will be refunded when the plans and specifications are returned.

All bids must be accompanied with a certified check equal to ten per cent of the aggregate amount of the bid.

The right is reserved to reject any or all bids.

CYRUS J. RHODE,
County Controller.

June 18, 1919.

OFFICIAL PROPOSALS

Bids: Sept. 30.

Bridge Construction

CONSTRUCTION OF A REINFORCED CONCRETE BRIDGE OVER THE RIO YAQUE DEL SUR ON THE ROAD FROM AZUA TO SAN JUAN

The Province of Azua, Dominican Republic.

Sealed proposals will be received at the Office of the Director General of Public Works, Santo Domingo City, Dominican Republic, until 10 o'clock A.M., September 30, 1919, for furnishing all materials and labor necessary for the CONSTRUCTION OF A REINFORCED CONCRETE BRIDGE AND APPROACHES over the Rio Yaque del Sur on the road from Azua to San Juan, in the Province of Azua, Dominican Republic. The bridge consists of two reinforced concrete arches of 91 ft. span each and four slab spans of 22 ft. each. Over all length of bridge 304 ft. 0 in. and out to out width 18 ft. 9 in.

The plans and specifications may be secured at the Office of the Director General of Public Works in Santo Domingo City, Dominican Republic, by making a deposit of Thirty Dollars ($30.00) for same, which will be returned after the award of the Contract.

Santo Domingo, Dominican Republic,
June 12, 1919.

Bids: July 14.

Road Work

Fayetteville, W. Va.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until July 14, 1919, for grading one section of County Highway of approximately 3.0 miles from Fayette to Lansing containing 45,000 cu.yd. of excavation. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check of five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with the bid. The County Court reserves the right to reject any and all bids.

J. K. McGRATH, Road Engineer.

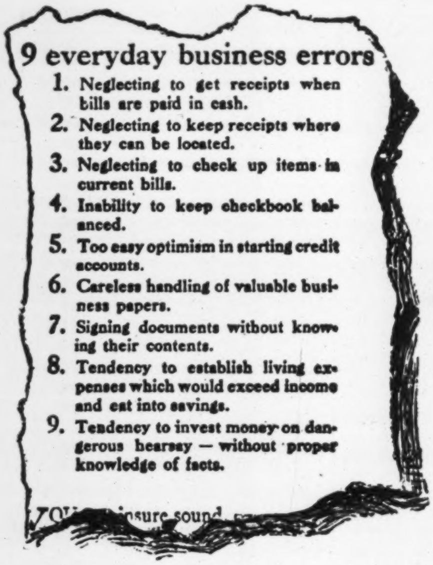
By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

WHAT IS IT WORTH TO YOU
To know that the handling of your bonds and compensation insurance is in the hands of a specialist, an expert in your particular needs in insurance?
An Engineering Insurance Service
Swart Service Really Serves
TRY ME OUT
HARMON V. SWART
19 Liberty Street, New York

WANTED
To sub-let or will hire Machine
to do 100,000 yard contract, with 20 foot bottom, average depth of 5½ feet, a one to one slope, with 8 foot berm.
WISCONSIN DRAINAGE CO.
Elkhorn, Wisconsin.



9 everyday business errors

1. Neglecting to get receipts when bills are paid in cash.
2. Neglecting to keep receipts where they can be located.
3. Neglecting to check up items in current bills.
4. Inability to keep checkbook balanced.
5. Too easy optimism in starting credit accounts.
6. Careless handling of valuable business papers.
7. Signing documents without knowing their contents.
8. Tendency to establish living expenses which would exceed income and eat into savings.
9. Tendency to invest money on dangerous hearsay — without proper knowledge of facts.

YO insure sound

—The TENTH Error

This clipping from a recent newspaper advertisement, tells a valuable story. But it overlooks one of the *biggest* business errors—

Neglecting to use the

SEARCHLIGHT SECTION

It is a bad business error to overlook the opportunities that this Department puts at your disposal.

Whether you wish to buy or to sell—to secure contracts—to reach the men whose services you want or to whom you wish to sell your services

—the "Searchlight" offers you the opportunity to reach the largest possible number of your prospective customers.

0086

OFFICIAL PROPOSALS

Bids: June 30.

Sewer Construction

Muskegon, Mich.

Sealed bids will be received at the office of the City Recorder, Muskegon, Michigan, up to 8 o'clock, June 30, 1919, for the furnishing of material and the performance of the work of constructing main and lateral sewers in sewer district No. 28, which lies in the southeastern part of the City of Muskegon. Sewer will be laid in sandy soil, ground water will be encountered at a depth of ten (10) to fourteen (14) feet.

5,461 lin.ft. 24-in. D.S. Sewer Tile, maximum cut 16 ft., average cut 10 to 14 ft.
2,242 lin.ft. 20-in., average cut 12 ft.
1,106 ft. 18-in., average cut 12 ft.
2,562 ft. of 15 in.
2,148 ft. of 12 in.
2,282 ft. of 10 in.
31,521 ft. of 8 in.
61 Manholes.
13 "Y" Branches on the 24-in. pipe.

On the 8-in. there will be a "Y" Branch about every 25 ft.

Lamp holes without cast iron covers will be provided on the end of each lateral.

Plans and Specifications of the same are on file in the office of the City Engineer.

Each bidder will be required to deposit with his bid a certified check of 5% of the total amount thereof to be forfeited to the City in case he fails to enter into contract if his bid is accepted.

The city reserves the right to reject any and all bids.

B. H. TELLMAN,
City Recorder.

Bids: June 30.

Street Improvement

Raton, New Mexico.

Separate, sealed proposals for the paving and improving of the following streets within the City of Raton, New Mexico, will be received at the office of the City Clerk until 8 o'clock P.M., June 30: Cook Avenue from First to Third Streets; Park Avenue from First to Third Streets; First Street from Rio Grande to Savage Avenue; Second Street from Rio Grande to Savage Avenues. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check in the sum of $1,000.00 payable to the City Treasurer. Approximate quantities are as follows: Topeka of Bitulithic Pavement, 26,887 sq.yd.; Concrete Curb and Gutter, 6661 lin.ft.; Concrete Alley Returns, 546 lin.ft.; Concrete Alley Pavement, 4000 sq.yd., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work, of certificates bearing 6% interest and certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, E. Las Vegas, N. M., or at the office of the City Clerk. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Raton, N. M.,
By J. J. SHULER, Mayor.
Attest:
PERRY TURNER, Clerk.

OFFICIAL PROPOSALS

Bids: July 10.

Concrete Bridge Construction

Adrian, Michigan.

Notice is hereby given that sealed bids will be received by the City Clerk of the City of Adrian, Michigan, for the construction of a reinforced concrete bridge over the Raisin River on West Maumee Street, in said City of Adrian. The plans and specifications for said concrete bridge may be seen at the office of the City Clerk where they are on file for inspection, and include by reference Michigan State Highway Department, Specifications Edition 1916. All bids must be accompanied by a certified check for the sum of $500.00 to be forfeited by the bidder in the event that he is the successful bidder and fails to carry out his contract, and in the event that his bid is not accepted, said certified check will be returned. The right is also reserved to reject any and all bids.

All bids will be opened on July 10, 1919, at 4 o'clock P.M. at the office of said City Clerk. The successful bidder will be required to furnish a construction bond in a sum not less than the amount of the bid, furnished by a Surety Bonding Company authorized to transact business in the State of Michigan, and to carry insurance covering Workmen's Compensation and public liability.

G. PERCY LOVE,
City Clerk.

Dated this 17th day of June, 1919.

POSITIONS VACANT

A FIRST-CLASS mechanical and electrical engineer wanted, capable of designing electric traveling cranes; must have executive ability and be capable of taking full charge. State experience, age, salary expected. Communications strictly confidential. Address P-810, Eng. News-Record, Philadelphia.

ARCHITECTURAL draftsman wanted—State education, experience and salary wanted; location, New York City. P-837, Eng. News-Record.

ASSISTANT superintendent or general foreman wanted on bridge work. Requirements, energy and good judgment. Address P-746, Eng. News-Record, Chicago.

DESIGNER—Reinforced concrete designer wanted; thoroughly posted on latest commercial methods of flat slab design and construction; engineering graduate preferred. The J. G. White Engineering Corporation, 43 Exchange Pl., New York.

DRAFTSMEN wanted for the Panama Canal—1 electrical draftsman experienced in underground power distribution and building illumination, $168 to $179 month; 2 hull draftsmen, $168 to $231 month; 1 draftsman capable of handling municipal engineering work, $189 month; must be thorougly experienced in special lines above indicated, American citizens under 50 years of age, in good health. Free steamship transportation from New York or New Orleans, salary beginning date of sailing. Write Chief of Office, The Panama Canal, Washington, D. C.

DRAFTSMAN wanted at once—First-class; state age, nationality, references and experience in first letter. Permanent position in central South if satisfactory. P-747, Eng. News-Record, Leader-News Bldg., Cleveland.

POSITIONS VACANT

DRAFTSMEN — First-class, experienced architectural or structural men for commercial or domestic work. Send samples of recent work with experience, salary wanted and reporting date, first letter. Permanent work under best conditions. Smith, Hinchman & Grylls, Washington Arcade, Detroit, Mich.

DRAFTSMAN wanted on construction work, New York City; technical graduate preferred; give past experience and salary desired. Address P-835, Eng. News-Record.

DRAFTSMEN and detailers wanted immediately on reinforced concrete. State experience, salary, age and nationality. P-870, Eng. News-Record.

ENGINEER-SUPERINTENDENT capable of handling any class of municipal engineering and superintending paving construction for city doing its own work; one experienced with Kentucky rock asphalt preferred; state fully experience in first letter. W. Austin Smith, Box 1206, Huntington, W. Va.

ENGINEER wanted on highway work, capable of taking charge of party in field making road surveys. F. O. Laing, County Engineer, Des Moines, Ia.

ENGINEERS wanted; one transitman and one draftsman, with some experience in highway work. Permanent employment if services satisfactory. P-216, Eng. News-Record, Chicago.

ENGINEER solicitor wanted by engineering firm to manage business-getting department; headquarters New York City; experience in manufacture of structural steel, steel products and machinery preferred; state age, nationality, experience in detail; references and salary. P-847, Eng. News-Record.

ESTIMATOR wanted for miscellaneous iron and steel work, reinforcing especially; structural and ornamental knowledge desirable. Must be qualified to take items accurately from plans. Would consider partnership with right man. Actual business good, prospects splendid. P. O. Box 487, Little Rock, Ark.

EXPERIENCED checkers and detailers on bridge and building work, at once. Location, New England. State age, nationality, experience, salary expected and when able to report in first letter. P-769, Eng. News-Record.

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

FIRST-CLASS checkers and detailers wanted on mill buildings and other steel construction; state qualifications, salary expected and date available. Indiana Bridge Company, Muncie, Ind.

Structural Draftsmen Wanted

Several first-class detailers and checkers by large Buffalo fabricating shop. Permanent positions with excellent opportunities for advancement, depending upon ability. Give age, education, references and experience in detail.

P824—Engineering News-Record
10th Ave. at 36th St., New York City

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space for 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
935 Real Estate Trust Bldg.,	Philadelphia
657 Leader-News Bldg.,	Cleveland
1570 Old Colony Bldg.,	Chicago
501 Rialto Bldg.,	San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

POSITIONS VACANT EMPLOYMENT POSITIONS WANTED

POSITIONS VACANT

GRADUATE engineer wanted — Experienced in automobile design, maintenance and repair; must have had practical shop experience on repairing at same time; give past experience and salary desired. Address P-836, Eng. News-Record.

GRADUATE engineer wanted, specialist in reinforced concrete design, with practical construction and sales experience, for position resident sales engineer, Calcutta, India. Also for Singapore, Straits Settlements. Must be unmarried and American or British born and prepared to stick. Only high-grade men wanted. Send complete details education, training, experience, references and salary requirements. Truscon Steel Co., 2 Rector St., New York City.

HEATING and ventilating engineer-draftsman wanted—Must be college graduate, neat draftsman, capable of designing hot air heating, ventilating and exhaust systems. Location eastern New York. Salary $165 per month. P-748, Eng. News-Record.

LARGE locomotive firm will shortly require the services of a thoroughly experienced works manager conversant with the best modern practice; liberal salary and exceptional prospects to suitable man. Address "Locomotive," Wm. Porteous & Co., Advertising Agents, Glasgow, Scotland.

LEVELMAN and transitmen wanted on reclamation work; state age, experience, education, nationality and salary desired; no replies to rejected applicants. Address Morgan Engineering Co., 622 Goodwyn Institute, Memphis, Tenn.

ONE experienced structural steel engineer wanted for Southwest. Permanent position. P-770, Eng. News-Record, Chicago.

POSITIONS VACANT

MAN wanted capable of taking charge of an excavating business; one capable of making estimates and supervising work; this is an unusual opportunity for a capable man who is willing to start at a fair salary and show that he can make good. Write, giving, experience, age and salary wanted to start. P-811, Eng. News-Record.

MEN wanted familiar with valuation of railway structures, for work in the middle west. Address P-782, Eng. News-Record, Philadelphia, giving experience and salary.

REINFORCED concrete engineers of ability, conversant with latest design methods, experience with reinforcing steel concerns preferred; permanent positions, attractive future; state age, education, experience in detail, salary and when available. Truscon Steel Company, Majestic Bldg., Chicago, Ill.

SOUTHERN college desires applications for assistant professorship of drawing and surveying. Applicants must be unmarried. Salary $1500 and quarters. P-859, Eng. News-Record, Philadelphia.

STRUCTURAL steel detailers wanted; reply by mail, stating age, nationality, experience and salary expected. The George A. Just Company, Long Island City.

STRUCTURAL draftsmen wanted—Competent. Reply with full particulars as to experience, age, salary required, how soon could report and references. Lehigh Structural Steel Company, Allentown, Pa.

STRUCTURAL steel detailers wanted; state age, experience, salary expected, and date available. New England Structural Company, Everett, Mass.

POSITIONS VACANT

TEMPLET makers — Several first-class templet makers for structural shop. Address Anthracite Bridge Co., Scranton, Penn.

THOROUGHLY experienced grade and concrete foreman wanted on county road work; no amateurs wanted. Wire Atlantic Bitulithic Company, First National Bank Bldg., Shinnstown, W. Va.

LABOR AGENCY

CONSTRUCTION laborers of all kinds supplied free of any charge to employers, provided transportation is advanced. Finn's Labor Agency, 27 Washington St., Boston, Mass. Tel, Haymarket 3256 or Haymarket 1108.

EMPLOYMENT AGENCIES

CLEVELAND Engineering Agency, Rose Building, Cleveland, wants quickly experienced engineers, draftsmen and technical men, available for executive, sales or engineering positions. Send stamp for blank and list of vacant positions.

THE Engineering Agency, now in its twenty-sixth successful year is the oldest technical employment bureau in the world for high-grade executives in engineering, construction and manufacturing. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago, Ill.

WESTERN C. E. openings—Draftsmen desiring western locations, on highway and irrigation work, at $135 to $175 a month, communicate with the Business Men's Clearing House, Denver, Colo.

DRAFTSMEN WANTED IMMEDIATELY

for work in the Wilmington Office of E. I. duPont de Nemours & Co.

Positions are now open for the following:

Architectural Draftsmen.
Architectural Engineers with reinforced concrete and structural experience.
Machine Designers.
General arrangement and layout draftsmen.
Structural Steel Design Draftsmen.
Power Draftsmen.
Map Draftsmen.

Write to Personnel Division, E. I. duPont de Nemours & Co., DuPont Bldg., Wilmington, Delaware, giving age, detail of experience, salary desired and other important information

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State Highway Department to Hold Examination for Assistant Engineers

In compliance with a recent law enacted by the legislature, the State Highway Department will hold an examination for Assistant Highway Engineers in the Capitol building at Nashville, Tennessee, on

JULY 7th 1919

Chapter 74 of the Public Act of 1917 requires all Assistant Engineers who are employed by the State Highway Department to have passed a creditable examination before the examining Board, consisting of the State Highway Engineer, the Dean of Engineering of the University of Tennessee and the State Geologist. The object of this examination is to qualify a number of Engineers for immediate employment. The State Highway Department is now preparing a number of projects to be passed upon by the Federal Government with an idea of immediate construction. The Department is putting forth every effort to construct the unimproved portions of the Memphis to Bristol Highway (610 miles in length) and the Dixie Highway (207 miles in length) as quickly as possible. In addition to these main trunk lines there are a number of other projects which are receiving the attention of the Department. In order to carry on this work and to prepare the various projects for construction the Department is now needing additional engineers. This examination is therefore held in order to obtain Assistant Engineers for immediate employment and not to be placed on the eligibility list to wait for future assignment. **It is thought by the Commission that the Department can use at the present time every engineer who qualifies.**

W. P. MOORE, Chief Engineer, State Highway Dept., Nashville, Tenn.

STRUCTURAL STEEL DETAILING for

Mill buildings, office buildings, tower tipples, viaducts, schools, theatres, etc.

Correctness and time of delivery of drawings guaranteed. All drawings made in accordance with your Shop Standards. We have a complete organization, which will save you money, time and worry; can refer you to twenty or more satisfied clients, covering nine years' business. The Mail makes Five Hundred Miles the same as next door.

Send us your Inquiries.

Write or wire and we will come and talk it over.

Designs for Structural Steel and Reinforced Concrete Industrial Buildings, Foundations, etc.

RAPP & DUNKEL
Fulton Bldg., Pittsburgh, Pa.

Experienced Draftsmen Wanted

for right-of-way and track maps in connection with Federal Valuation and maintenance of way. State age, nationality, experience and salary expected. Submit sample of work.

H. R. CARPENTER
Chief Engineer
Missouri Pacific Railroad, St. Louis, Mo.

EMPLOYMENT AGENCIES

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, 304 Lockwood Bldg., Buffalo, N. Y.

POSITIONS WANTED

Mechanical and Electrical

ELECTRICAL engineer, specializing designing medium voltage alternating current factory installations; thoroughly experienced equipment purchaser. PW-830, Eng. News-Record.

ENGINEER, mechanical and hydro-electric, age 35, 3½ years shop, general machinery and mining, nine years hydro-electric developments (thoroughly familiar with preliminaries, projects, design, construction, inspection, testing, supervision and executive duties), with foreign and domestic business experience, speaking four languages, desires position with prominent company, work home or abroad. PW-783, Eng. News-Record, Philadelphia.

MECHANICAL, seven years' experience on steam power plant layouts, desires position where an A-1 man is required as sales engineer or in drafting room; vicinity New York City. PW-857, Eng. News-Record.

MECHANICAL consulting engineer, retired, experience waterworks pumping engineer, hydraulic and general machinery, expert draftsman and mechanic, wants employment part of the day. Salary no object. PW-623, Eng. News-Record.

Civil Engineers

A CIVIL engineering graduate; married; ex-lieutenant engineering corps with two years' experience in topographical and highway surveying, desires a permanent position in reinforced concrete dam and bridge construction. G. H. Squires, West Brattleboro, Vermont.

ARMY officer now in France, civil engineer, 15 years' extensive experience, would like to make connection with construction firm for work in France or Belgium. Speaks and writes French. PW-713, Eng. News-Record.

CIVIL engineer, 26, graduate, married, five years' general construction, valuation, factory maintenance, surveying; good draftsman and estimator; knowledge machinery, seeks connection vicinity New York City. H. Lewis, Wright Inn, Palmer, Mass.

CIVIL engineer, discharged from service, three years city engineer and county surveyor, experience in concrete construction and paving work, wishes position as field engineer or superintendent with contracting firm; 27; single. PW-823, Eng. News-Record, Chicago.

CIVIL engineer, technical education, seven years' experience sewer investigation, design and construction, pavements, municipal work; salary $250 per month. PW-845, Eng. News-Record.

CIVIL engineer, graduate, 29, married, five years' responsible experience on concrete and steel design and construction, bridges, subways and municipal improvements. Hydraulic and sanitary work preferred. PW-793, Eng. News-Record, Chicago.

CIVIL engineer, 35, married, Asso. Mem. Am. Soc., 15 years' experience railroad and building construction, unemployed, will go anywhere. Address F. S., 18 Chedell Pl., Auburn, N. Y.

POSITIONS WANTED.

CIVIL engineer, 29, graduate, unmarried, 1st Lieut. Engrs., U. S. A., five years' experience heavy concrete construction, surveys, design, estimating, etc.; six months overseas with sapper regiment, wishes engagement on reconstruction work in France with American firm; $200. PW-804, Eng. News-Record, Philadelphia.

CIVIL engineering graduate, ex-lieutenant engineers, with three years' engineering teaching experience and two years' army experience, desires position on construction or highway in Eastern states. PW-631, Eng. News-Record.

CIVIL engineer, graduate, 29, married, seven years' railroad and highway location and construction, available at once; location immaterial. Box 138, Barbourville, Ky.

CIVIL engineer, technical graduate, seven years' field and office experience, desires responsible position with engineering or contracting company. PW-734, Eng. News-Record.

CIVIL engineer, 27, university graduate, recently discharged army officer; four years' experience in field and office, surveying, drainage construction, railroad location and construction, railroad valuation, steel and concrete design; good draftsman and letterer; desires permanent position; $200; best references as to ability and character. Cyril Wakefield, c/o Friedlander, 231 West 96th St., New York City.

CIVIL engineer, 26, technical education, ex-soldier, five years' experience supervising construction subways, transmission lines, industrial plants; now office engineer highway construction; capable construction engineer, estimator and draftsman, desires connection with contracting or manufacturing company as engineer or salesman. PW-723, Eng. News-Record, Chicago.

CIVIL engineer—Princeton graduate, now assistant supervisor Penna. railroad, desires change of position. Can furnish capital for partnership, but will consider anything exceeding $40 per week. PW-666, Eng. News-Record.

POSITIONS WANTED.

CIVIL engineer with geological training, graduate, 35, with six years' experience in laying out, designing and erecting shop industrial plants, buildings, terminals, piers and bulkheads of concrete, steel and wood; have had charge of design of large undertakings; can handle men well; keep cost statistics and manage office; five years with one large contracting concern; have good training in mineralogy and geology, useful in connection with possible mineral or ore deposits in undeveloped regions; will go anywhere; ideal man for pioneer work; ready for work June 1; what is your proposition? PW-597, Eng. News-Record.

CIVIL engineer, recent graduate, Serbian, wishes position with a firm doing general steel and reinforced concrete construction; have you got your eye on foreign trade? If so, act quick; eastern location preferred. PW-817, Eng. News-Record, Chicago.

CIVIL engineer, graduate; honorably discharged lieutenant of engineers; 11 years' experience foundations, steel and concrete construction, topography. PW-820, Eng. News-Record.

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CONSULTING engineer—**For the selection of special motor truck equipment for municipal and engineering uses. For appointment write Captain Whittemore, 219 West 81st St., New York, N. Y.**

ENGINEER with 17 years' office and construction experience, desires position with engineering or contracting firm. Technical graduate. PW-790, Eng. News-Record.

EXECUTIVE engineer, technical graduate, member of leading professional societies; 18 years' experience in construction, administration, operation, investigations, valuations and statistical research; waterworks, conservancy engineering, etc. Army experience. PW-789, Eng. News-Record.

EXECUTIVE structural and civil engineer, Member Am. Soc. C. E., technical graduate, 20 years' general experience in office and field on plant construction and equipment, good knowledge of chemistry, recently chief engineer and clerk of works for contractors on $9,000,000 chemical plant; have designed decorative structural work in steel and masonry; decreasing business will soon make change from present position desirable. PW-828, Eng. News-Record.

FIELD engineer, Asso. Mem. Am. Soc. C. E., graduate, 12 years' experience on construction of railways, municipal improvements and industrial plants; least salary $225. PW-826, Eng. News-Record, Philadelphia.

HIGHWAY engineer, first-class draftsman and letterer; 44; married; 15 years town engineer; desires engagement, preferably as highway engineer either on salary or contract basis; own two transits and complete office outfit. PW-829, Eng. News-Record.

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POSITIONS WANTED.

CIVIL engineer, experienced in design of reinforced concrete; estimator preferred. State qualifications and salary. P-809, Eng. News-Record, Philadelphia.

HIGHWAY engineer, graduate, American, 30, married; eight years' experience in highway engineering in all its branches, desires responsible position with contracting company or as division engineer; Eastern states preferred. Address PW-726, Eng. News-Record, Philadelphia.

HIGHWAY engineer, graduate C. E., age 30, married, capable and reliable, desires position as county or district engineer; six years' practical experience, roads, bridges, drainage, heavy building construction; own equipment and instruments; recently honorably discharged as construction officer; available short notice; excellent references. Give full particulars when writing. Address Engineer, Box 557, Aitkin, Minn.

INVESTIGATION and statistics; C. E. graduate with business schooling and six years' experience; a versatile, analytical organizer, age 30, seeks promising opening, preferably in California. PW-796, Eng. News-Record., Philadelphia.

REINFORCED concrete engineer, just released from service, desires responsible position in charge of concrete designing, detailing and estimating; graduate civil engineer, 31 years of age; eight years' experience in responsible charge of work. PW-839, Eng. News-Record.

STRUCTURAL steel engineer, superintendent, chief draftsman; have filled the above positions. Work executed: Highway and railway bridges, mill and office buildings, churches and cathedrals, blast and open hearth furnaces, conveyors, deckheads, etc. Fifteen years experience, age 34, American citizen, desires change. PW-739, Eng. News-Record.

TECHNICAL graduate, two years' teaching, three years' construction, highway and railroad experience, desires position as instructor iin recognized engineering school; East or Central States. PW-827, Eng. News-Record.

YOUNG civil engineer desires field or office position with construction engineer where neatness and accuracy are chief requisites. PW-841, Eng. News-Record.

Bridge and Structural

CONSTRUCTION engineer, age 34, technical graduate, 11 years' experience on design, supervision and construction of reinforced concrete commercial and industrial buildings, just released from the Construction Division of the army, desires location with engineering or contracting concern; experience in East, Middle West and Pacific Coast; strictly high-class man and highest references. PW-834, Eng. News-Record, Leader-News Bldg., Cleveland.

GRADUATE civil engineer, structural steel and reinforced concrete designer, checker and estimator; nine years' experience bridges, subways, elevated structures, dry docks and all classes of buildings, wants position in New York City. Address PW-812, Eng. News-Record.

POSITIONS WANTED

GRADUATE engineer, two years' experience in structural steel and surveys, desires position with progressive firm of engineers or contractors, preferably in vicinity of New York. PW-840, Eng. News-Record.

GRADUATE civil engineer, two years' experience on steel design and detail in office and on construction job, desires connection with structural firm in or near New York City. PW-867, Eng. News-Record.

RESPONSIBLE position wanted by engineer with technical education and ten years' experience in office and field; growing structural firm preferred; present salary $250. PW-816, Eng. News-Record, Philadelphia.

STEEL engineer, graduate structural, large experience designing, estimating and selling steel and factory buildings, desires permanent connection. Export Steel Company preferred. PW-617, Eng. News-Record.

STRUCTURAL engineer, 18 years' experience, detailing, designing, estimating and in charge of work, desires responsible position, preferably in New York; experienced in industrial building design. PW-814, Eng. News-Record.

STRUCTURAL designer, technical and college graduate, 29, single, two years' experience as structural steel detailer and draftsman; five years' experience as designer and checker of designs on varied structural steel and reinforced concrete structures, including two years of responsible design and checking on mill building work. Available on ten days' notice. Wishes position as designer with reputable industrial or railroad firm or building contractor. Location preferably in the vicinity of New York City. PW-838, Eng. News-Record, Philadelphia.

STRUCTURAL engineer, specialist in reinforced concrete and fireproofing, broad experience covering designing, manufacturing, selling and contracting, wishes to make change. East preferred. PW-715, Eng. News-Record, Leader-News Bldg., Cleveland.

STRUCTURAL-MECHANICAL engineer; 13 years' experience in steel, concrete, timber and mechanical and electrical equipment. Design, details and erection of buildings, bridges, cranes, gantries and conveyors PW-693 Eng. News-Record, Philadelphia.

STRUCTURAL steel and reinforced concrete designer, checker and detailer; technical graduate; ten years' experience on all classes of work; have specialized on power houses and mill buildings; desire position as squad leader or checker. PW-775, Eng. News-Record, Philadelphia.

STRUCTURAL and mechanical engineer, graduate, ten years' experience buildings, bridges, cranes, derricks, conveyors, etc.; executive; references. PW-844, Eng. News-Record.

STRUCTURAL engineer of extended experience in all classes of steel structures, detailing, designing and estimating, wishes permanent executive position with live concern. Expert in economical and efficient design. PW-799, Eng. News-Record, Leader-News Bldg., Cleveland.

YOUNG man, married, technical graduate, thorough knowledge reinforced concrete and structural steel; experience railway bridge work, wants position anywhere. B. S., 3730 Page Blvd., St. Louis, Mo.

Draftsmen

DESIGNER, eight years' design, detail and erection, steel and concrete structures, conveyors, industrial work, etc., wants position in New York City. PW-777, Eng. News-Record.

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DESIGNING engineer with wide experience in electric machinery, **switchgear, station** layouts, steel, brick and concrete structures and general mechanical **apparatus,** at present with large chemical company, desires change; responsible position with established concern only. PW-759, Eng. News-Record.

DRAFTSMAN, surveyor, technical graduate, five years varied civil and mechanical engineering, office management, desires connection; New York or vicinity. PW-832, Eng. News-Record.

DRAFTSMAN, general building construction, can estimate, superintend job, 7½ years' experience. PW-728, Eng. News-Record.

ENGINEERING draftsman, graduate C. E., 27; five years design of construction, inspection and surveys. PW-696, Eng. News-Record.

ENGINEER, 31, 12 years' varied experience, largely in design of concrete and steel industrial buildings; capable designer, estimator and draftsman; with large contracting-engineering firm for five years as chief draftsman and assistant engineer; $225; available about July 1. PW-800, Eng. News-Record, Philadelphia.

ENGINEERING draftsman; 13 years' experience, steel and concrete design; can prepare complete working drawings for all types of structures; accurate; good letterer; also experience architectural drafting, details. PW-801, Eng. News-Record, Philadelphia.

ESTIMATOR and draftsman, 33, married, 12 years' experience ornamental iron, miscellaneous structural and plate work; thoroughly familiar with shop practice and costs; now employed; any location. Address PW-853, Eng. News-Record.

EXPERIENCED designer and **draftsman desires** responsible position in Greater New York. Industrial plant engineering **a specialty; steel and concrete structures, general plant** layout, **conveying equipment, etc.** Address Engineer, **404** East **125th St.,** New York City.

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Owing to the holiday next week, the forms for the Searchlight Section of the

July 3rd Issue

of

ENGINEERING NEWS-RECORD

will close for press at 4 P. M Monday, June 30th.

POSITIONS WANTED.

DESIGNER and draftsman; 10 years' experience; steel, concrete, buildings, ships; New York position preferred. PW-849, Eng. News-Record.

RAILROAD and map engineer-draftsman desires responsible position with first-class company; on or in charge of map work, railroad or otherwise, or on special assignments for chief, right of way or valuation engineer. Could assume direction of right of way re-mapping, also of surveys and investigations for same. PW-819, Eng. News-Record, Chicago.

TECHNICAL graduate, six years' experience as draftsman, designer, cost estimator in steel plate shop, desires permanent connection in same line or other structural or mechanical lines where opportunity for sales work will be given after ability has been demonstrated. Address PW- 861, Eng. News-Record, Leader-News Bldg., Cleveland.

Surveyors

INSTRUMENTMAN, 23, has four years' experience on construction and railroad work, wishes position outside or in drafting room; in or within commuting distance of New York City preferred. PW-818, Eng. News-Record.

INSTRUMENTMAN desires to specialize in highway work; three years' experience in engineering, various lines; further details on request. PW-865, Eng. News-Record, Philadelphia, Pa.

SURVEYOR of mines, both underground and surface workings, including all branches of tram roads, and standard gauge; four years laboratory work; drafting with mechanical mine and map making; at present employed as construction engineer in charge of mine and mill; have set of field and drafting instruments; available immediately. P. O. Box 195, Stuart's Draft, Va.

SURVEYOR, city, country, soundings and office work, ten years' experience, wishes position. PW-863, Eng. News-Record.

TRANSITMAN and levelman, several years' varied experience, rapid and accurate, of good habits, at present on temporary work, wishes position. PW-754, Eng. News-Record, Philadelphia.

Superintendent

ARE you looking for a high-grade manager, general superintendent, or superintendent with 25 years' practical experience with New York contractors on heavy construction in concrete pavements, other pavements, steam shovel, waterworks, sewers, foundation, railroads, etc., and who began work as a foreman when 17 years old? Born executive, endowed with pep in plenty, and determination to get results; exceptional ability to hold men to highest morale; good education; for interview address "Elmwood," Bethlehem, Pa.

CONTRACTOR'S or engineer's superintendent; paving experience; age 30; civil engineer graduate; can operate asphalt plant. PW-864, Eng. News-Record, Chicago.

CONTRACTORS' superintendent wants position; 20 years' experience in concrete work, pile driving, foundation work, dirt work and general contracting; best of references; go anywhere; will come on make-good plan or no pay; age 36. PW-761, Eng. News-Record, Leader-News Bldg., Cleveland.

ENGINEER, superintendent of construction, 19 years' successful experience railway, subway, sewer and building construction; foundations, heavy and reinforced concrete. College graduate, office and field experience, expert on track work and steam shovel excavation. Last five years contractor's engineer and superintendent. Age 38. Invites correspondence. Address ABC, Lock Box 134, Buffalo, N. Y.

SUPERINTENDENT or general foreman, heavy and reinforced concrete, highway and steam shovel work. PW-703, Eng. **News-Record.**

POSITIONS WANTED

CONTRACTOR'S engineer, superintendent, executive, estimator, 35, 15 years construction, railroad, concrete, docks, sewers, heavy excavation, municipal work, etc.; willing to work in France; available immediately. PW-851, Eng. News-Record.

CONTRACTOR'S engineer, superintendent, executive, estimator, 35, Assoc. Mem. Am. Soc. C. E.; 15 years construction railroads, concrete arches, bridges, docks, wharves, pile driving, heavy excavations, municipal work, etc., available immediately. PW-831, Eng. News-Record, Philadelphia.

CONTRACTOR'S superintendent; thorough experience on concrete, brick and frame buildings, with reputation for speed and producing results; some experience as civil engineer, can run own instruments; full details and reference by letter. American, age 33. M. S., 716 Venango Street, Philadelphia.

FOREMAN desires position on concrete road work; age 33; 12 years' experience on construction work; best references. Salary $50 per week. PW-752, Eng. News-Record.

I AM looking for an opening as general superintendent or supervising engineer with a construction organization; nine years' experience on engineering construction, starting as foreman. J. D. Tuller, 29 Lewis St., Auburn, N. Y.

SHOP foreman; several years' experience at bridge and structural work; best of references from former employers. PW-850, Eng. News-Record.

STRUCTURAL designer and draftsman, technical graduate, ten years' experience, industrial buildings, smelters, conveyors, etc., seeks position in New York or vicinity. PW-794, Eng. News-Record.

SUPERINTENDENT of construction, 16 years' experience. Industrial plant construction, reinforced-concrete construction, and all classes of deep foundation work. First-class executive. PW-1001, Eng. News-Record.

SUPERINTENDENT desires position in charge of sewer, water mains, or road construction; three years with N. Y. state highway department in charge of road construction. Age 33. Salary $250 per month. PW-751, Eng. News-Record.

EFFICIENT INVESTMENT OF Your Building Fund is offered by an Executive Engineer of twenty-five years' experience designing and constructing bridges, buildings and docks of timber steel and reinforced concrete—recently returned from civilian war service.

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PW787—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

MECHANICAL ENGINEER—37, married, 12 yrs. general engineering experience since graduation along mech., civil, and electrical lines, now employed, desires position as chief or assistant engineer. Experience includes estimating, machine design, buildings, water and steam piping, sewers, structural steel, reinforced concrete, plant layout, paving, wharves, piers, electrical power distribution, etc. 2 yrs. chief draftsman. Minimum salary considered, $300 per month, with chance for advancement.
PW825—Engineering News-Record, Philadelphia

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SUPERINTENDENT highway construction, 11 years' experience, age 32, recently discharged from army; absolutely competent and capable; what have you to offer? P. A. R., Box O, Nanticoke, N. Y.

SUPERINTENDENT, steam shovel work, quarry and crushing plants, road building, either concrete, macadam, chert or sand clay, concrete, reinforced or plain, reservoir and cyclopean masonry. Can you use a live wire on above lines? Can assemble a thorough organization immediately; 20 years' experience; open for immediate engagement. PW-638, Eng. News-Record, Philadelphia.

SUPERINTENDENT and general foreman on mill construction, school or bank and office buildings, 17 years' experience; absolutely trustworthy and reliable. PW-645, Eng. News-Record.

SUPERINTENDENT of construction; American; 43; A-1 organizer; practical, trustworthy, energetic; broad experience all kinds of building construction; best references; available; salary, $75 per week. PW-848, Eng. News-Record.

SUPERINTENDENT of construction with 15 years' experience on heavy steam shovel work and general construction; have only been with two concerns; hustler and know how to organize and handle men. PW-773, Eng. News-Record, Leader-News Bldg., Cleveland.

SUPERINTENDENT or general foreman, 12 years' experience, highway, sewer and water construction. Salary $60 per week. At present employed. Available immediately. PW-755, Eng. News-Record, Leader-News Bldg., Cleveland.

SUPERINTENDENT or general foreman, age 35, good organizer, can handle large forces; steam shovels, concreting, grading, sewers; 16 years' experience; go anywhere. PW-858, Eng. News-Record.

SUPERINTENDENT, 42, over 20 years' practical experience on heavy construction; tunnels, sewers, deep foundation, river and heavy timber work underground. Difficult excavation; reinforced concrete a specialty; best of references. PW-842, Eng. News-Record.

SUPERINTENDENT or general foreman, practical engineer; special course Columbia University; recently returned American Expeditionary Force. PW-763, Eng. News-Record.

POSITIONS WANTED

SUPERINTENDENT of construction, 15 years' experience on heavy steam shovel work; have had charge of some of the largest excavation jobs in U. S. and all made money; seven years with last concern; hustler; good organizer; best references. PW-852, Eng. News-Record, Leader-News Bldg., Cleveland.

TECHNICAL and practical man, 10 years building superintendent, desires a change with a chance to become associated with firm; salary $400. PW-833, Eng. News-Record, Leader-News Bldg., Cleveland.

YOUNG civil engineer, two years' surveying experience; at present employed with building construction company, desires a position as assistant superintendent. Anywhere in United States. PW-698, Eng. News-Record.

Miscellaneous

ARCHITECT and engineer wants position in charge of drafting room or construction department; thorough technical training; ten years' experience; age 36; married; salary $4000. PW-813, Eng. News-Record, Chicago.

A BUILDER of large experience wants to connect with a contracting company that wants business in Southern territory. PW-862, Eng. News-Record.

DO YOU need a $5000 executive? One with broad business and engineering education and training? Alert, on-the-minute, gentleman; New York City preferred. PW-585, Eng. News-Record.

ENGINEER, general construction and underpinning, railroad construction; just returned from American Expeditionary Force. PW-762, Eng. News-Record.

EXECUTIVE engineer, 30, technical graduate, experienced in engineering, production, costs, valuation and management; now employed, general manager, salary $6000, in complete charge sales, production, etc., 250 employees; references furnished. PW-815, Eng. News-Record, Philadelphia.

YOUNG man, 17 years old, will base four years' college course on specialized training in any line of engineering if some well-known corporation or individual can guarantee position with good chance for advancement at end of college course. At present has good speaking knowledge of Spanish and slight knowledge of French. For particulars address A. W. K. Billings, Jr., 10 Bancroft Hall, Andover, Mass.

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EXECUTIVE manager desires entrance into large industrial concern or large construction company, to secure lead to responsible executive position. Exceptionally versatile, can tackle anything. Business training. Born analyst. Great organizer. Abundance initiative, resourcefulness, and endowed by nature to lead and hold men to highest pitch of esprit de corps. Exceptionally thorough on detail. Good address, right business bearing to command. Naturally aggressive, forceful, full of pep, but well tempered by 22 years' practical training as contractor, manager, chief engineer, superintendent, assistant superintendent, starting work at 18 as foreman. Handled all kinds machinery. Expert steam and gas engines. Experienced in every and all kinds of heavy construction work. Two years resident engineer, instrumentman and inspector. Mechanical and civil engineer. Look me over. Q. E. D., 332 Dellwood St., Bethlehem, Penn.

FOUR years night technical school; five years' experience on detail and design of steel and reinforced concrete of mill and industrial buildings, field and office on street layout, etc.; commercial education; want to locate in New York City; salary $175. PW-854, Eng. News-Record.

LIVE, tough job of cost analysis, estimating, valuation or statistical work, by high-grade cost engineer, capable of coordinating information furnished by the accounting and engineering departments, thereby determining unit costs of present work and probable cost of future work. Must be in Philadelphia. PW-871, Eng News-Record, Philadelphia.

SANITARIAN and welfare man, Belgian by birth, naturalized American, at present employed as project sanitarian at a shipping board housing project of 1700 homes, seeks connection with concern interested in large construction projects, or European reconstruction work. PW-637, Eng. News-Record.

SPANISH-SPEAKING master mechanic and licensed chief engineer, desires to connect with corporation operating in Latin America. PW-866, Eng. News-Record.

YOUNG man, 30, technical training, 10 years' experience designing machinery and tools; familiar with shop and foundry practice; inventive mind and integrity of character, selling ability, desires position. PW-846, Eng. News-Record

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Engineer Desires Position as Salesman

Graduate civil engineer, age 25, desires position as salesman; two years' experience as designer and estimator of reinforced concrete, structural steel and wood construction. AS-737, Eng. News-Record.

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For American concerns desiring to do business in Cuba or South America, by reputable, experienced, unmarried American technical man. Will organize sales force and take complete charge of exports. Write AS-786, Eng. News-Record, Philadelphia.

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Company controlling nationally known specialty for concrete buildings will consider purchase, manufacture or sales control of similar articles, or will handle sales in Philadelphia territory of any building material or specialty on commission basis. AS-843, Eng. News-Record, Philadelphia.

Well-Known Engineer Now In France

Wants to represent American house in that country; engineer and contractor with 30 years' experience before the war, 2 years as Major and Lieut-Col. with A. E. F.; perfect facility in French language. References and other information can be obtained by return mail from Searchlight Gilbert, Engineering News-Record.

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Structural designer (C. E.), desires additional work. Steel and reinforced concrete, mill and office buildings, bridges. Chas. W. Barber, 3428 Brown St., N. W., Washington, D. C.

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Experienced Paving Chemist
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Transit, 22-In. Level, Planimeter
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In good condition, level attachment, complete with tripod and case; seller must permit inspection. Lee Hooper, County Engr., Beaufort, N. C.

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Gurley light mountain transit and 20-in. level, in good condition and adjustment. Also Eng. News and Eng. News-Record from 1887 to date. FS-805, Eng. News-Record, Leader-News Bldg., Cleveland.

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Six-inch circle, graduated on silver; vertical arc; stadia wires; extension tripod. Owner, Clark Millen, 72 North Munn Ave., East Orange, N. J.

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SALE OF NEW STEEL PLATES AND CHANNELS at Norfolk.—There will be sold 343,000 pounds of medium steel channels, 40 to 45 feet ni length, 9" x 3.8" x 28.6 pounds per foot; also 15,000 pounds medium steel plates, 5' 5" x 26" x ⅜" new steel, unused, in good condition, stored at the Navy Yard, Norfolk. Bids invited for all or a portion. Sealed bids will be received by the Disbursing Officer, Navy Yard, Norfolk, up to 1:30 **P.M., July 15, 1919**. Inspection is invited. Schedules of sale and further information may be obtained from Lieutenant Commander F. R. Holt, Senior Member, Board of Survey, Appraisal and Sale, Navy Yard, Norfolk, Va. Josephus Daniels, Secretary of the Navy.

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Wool blankets, all styles, $3.58, $4.08, $5.08. O. D. Comforts, $1.50.
Pyramid Tents, 16 x 16, $20 (value $100). Pup Tents, $3. Cots, $2. Kit and Tool Bags, $1. Tarpaulins, etc.

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40,000, weight—7-lbs., size—end to end 25-in. **Sealed Bids** will be opened

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for handling sand; capacity 60 tons per hour; new or second-hand. State full particulars.

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One each, second-hand three fourths and one yard wet mix

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with steam engine, without boiler. Must be in first-class working condition. Also, one 50 hp. vertical

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W872—Engineering News-Record
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State number pieces, exact length, make, weight per foot, condition, location, price f.o.b. cars loading point.

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1—**Clam shell outfit,** preferred on traction wheels, for unloading sand and gravel from cars.

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TWO REVOLVING CRANES

full circle swing; 10-ton capacity; 40 to 50 ft. boom; movable on track; steam or electric power, fully equipped.

First-class condition; immediate delivery.

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between 300 and 500 H.P. to carry 150 lbs. steam pressure, and would prefer one connected to an A.C. Generator, 60 cycle, 3 phase, 440 volts.
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3—2½-yd, 2-Line

Clam-Shell Buckets

Advise name of manufacturer, type.

Three Hoisting Engines

3 Drums, 10 x 12, standard make, link motion, Drums 54 in. in diameter.

Vertical Boilers

3—60-hp., 100 lb. steam pressure.

State location for inspection, also condition.

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5-5 ton gantry cranes

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Two Lambert **hoisting engines.**
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All Boilers complete with all fittings.

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1—No. 15 Portable Champion Jaw, with elevator, screen, engine and boiler.
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1—15-ton, same as above except for bucket operation.
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All above Derricks with or without guy and running ropes.

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3—60-hp. Lambert, double drum and swingers.
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1—18-ton, 10 x 14 Davenport Saddle Tank.
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Also Air Receivers, Drills, Drill Sharpeners, Mixers, Pumps, Steam Hammers, Wire Rope, and other contractors' equipment.

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1—4000 cu.ft. Laidlaw Nordberg, compound steam, duplex air.
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1—741 cu.ft. O-CB Chicago, two stage belt with motor.
1— 680 cu.ft. WJ Sullivan two stage belt.
1— 599 cu.ft. XB-2 Ingersoll, two stage belt.
1—464 cu.ft. ER-1 Ingersoll, single stage belt.
1— 145 cu.ft. ER-1 Ingersoll, single stage belt.
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2—300 hp. Edgemoor, 200 lb. Mass.
1—150 hp. 160 lb. Mass. Vert. Manning.
1—150 hp. 125 lb. Mass. HRT type.
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1—500 kw. Wsthse. Turbo, 3 ph., 60 cy., 480 v. condenser.
1—300 kw. Wsthse, Erie City, 3 ph., 60 cy., set, 220-440-2200 v.
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Engine & Turbo Generator Units—D.C. & A.C.
(All Sizes; Any Voltage)
Boilers—H.R.T. & Water Tube.

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500—220/440 A.C., 3/25 Cycle (all sizes).
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Engine & Turbo Generator Sets—A.C. & D.C. (all sizes).
Boilers—H.R.T. & Water Tube—all sizes.

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GENERATING UNITS

2—75 kw. 250 volt D.C. direct connected to Fleming Harrisburg Engines, each complete with switchboards and instruments.

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2—Scotch Marine, complete with every fitting—will be sold separately or as a whole. This plant used two years only. Located Birmingham, Ala.

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1—No. 1 Austin Trench Machine.

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Portable Boilers

Hoisters, Air Compressors, Concrete Mixers, Centrifugal Pumps, Diving Outfits, Rock Drills, Derricks, Pile Drivers and General Contractor's Equipment, both Steam and Electrically Driven.

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SPECIAL OFFERINGS for IMMEDIATE DELIVERY

Locomotives
Passenger Cars
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2— 20-hp. Vertical Boiler.
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1— 1¼-yd. Peerless Clamshell.
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1— 1-yd. Hayward Clamshell.
1— ¾-yd. Hayward Clamshell.
110— 25-ton Flat Cars, std. gage.
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15— 40-ton Flat Cars, std. gage.
2— 40-ton K. & J. Dump Cars, std. gage.
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20— 4-yd. Western Dump Cars, 36-in. gage.
1—Williamson 5-ton, 4-wheel Locomotive Crane.
1—Brown Hoist, 7½-ton, 4-wheel Locomotive Crane.
1—Industrial, 7½-ton, 4-wheel, Locomotive Crane.
1—Industrial, 10-ton, 4-wheel Locomotive Crane.
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2—Sets Guy Derrick Fittings, 20 ton.
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1—Mundy, 6½ x 10-in., D.D., D.C. Boiler Hoist.
1—Flory, 10 x 12-in., D.D., D.C. Skeleton Hoist.
1—Lidgerwood, 8¼ x 10-in., 3-drum Skeleton Hoist.
1—American, 35-ton, 14 x 24-in., Saddle Tank Locomotive, std. gage
1—Porter, 28-ton, 12 x 18-in. Saddle Tank Locomotive, std. gage.
1—Vulcan, 25-ton, 12 x 16-in. Saddle Tank Locomotive, std. gage.
2—American, 25-ton, 12 x 16-in. Saddle Tank Locomotive, std. gage
6—Porter, 12-ton, 9 x 14-in. Saddle Tank Locomotive, 36-in. gage.
2—Vulcan, 12-ton, 9 x 14-in. Saddle Tank Locomotive, 36-in. gage.
1—American, 25-ton, 10 x 16-in. Forney Type Locomotive, 36-in. gage.
4—American, 30-ton, 13 x 18-in. American Type Locomotive, 36-in. gage.
2—Baldwin, 32-ton, 14 x 20-in. Mogul Type Locomotive, 36-in. gage.
2—Baldwin, 45-ton, 15 x 22-in. 10-wheel type Locomotive, 36-in. gage
6—Standard gage Passenger Coaches.
10—36-in. gage Passenger Coaches.
25—36-in. gage, double truck Hopper Cars.

Locomotive Cranes
Derricks
Grab Buckets
Hoisting Engines

MACHINERY FOR MOVING MATERIALS

SEND FOR COMPLETE LIST AND PRICES

HOISTING MACHINERY CO.

50 Church Street, New York

MACHINERY FOR MOVING MATERIALS

AIR COMPRESSORS

Steam driven

2000 ft. Rand duplex 20 x 20 x 30
1200 ft. Ingersoll-Rand 14 x 22 and 13 x 16
750 ft. Bacon 12 and 19 x 14 x 18
700 ft. Laidlaw 12 and 18 x 12 x 12
250 ft. Chicago 10 x 10 x 10
139 ft. Chicago 8 x 8 x 8

Belt driven

1600 ft. Ingersoll 18 x 16 duplex
886 ft. Sullivan 18 x 11 x 14
599 ft. Ingersoll 16 x 10 x 14
348 ft. Ingersoll 16 x 10 x 10

MOTORS

All voltages and sizes 1 to 200 H.P.

1000 Other Machinery Bargains

WICKES MACHINERY CO.
Jersey City, N. J.

FOR SALE
Ingersoll-Rand

COMPRESSOR

Class A-2, piston displacement 1554 cu.ft. per min. Machine knocked down and will sell rather than store at any reasonable offer.

Acme Engineering & Contracting Co.
Herkimer, N. Y.

LARGE RIVETED PIPE

We have 1500 ft. 16 in. Riveted Steel Pipe with riveted flanges on ends, lengths running from 30 to 40 ft., plate approximately ¼ in. thick. Pipe is in excellent condition. Has been used for temporary gas mains. Excellent pipe for dredging or pumping lines.

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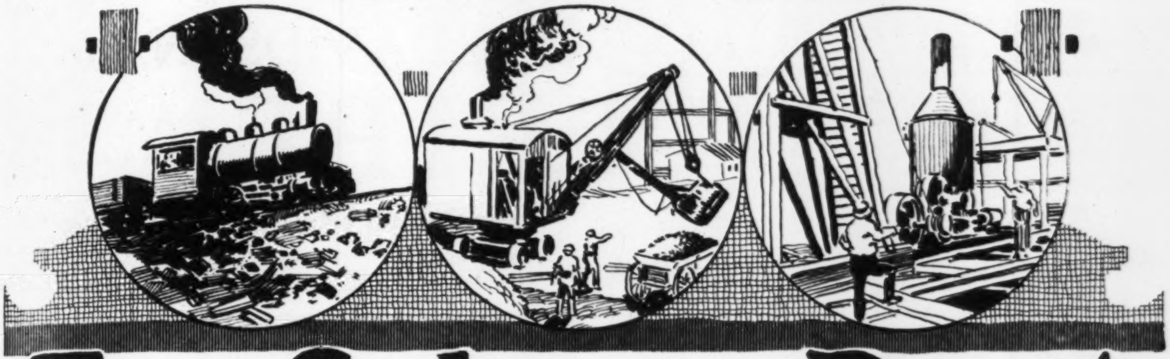

For Sale or Rent

REPAIRED EQUIPMENT

DERRICK CAR

60-M capacity Flat Car, 40-ft. long, M.C.B. Hoisting Engine, 7 x 10, D.C., 2-D Lidgerwood, 25-hp. boiler, Dake swinger, 30-ft. A-frame derrick.

STEAM SHOVELS

3—Marion 60 Shovels, 2½-yd., shop numbers 1995, 1999, 2059, 2079, 2372.
1—Marion 75, 4-yd. dipper, shop number 2191.
1—Marion 70, 2½-yd. dipper, shop number 2694.
2—Model 18 Osgood Shovels, ¾-yd. dippers, shop numbers 375 and 521.
1—Type "B" Erie Shovels, ¾-yd. dippers, shop number 256.

LOCOMOTIVES

2—Standard gage, 50-ton Switchers.
10—18-ton, 10 x 16-in. Dinkeys, 36-in. gage.
4—12-ton, 9 x 14-in. Dinkeys, 36-in.gage.
1—10-ton, 7x 12-in. Dinkeys, 36-in. gage.

CARS

50—Western 12-yd., air dump, standard gage.
25—Oliver and K. & J. Wood Beam Cars.
1—Western, narrow gage, hand operated Spreader Car.

BOILERS

1—30-hp. Locomotive Type, on wheels.
1—35-hp. Locomotive Type on wheels.
100-hp. Locomotive Type Boiler.

CONCRETE BUCKETS
(Center Dump)

2—1-yd. Steubner Controllable.
15—36-ft. Steubner Controllable.

CLAM SHELL BUCKETS

2—1-yd. Owen.
1—1-yd. Type "E" Blaw.
¾-yd. Owen.

AIR COMPRESSORS

1—Ingersoll-Rand, Class NE-1, 310-cu.ft. capacity, 12¼ x 12 cylinders, with air receiver.
1—¾-in. Zin-Ho gasoline driven Compressor, 42-cu.ft. capacity, on trucks, new.

PUMPS

1—Novo Centrifugal, 4-in. suction, 3½-in. discharge 6-hp. engine.
1—FM Centrifugal, 5-in. suction, 5-in. discharge.
5—Emerson No. 2.
1—Emerson No. 4.

ROAD EQUIPMENT

1—Western Road Scraper, 8-ft. blade, adjustable.
1—Champion Road Scraper, 8-ft. blade, adjustable.

HAMMERS

1—Model 3 Union.
1—Model 1 Vulcan, with McDermid base.
1—Model 2 Vulcan.
1—Model 2 Union.

STEEL PILING

322—Pieces 7-in. x 14-ft. Lackawanna Straight Web.
24—Corners, 21-ft. long, for 37-lb. Lackawanna Piling.
100—Tons, 12¾-in. Straight Web and 14-in. Arch, miscellaneous lengths.

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1—Lidgerwood Cableway, 1164-ft. span, with 9 x 10-in., D.C., Reversible Link Motion Cableway Engine, 3-ton capacity.

Offer Us Your Used Equipment

We are always in the market for heavy construction equipment and buy for cash. We have large repair shops in Pittsburgh, where all equipment is thoroughly repaired before being reshipped. Send for Our Complete List.

H. KLEINHANS CO., Union Arcade, Pittsburgh, Pa.
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KLEINHANS

FOR SALE

At Camp Colt, Gettysburg, Pa.
2,500,000 ft. **First-Class Lumber.**
2—50,000 **Wooden Water Tanks.**
2—12-hp. **Gasoline Engines.**
2—**Worthington Deep Well Pumps.**
All Sizes of Pipe, Fittings and Gate Valves from 1-in. to 6-in.
1—**Mercury Gauge.**

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Steel Sheet
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all makes, weights and lengths.

Quick Shipments. Excellent Condition.

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RAILS, LOCOMOTIVES, CARS
POWER PLANTS, TANKS, etc.

FOR PROMPT SHIPMENT

Buckeye Steam **Trenching Machine.**
No. 11 Koehring **Steam Paver,** Boom and Bucket.
3—No. 16 Eclipse **Gallon Unloaders.**
1—10-ton Huber **Steam Roller.**
1—10-ton Kelly **Gasoline Roller.**
1—7 x 10 3-Drum **Clyde with attached Swinger.**
5—1-yd. **Maney Scrapers.**
5-ft. x 8-ft. **Pressure Tank.**
30-hp. **Springfield Gas Engine.**

THE T. J. LANE EQUIPMENT CO.
1026 West Main Street, Springfield, Ohio

FOR SALE

1—Abenaque-Sullivan **compressor,** 90 cu. ft. per minute; mounted with four Sullivan jack hammers, hose steel, etc., complete.
2—3½-ton Sterling motor **dump trucks.**
1—5-ton Sterling motor **dump truck.**
A quantity of 1¼-in. and 1½-in. **pipe.**
1000 lin. ft. 16 lb. 24-in. gauge **track.**
4—1½ cu. yd. **Koppel cars.**
1—1½-h.p. Bulldog Fairbanks **motor** and **pump.**
1—2½ Climax **crusher,** not mounted.

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523 Main Street, Utica, N. Y.

25,000 ft. 4-in. Reading Genuine

WROUGHT IRON PIPE

with American threads and couplings.

This material is new and in first-class condition. Immediate shipment from our warehouse in Brooklyn.

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New and second-hand. With new threads and couplings. All sizes from ½ to 12 in Also cut to sketch.

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FOR SALE
All Sizes
Any Quantity
Rethreaded and Coupled
Cut to Sketch

PIPE

Second Hand and New

WANTED
All Sizes
Any Quantity
Unthreaded

256-264 Oakland Street, Brooklyn, N. Y.

PIPE All sizes, bargain prices, second-hand and new

IMMEDIATE DELIVERIES:

8,000 ft. of 12-in. pipe
10,000 ft. of 8-in. pipe
10,000 ft. of 6-in. pipe
10,000 ft. of 4-in. pipe
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50,000 ft. of 2-in. pipe
50,000 ft. of 1½-in. pipe
100,000 ft. of 1¼-in. pipe
100,000 ft. of 1-in. pipe

Also a large stock of 16, 18 and 20-in. pipe.

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THE MARINES

"First to Fight"
—the high cost of pipe, valves and fittings

The good work of the "Marines" is talked about because we were fortunate in purchasing a large quantity of slightly used and second-hand pipe, valves and fittings. Prospective buyers should familiarize themselves with our attractive prices for the large stock on hand of used wrought and steel pipe, gate, globe and angle valves; cast iron and malleable, screw and flanged fittings. All sizes from 1 in. to 24 in., inclusive. Also spiral and straight riveted, black and galvanized; sizes 4 in. to 24 in.

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167 South St., New York City

PIPE SECOND HAND

With new threads and couplings; also cut to sketch.

PFAFF & KENDALL
Ferry & Foundry Sts., Newark, N. J.

PIPE

Second Hand and New

Large stock, all sizes.

Immediate Delivery.

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412-24 Moyer St., Philadelphia, Pa.

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Fine Condition *Prompt Delivery*

40—12-in. **Beams,** 10 to 11 ft., 9 in. long.
350—15-in. Beams, 17 to 19 ft., 8 in. long.
150—20-in. **Beams,** 15 to 18 ft. long.
Variety of **other beams on hand. Send us** your specifications.

TANKS

5—Conical Tanks, overall length 16 ft. 2 in., largest diameter 9 ft. 5 in., length of tank 14 ft. 2 in., made of 5/16-in. plate.
10—6 ft. diameter x 17 ft. to 19 ft. 6 in. long.
Many others—open and closed.
1—400,000 gallon.

PIPE

Large stock, all sizes of second-hand pipe, rethreaded and coupled, for immediate delivery.

TUBES

Seamless (New)
-tons, 2½-in. x 7-ft. 1-in.
Lap Welded (Second Hand)
150-ton, 2½, 3, 3¼, 3½ and 4-in., 15 to 20 ft. long.

BOILERS

6—Manning Vertical Boilers, 185-hp., 120 lb. pressure.
2—Erie City Watertube, 400-hp. each.
1—Stirling, 250-hp.
1—Mass. Standard, 72 in. x 17 ft. 6 in. H.R.T.
1—Mass. Standard, 66 in. x 20 ft. 6 in. H.R.T.
Many other boilers.

Lot of 100 tons of 1-1/16 in. Round Steel Bars, 18 ft. long.
1—200 hp. American Feed Water Heater.
1—1300 hp. Berryman Feed Water Heater.
1—1300 hp. Geo. F. Blake Heater.
1—1000 hp. Wheeler Condenser.

Prompt Delivery

Send us a list of your requirements

THE PERRY, BUXTON, DOANE CO.
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NEW — USED

FOR EVERY PRACTICAL PURPOSE

We carry available for prompt shipment large stock of all sizes in random lengths.

Can offer used pipe threaded or cut to specification as per your requirements. Will guarantee satisfaction and quality equal to new material.

Inquiries Solicited

Peerless Iron Pipe Exchange.
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302 Broadway, New York

We Buy for Cash

T. F. RANDALL

Buys—Sells—Rents

INDUSTRIAL EQUIPMENT EXCHANGE

75 Westminster St., Providence, R. I.

The following is only a partial list of the equipment **we have** for sale. If what you want is not listed here send for our complete list. All equipment offered has been inspected by us and is in first-class working condition.

BOILERS

1—250 H.P. Dillon Return Tubular, 140 lb. pres.
2—250 H.P. Heine 100 lb. pressure.
1—75 H.P. Whittier R.T.B., 8—32 in. tubes, 12 ft. long, 7 extra grate bars.
1—60 H.P. Mass. Standard Vertical.
1—100 H.P. Loco. Type, Mass. standard.
1—60 H.P. Loco type, Mass. standard.
1—75 H.P. Vertical type, Mass. standard.
1—50 H.P. Loco. type, Mass. standard.
1—42 in. x 90 in. Mass. standard, complete.
1—12 in. x 84 in. Mass. standard, complete.
1—36 in. x 75 in. Mass. standard.
1—34 in. x 75 in. Mass. standard.
124 in. x 5 ft. Mass. standard, complete with all fittings.
1—24 in. x 6 ft. 6 in. Mass. standard, complete with all fittings.
Horizontal Upright and Return Tubular up to 1100 H.P.

ENGINES

1—100 H.P. Atlas 14 in. dia. 20 in. stroke, 125 to 150 r.p.m. flywheel, 108 to 16½ horse-power based on 85 lb. of steam.
1—75 H.P. Armington & Sims, 13¼ in. dia., 12 in. stroke, 125 r.p.m.
Can make delivery on many types of Corliss Engines.

STEAM SHOVELS

6—Thew, O tractor type, ⅝-yd. bucket, extra good.
2—Vulcans revolving, ¾-yd., good condition.
1—Vulcan, not revolving, 1-yd. good condition. Two buckets.
1—Thew O Tractor type, ⅝-yd., good condition.
1—Osgood Revolving, ⅝-yd. good condition.
6—Thew O Tractor type, ⅝-yd. extra good.
Some large shovels.

HOISTING ENGINES

4—Lidgerwood 8 x 6, D.C., D.D.
1—Lidgerwood 18 H.P. skeleton hoist.
1—Lidgerwood 30 H.P. D.C., D.D.
1—Lidgerwood, single drum, 20 H.P.
1—American 18 H.P. skeleton hoist.

HOISTS

Double drum, double cylinder with boilers
1—Byers D.D., D.C., 5 x 10, condition good.
1—Kendall & Sons, D.D., D.C., 5½ x 10, extra.
1—Mundy D.D., D.C., 5 x 8,-90 lb. Mass., extra.
3—Lidgerwood, D.D., D.C., 6¼ x 8, Mass., extra.
2—Lidgerwood, D.D., D.C., 7 x 10, Mass. S. extra.
3—Lamberts, D.D., D.C., 7½ x 10, Mass., S. extra.
4—Lamberts, D.D., D.C., 8½ x 10, Mass., S, extra good condition.

HOISTS

Single drum, single cylinder with boilers
2—S.D., S.C., 6 x 12. Good condition, complete. Over 75 Hoists in stock.
All Hoists in fine condition.

AIR COMPRESSORS

All makes and sizes. Gasoline, steam and electric driven.

LOCOMOTIVES

2—Porters, 9 x 14—36 in. gauge.
2—Vulcans, 9 x 14—36 in. gauge.
2—Vulcans, 9 x 16—36 in. gauge.

BUCKETS (Clamshell)

1—Hayward, 5-yd., like new.
1—Mead-Morrison, ¾-yd.
1—Mead-Morrison, 1-yd., good condition.
1—Mead-Morrison, 2-yd., new shape.
1—Brown Hoist, 2½-yd., good condition.
1—Ollie Johnson, 4-ton, new.
1—Williams, 1½-yd., condition new.

BUCKETS (Orange Peel)

¼-yd. to 3-yd.—all makes.

DERRICKS

1—75 ft. mast, 60 ft. boom.
3—60 ft. mast, 45 ft. boom, hand.
3—Large Guy Derricks.
Also Derricks of other sizes.

TRENCH EXCAVATOR

1—Austin Excavator or Trench Machine.

WIRE ROPE (All sizes)

ROAD ROLLERS

0—10 and 12-ton Buffalo, Pitts and Monarch.

TANKS

All sizes, pressure and storage.

STACKS

Practically all sizes.

PIPE (All sizes)

LOCOMOTIVE CRANES

1—10-ton, 4-wheel, Williams, NEW.
1—Tandem Crane.
1—15-ton Crane.

SPECIAL

CONCRETE LIGHTERS

New concrete Lighters, 500 tons capacity.

TUG BOATS

5—67 ft. to 110 ft.

CRUSHER PLANTS

STEAM VESSELS

SAILING VESSELS

(Complete)

STEEL COAL TOWER

Capacity 6 buckets per minute. New condition.

PUMPS

All makes and sizes.

CENTRIFUGAL PUMPS

Any make or size.

DUMP CARS (Standard Gauge)

DUMP CARS (36-in. Gauge)

15—4-yd. 2-way, Western.

LUMBER

We are prepared to supply at short notice large shipments of native lumber—either carload or cargo lots.

PILING

Oak, Chestnut or Yellow Pine

WE BUY—SELL—RENT

NOW READY FOR IMMEDIATE SHIPMENT

LOCOMOTIVE CRANES

1—Brownhoist, 15-20-ton, 8-wheel, 40-ft. boom, 54-in. dia. A.S.M.E. boiler, with or without 2-yd. Brownhoist coal clamshell bucket.
1—Browning, Type No. 1, 15-ton, 4-wheel crane 45-ft. boom, bucket drums equipped, 1-yd. clamshell.
1—"American" Railroad Ditcher. "Twenty Machines in One" Locomotive Crane Work, Clamshell and Orange Peel Bucket Work, shipbuilding, log loading, steam shovel work, etc.
1—Byers Auto Crane, equipped with 30-ft. boom

LOCOMOTIVES

1—60-ton American 6-wheel switcher, driving wheels, 44-in. diameter, carries 150-lb. steam, no truck weight, all on drivers. Excellent condition, just out of shop.
1—Baldwin, 30-ton standard gage, type 0-4-0, saddle tank.

ROAD ROLLERS

1—10-ton Tandem Pioneer.
1—2½-ton Iroquois.
1—10-ton Kelly-Springfield, 3-wheeler.
1—15-ton Kelly-Springfield, 3-wheeler.
1—10-ton J. I. Case, 3-wheeler.

AIR COMPRESSORS

1—Norwalk straight line, 2-stage, 10-in. intake air cylinder, 6½-in. compressing cylinder, 10-in. steam cylinder (all cylinders of 12-in. stroke), capacity 195 cu.ft. at 180-r.p.m., 100-lb. pressure.
1—Blake-Knowles, 10 x 10, belt driven.
1—Ingersoll-Rand Imperial Type 10, belt drive Compressor, capacity 1190 cu.ft. of free air per minute, good for 110 lb. pressure. Compressor now driven by G. E., 200-hp. motor, D.C., 220-volt, 450-r.p.m. Will sell compressor or motor separately.

BUCKETS

1—1½-yd. Clamshell Bucket.
1—Hayward, class E, 1½-yd. capacity clam shell bucket
1—Page 1 yd. capacity dragline bucket.
1—1-yd. Clamshell, type V, Orton & Steinbrenner.
3—1½-yd. Clamshell, type V, Orton & Steinbrenner.
1—1½-yd. Clamshell, type C, Hayward.

GENERATOR

1—100-kw. Western Elec., 125-volt, D.C., belted to Ball Engine.

BOILERS

1—Marine type, 150-hp. (portable).
1—Marine type, 100-hp. Freeman internal fired portable boiler, diameter 84 in., length overall 18 ft. 125-lb. pressure.
1—30-hp. locomotive type, portable Boiler and engine, mounted on iron wheels with engine mounted on top of boiler.
2—18-hp. Vertical.
1—30 hp. Vertical.
1—10-hp. Vertical.
1—8-hp. Vertical.

HOISTING ENGINES

Derrick Hoist

1—60-hp. Puget Sound, heavy duty, double cylinder, double drum Hoist, with 60-in. diam. butt strapped boilers. Good log loader or heavy derrick engine.
2—Byers 16-hp. double cylinders, double drum, equipped with boilers and swinging gears.
1—9 x 10 Lidgerwood, double cylinder, double drum, with special boiler, all steel gears, engine built for heavy duty.

MINE AND CABLEWAY HOISTS

1—Flory 10 x 12 D.C. double [illegible] drum engine. Drums 40 in. diam. x 40 in. face. Levers banked in quadrant.
Lambert 10½ x 12 double cylinder, single drum, 38-in. diam., 24-in. face. Drum grooved, will take up ⅞-in. cable. Drum flanges 8 in. deep. Link motion.
1—Flory, 8½ x 10, D.C., D.D., skeleton, link motion, has quadrant.
1—Lidgerwood tandem, drum 8½ x 10, D.C. drums 36-in. dia., 24-in. face, link motion

CABLE

1840 ft. one piece 2" dia. locked wire rope for tramway or cableway use.

STANDARD SHOVEL

1—Marion Model 50, railroad trucks, 2 yd. dipper

REVOLVING SHOVELS

1—Marion Model 28, on traction wheels, ¾-yd dipper, Shop No. 3832, new in Spring, 1917. Like new in condition.
1—Marion Model 31, on traction wheels, 1½-yd dipper, special 23-ft. boom, 17-ft. dipper handle

CONCRETE MIXERS

1—Lot concrete spouting, size 14½-in. wide, 9½-in. deep; hopper connection.
3—Complete standard gage Concrete Mixer Railroad Car Outfits, one car equipped with No. 12 Smith Gasoline driven, one car with No. 12 Smith steam driven, the other car equipped with Smith-Chicago steam driven.
2—Smith No. 1 gasoline driven, on trucks.
2—Smith No. 11 steam driven, on trucks, with side loaders.
1—Cube No. 11, steam driven, on trucks, with side loader.
6—Cube No. 17 steam driven, on trucks, with side loaders.

CARS

6—**Flat Cars**, 50,000 lb. capacity, M.C.B. journals 4 x 7.
4—1-yd. capacity "V" shaped steel two-way dump, 30-in. gage.
25—1-yd. capacity "V" shaped steel, two-way dump, 24-in. gage.

PUMPS

2—Morris 6-in. (sand) centrifugal, direct connected to steam engine.
1—Van Wie 6-in. suction, 5-in. discharge, belt centrifugal Pump.
1—Gould belt driven, 6-inch suction, 5-inch discharge.
1—Swaby, direct connected to steam engine, 6-inch suction, 5-inch discharge.

F. MAYER, 737-738 Monadnock Bldg., Chicago, Ill.

FOR SALE
Immediate Delivery

12-IN. SUCTION DREDGE

5 Years Old

Fully Equipped Electric Light Plant; Pontoons and Pipe; Ready to Work in 2 Days' Notice.

RALPH H. TUTTLE
Eastport, L. I.

FOR SALE

TRENCH DIGGER

No. 3 Municipal Trenching Machine with Manganese buckets, capable of digging 40 cu.yd. per hour. Boom of length to dig 10 ft. deep, 4 ft. wide. Machine in good operating condition. Address inquiries to

FS806—Eng. News-Record
935 Real Estate Trust Bldg., Phila., Pa.

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REBUILT DITCHING MACHINES

1—Model E. Parsons, steam driven, cutting 32 in. wide x 15 ft. deep.
1—No. 3, Buckeye, gasoline driven, cutting 15½ in. wide x 6 ft. deep.
1—No. 5, Buckeye, gasoline driven, cutting 24 in. and 26 in. x 5½ ft. deep.
1—Buckeye, gasoline driven, cutting 24 in. and 36 in. x 10 ft. deep, apron traction wheels.

FS 522—Engineering News-Record
10th Ave. at 36th St., New York City

2½-YD. MARION DREDGE

Wooden Hull, 33 ft. x 7 ft. x 89 ft. 45-ft. Boom, complete with all equipment, including 50 Light Generator. Now located in Hudson River.

American Pipe & Construction Co.,
112 North Broad St., Philadelphia

FOR SALE

Buckeye Steam-Driven TRENCH DIGGER

No. 9-A, Machine No. 679. Will dig trenches up to ten feet deep and from eighteen to twenty-four inches in width. Purchased new in 1917 and is a very durable machine. Will dig through paving, frozen ground, shale, etc. Apply to Owner, 516 Stambaugh Building, Youngstown, Ohio.

KEYSTONE EXCAVATORS

No. 3, traction, skimmer scoop, ditcher scoop, good condition.

Low Price; Location, Chicago, Ill.

MOORE BROS.
39 So. La Salle St., Chicago, Ill.

12-INCH HYDRAULIC DREDGE

Fully equipped. Electric light plant, Pontoons, Pontoon pipe, shore pipe, rubber sleeves and bands, coal scow with mast and boom. Double drum, hand power with wire blocks and falls. Galley and sleeping quarters for eleven men. All in first-class condition, ready to go into commission.

A. R. Powley Dredging & Construction Co., Inc.
P. O. Box 65, Kingston, N. Y.

FOR SALE OR RENT
No. 6 A. J. Morse & Son

DIVING OUTFIT

MACHINERY RENTAL & SALES CO.
Contractors and Industrial Equipment
2918 Southwest Blvd. Kansas City, Mo.

PUMPS and HAMMER

10-in. Morris Centrifugal. Direct connected.
8-in. Submerged Centrifugal.
No. 3 Vulcan Steam Hammer.

MINNEAPOLIS EQUIPMENT CO.
456 Builders Exchange, Minneapolis, Minn.

E.C.A. REBUILT

EQUIPMENT

For Sale or Rent Immediate Delivery

EQUIPMENT CORPORATION OF AMERICA

CHICAGO, Lumber Exchange Bldg. **PITTSBURGH, Empire Bldg.** **PHILADELPHIA, Land Title Bldg.**

LOCOMOTIVE CRANES

1—15-ton O. & S. 4-wheel standard ga. 40-ft. booms, butt strap boilers, bucket operating.
1—No 5 Browning 8-wheel MCB, 50-ft. boom.
2—Late Model Byers Auto.
1—Brand new 30-ton O. & S., 8 wheel, 50-ft. boom.
1—30 ton O. & S. 8-wheel crane bucket operating, 50 ft. boom.

STEAM SHOVELS

2—No. 0 Thews fully revolving with ⅝-yd. dippers.
1—No. 1 Thew 1-yard standard ga.
1—A-1 Thew 1-yd. standard ga.
2—Type B Erie ¾-yd.
1—18 B Bucyrus.
1—No. 3 Thew on standard car wheels equipped 1¼-yd. dipper.
1—Marion Model 60.

LOCOMOTIVES

2—6-ton 24-in. ga. Fate gasoline.
1—6-ton 24-in. ga. Bell, fuel oil.
3—3-ton gasoline 24-in. ga. Plymouths.
2—6-ton 24-in. ga. Plymouths.
1—7-ton 24-in. ga. Davenport.
3—36in. ga. steam locomotives.
1—18 x 24 Baldwin 6-wheel standard ga.
1—32-ton standard ga. Vulcan, new 1917.
2—6 ton 24-in. ga. Koppel steam.
2—8-ton 24-in. ga. Koppel locomotives.

CARS

93—36-in. ga. 4-yd. two-way dump.
33—24-in. ga. 1-yd. V shaped Koppel.
39—24-in. ga. 1½-yd. Koppel.
10—24-in. ga. ¾-yd. Koppel.
6—12-yd. standard ga. Western.
69—1¼-yd. 24-in. ga. V-shaped Koppel.

PAVING MIXERS

1—No. 15 Chain-Belt, capacity 15 cu. ft. dry material, equipped with steam engine and boiler, also boom and bucket.
2—No. 11 Koehrings equipped with engine and boiler, also boom and bucket.
1—No. 16 Koehring equipped with steam engine and boiler, also distributing chute.
1—4 sack Austin Cube equipped with steam engine and boiler, also distributing chute.
1—27 E Foote steam engine boiler and distributing chute.
1—12 cubic ft. Chicago, equipped with 10 H.P. Novo gasoline engine and distributing chute.
1—21 cu. ft. Chain-Belt boom and bucket.

ROAD ROLLERS

2—10-ton 3-wheel Kelly-Springfield.
1—10-ton 3-wheel Iroquois.
1—10-ton 3-wheel Buffalo-Pitts.
1— 6-ton Kelly tandem.
1— 8-ton Erie tandem.
1—10-ton 3-wheel Case.
1—10-ton, 3-wheel New York.

PORTABLE TRACK AND RELAYING RAIL

50 tons 20 lb. relayers.
20 tons 30 lb. relayers.
9½ miles 20-lb. 24-in. ga. Portable Koppel track.

EXCAVATORS AND TRENCHING MACHINES

2—Keystone Excavators with skimmers and shovel scoops.
1—Model E Parsons trenching machine.
1—Austin Backfiller.
1—Waterloo Backfiller.
1—Parsons Backfiller.

HOISTS

3—6¼ x 10 Mundy, D.C., D.D. without boilers.
2—7 x 10 Mundy, D.C., D.D. with boilers and swingers.
1—6½ x 12 Mundy, D.C., D.D. with boiler.
1—Mundy Swinging engine.
2—Mundy, D. C., S.D. cableway engines without boilers.
1—8¼ x 10 American, D.C., 3 D. with boiler.
2—8¼ x 10 American, D.D., D.C. with boilers.
1—7 x 10 American, D.C., D.D. with boiler.
120-Hp. Byers, D.C., D.D. with boiler.
1—7 x 10 Lidgerwood, D.C., D.D. with boiler.
1—8¼ x 10 Lidgerwood D.C., D.D. with boiler.
2—10 x 12 Lambert, D.C., D.D. with boiler and separate swingers.
2—8¼ x 10 Lambert, D.C., D.D. with boilers.
20—Other hoists, ranging in size from 4¾ x 6 to 10 x 12—various makes.
3—Dake Swinging engines No. 11084.
2—9 x 12 National D.C., 3D, 40-HP. with separate swinger.

GASOLINE HOISTS

1—6-HP., Novo, single drum, reversible.
1—5-HP., C. H. & E., single drum, reversible.
1—5-HP., Ideal, single drum, reversible.

AIR COMPRESSORS

1—20 Hp. Portable Sullivan gasoline.
1—Portable Chicago gasoline driven, 250 cu.ft.
1—Ingersoll-Rand Portable Steam, 10 x 10.
1—Ingersoll-Rand Gasoline Portable, 120 cu.ft.
2—Quincy Portable gasoline, 125 cu.ft.

DERRICKS

11—Stiff-leg Terry & Tench fittings, booms 14 x 14 x 60 with bull wheels.
1—All steel American stiff-leg 100 ft. sectional boom 30-ton cap with bull wheel.
1—Brand new stiff-leg derrick with 75-ft. boom clamshell bucket operating.
1—All steel stiff-leg derrick with 80-ft. boom.
1—Guy derrick, 18 x 18 x 83 ft. mast, 14 x 14 x 71 ft. boom.
1—Guy derrick, 12 x 12 x 50 ft. mast, 12 x 12 x 43 ft. boom.

CONCRETE MIXERS

5—½-yd. Mixers on trucks equipped with side loaders, steam engine and boilers.
3—¾-yd. Mixers of trucks with side loaders steam engines and boilers.
3—1-yd. Mixers on skids with batch hopper, with and without power.
7—1-sack Mixers on trucks with gasoline engine.
15—Mixers of various makes, ranging in size from 7 cu. ft., 1 yd., with and without power.

FOR SALE OR RENTAL

1—7 x 10 3 drum **Flory Skeleton Engine**, banked levers.
1—7 x 10 3 drum **American Hoist**, without boiler.
1—7 x 10 3 drum **Byers Hoist**, with boiler.
1—7½ x 10 2 drum **National**, with Massachusetts boiler.
1—6¼ x 8 2 drum **O. & S.** with boiler.
1—14 x 20 Standard ga. Vulcan Locomotive 2-4-2 type.
1—1-yd. Anderson-Evans **Clam Shell bucket.**
1—1-yd. Hayward **Orange Peel Bucket.**
1—1¼-yd. Hayward **Orange Peel Bucket.**
2—2½-yd. Haines-Weaver bottom dump **Buckets.**
1—1-yd. Haines-Weaver **Clam Shell Bucket.**
1—¾-yd. **Fogarty Bucket.**
1—¾-yd. **Ransome Mixer** with boiler, engine and pivot hopper, on wheels.
1—No. 2 Vulcan **Steam Hammer.**
2—600 gallon Austin **Sprinkling Wagons.**
1—Buckeye **Trench Digger,** gas driven for trench 15 in. x 5 ft.
1—Cylindrical **Water Tank** 5 ft. diameter 25 ft. long.
20—6-yd. St. Ga. 2-way **Cars,** Koppel, K. & J. and Western types.

FRED T. LEY & CO., Inc.
Equipment Department
Springfield, Mass.

FOR SALE

LIDGERWOOD CRAWFORD CLASS B EXCAVATOR

60-ft. boom, 1½-yd. bucket.

TUG BOAT ENGINE

Fore and aft compound 12-in. stroke, 9-in. high, 18-in. low pressure cylinders.

SULLIVAN SUBMARINE DRILLS

with frames, weights and engines.

GIRDER THROUGH PLATE

from single track steam railroad bridge—two each following lengths: 59 ft. 6 in., 70 ft. 3 in., 87 ft. 6 in., 91 ft. 6 in., 107 ft. 6 in., and all floor bracings.

NEW YORK STATE DREDGING CORP.
Tonawanda, New York

Ditching Machinery

For Sale in South Texas.

Two Walking Ditching Machines (Cross Patent) with 1¼ and 1½-yd. dippers. Operate successfully on muck or hard soils. Also one Fairbanks 1¼-yd. **Floating Dredge.** All three machines have Foos improved 50 and 60-H.P. engines. Address

THEO. F. KOCH
Riviera, Texas

FOR SALE—TO RENT

DITCH EXCAVATOR

Austin 00, Multipedal traction, gasoline engine in excellent operating condition, immediately available with efficient crew at Washington, D. C.

TRENCH EXCAVATING CORPORATION
Care of Benjamin Catchings
1012 16th St., N. W., Washington, D. C.

DECK SCOW

300 tons capacity; 90 ft. x 26 ft. x 6 ft.; first-class condition. Immediate delivery. Near New York.

E. C. SHERWOOD
50 Church St., New York, N. Y

FOR SALE

PUMPS

1—9 x 12 Triplex Gear-Driven Pump, capacity 350 gallons per minute. Manufactured by Plattsburg Iron Works Co.

1—24-in. Downey double-acting steam pump head. 18 x 24 cylinders. For 400-ft. well.

BOILER

1—80-hp. Boiler, 44—4-in. flues; 72-in. square grate surface with Herringbone grates. Complete with water column, steam dome and 1¼ in. Penberthy Injector.

HOIST

1—Lidgerwood, 8 x 12 twin cylinder, double-acting mine hoist.

Above articles have been used, but are in good condition.

IDAHO IRRIGATION COMPANY, Ltd.
Richfield, Idaho

FOR SALE OR RENT

in New York Harbor

FLOATING STEAM DIGGER and DERRICK

with Clamshell or Orange Peel bucket attached.

Also 14B Bucyrus

STEAM SHOVEL

Also sand, cinders, dock, rip-rap and one-man stone.

MODEL CONTRACTING CO.
264 W. 34th St., New York City

STOCK CLEARANCE SALE

Odd lots which we offer at low figures for immediate clearance.

SAW TABLES

No. 7 Knickerbocker, 7-hp. oil engine and Universal Tool Unit.

6-hp. American all-steel saw table, Novo engine, set of saws.

MOTORS

20-hp. 500-volt D.C., with grids and controller.

Extra armature for same.

40-hp. 220-volt D.C. Maine motor, grids and controller.

MIXERS

½-yd. Ransome steam mixer on wheels, power loader.

DERRICKS

10-ton lattice steel, 40-ft. mast, 3-section 80-ft. boom, steel sills and stifflegs.

15-ton Oregon Fir guy derrick, 16-in.-18-in. round timbers. 90-ft. mast, 85-ft. boom.

CABLEWAY

400-ft. 2-in. Mead-Morrison sewer cableway less small lines.

HOISTS

7 x 12 Mundy D. C. D. D., with or without boiler.

6 x 8 Lambert D. C. D. D., with boiler.

SWINGERS

Lambert grooved friction swinger to fit 37-hp. electric hoist. Maine geared friction swinger to fit 50 hp. electric hoist.

WINCH SHAFT

Extension shaft 17-ft. long geared to connect to 8¼ x 10 Lidgerwood hoist, two winch heads, bearings, etc.

BUCKETS

1¼-yd. Hayward class "G" clamshell, with manganese steel teeth.

¾-yd. Smith orange peel.

We can meet your requirements for any equipment in the above lines either from stock or for resale. Get our figures.

HOISTING ENGINE SALES COMPANY. INC., Grand Central Terminal, New York City

---

ROLLERS

1—10-ton, 3-wheel, double cylinder, steam Kelly Road Roller.

1—10-ton, 3-wheel, four cylinder, gasoline Kelly - Springfield Roller

1—10-ton, 3-wheel, double cylinder, steam Kelly-Springfield Roller.

2—Buffalo-Pitts, 10-ton, 3-wheel, double cylinder, steam Rollers.

1—10-ton, 3-wheel, double cylinder, steam Monarch Roller.

1—12-ton, 3-wheel, Kelly-Springfield, single cylinder, steam power.

1—10-ton, 3-wheel, J. I. Case, steam roller.

STEAM SHOVELS

1—No. 3 Keystone Machine.

1—No. 0 Thew Steam Shovel, on traction wheels.

1—No. 1 Thew Steam Shovel, with long dipper arm for sewer work.

MISCELLANEOUS

1—**Western Elevating Grader,** complete with 32 hp. Gaar Scott Engine.

1—110-hp. J. I. **Case Hauling Engine,** with eight reversible Troy Dump Wagons.

20—45-ton **Hydraulic Jacks.**

MIDWESTERN COMPANY
140 South Dearborn St., Chicago, Ill.

Single Drum, Reversible

Heavy 8½ x 12 Hoist

Drum 32 in. x 32 in., oscillating cyl. Fine order.

W. S. LIGHTHALL
Drawer 45, Syracuse, N. Y.

1—3 to 4 Yd.

LEE SIDE-DUMP BODY

At a Bargain

WATSON WAGON CO.
Canastota, N. Y.

RATES:

1 inch—$4.00
4 inches— 3.90 an inch

(The above rate applies to a 4-inch space in one issue, a 2-inch space in two issues, or a 1-inch space in four issues. The larger spaces following may be used up in a similar way).

8 inch—$3.80 an inch
15 inches— 3.70 an inch
27 inches— 3.60 an inch

Rates for larger spaces furnished on application

HAISS WAGON LOADER

Good condition

Vicinity New York

GEO. HAISS MFG. CO. Inc.
140th St., and Rider Ave., New York City

FOR SALE

MIXERS

1—Austin 33-cu.ft. Cube Mixer.

HOLDING DRUMS

3—Lambert Type K-2 Holding Drums.

BUCKETS

3—Lockwood 1¼-yd. Concrete Buckets.

PUMPS

1—12-in. belt-driven Centrifugal, with engine.
1— 8-in. belt-driven Centrifugal, with engine.

ROAD ROLLERS

1—Case 10-ton Road Roller.

Prices submitted on application. No reasonable offer will be rejected.

EASTOVER CONSTRUCTION CO.
Herkimer, N. Y.

No. 12K GATES CRUSHER

Manganese fitted, Nickel steel shaft

$5600

10—**Crushers,** Nos. 2 to 12, mostly Gates.
2—**1500 cubic foot** duplex air comp.
1—**2570 cubic foot** comp. 2 stage, with 3 Ph., 500 H.P. motor, 2080 V. G.E.
1—375 Kva. 2300 V., 60 Cy., 3 Ph. turbo.
1—Tan. Comp. **Corliss,** 375 Kva., 2300 V., 60 Cy., 3 Ph., 100 Rev. Fine condition.
2—326 H.P., 180 lb. hor. water tube **boilers, $9 H.P.** Fine condition.

Send us your inquiries for used equipment.

ROSS POWER EQUIPMENT CO.
Indianapolis, Ind.

ROAD EQUIPMENT

1—10 x 20 Climax **Portable Crusher,** complete.

1—11 x 18 Heavy Duty **Single Cylinder Star Gas or Gasoline Engine,** complete.

1—10-ton 3-wheel Buffalo-Pitts **Roller,** just retubed.

1—8-ton Kelly-Springfield **Tandem Roller,** new boiler.

5—**Asphalt Kettles** mounted, capacity, 300 to 1000 gals. each.

2—**Asphalt Storage Tanks,** capacity 12,000 gals., steam coils, like new.

1—**35 hp. Boiler,** with engine mounted on frame.

2—**Steel Tank Wagons,** 600-gallon capacity.

W. B. SPENCER
150 Nassau St., New York City
Tel. Beekman 3911

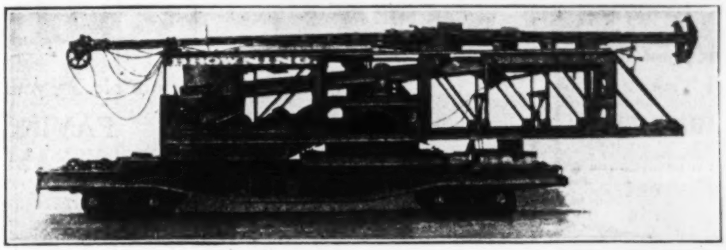
Surplus Equipment

FOR SALE

2—2½ Climax Rock Crushers in "A1" Condition.

1—35 H.P. Boiler and Engine, Derricks, concrete mixers, Koppel cars, boilers, compressors, etc.

J. L. RICHMOND
West Hamlin, West, Va.



Modern Browning Pile Driver

Equipped with 3000 lb. Hammer. Splendid Machine. Immediate Delivery

STEAM SHOVELS

2—Osgood shovels, 3 yard dippers.
1—Modern 80-C Bucyrus, 4 yard dipper.
3—Marion Model 60.
3—Atlantic type, 2½ yard dippers.
1—Bucyrus 45, 2 yard dipper.

CARS

25—Western **steel underframe** 12-yd. and **16-yd. dump** cars.
30—Oliver 12-yd. dump cars.

ALSO

LOCOMOTIVES

Narrow and Standard Gauge

All in Stock in Atlanta

SOUTHERN IRON & EQUIPMENT CO., Atlanta, Ga.

FOR SALE

EQUIPMENT

New and Second-Hand

Steam Shovels
Locomotives
Locomotive Cranes
Hoists—Steam and **Electric**
Cars—Mine, Quarry **and Contractors'**
Crushers—Other **Quarry** Equipment
Boilers and Engines

General line of contractors and mine supplies and equipment

Send Us Your Inquiries.

JOHN J. IRVIN COMPANY
Bellwood, Pa.

FOR SALE.

Road Building Equipment

2—Buffalo-Pitts, 10-ton, 3-wheel Steam Rollers.
2—Kelly, 3-wheel, 10-ton Steam Rollers.
1—Monarch 10-ton, 3-wheel Steam Roller.
1—Kelly 10-ton, 3-wheel Gasoline Roller.

All late models with cabs and side Curtains.

1—Erie B Steam Traction Shovel, A-1 condition.
1—No. 3 Keystone Steam Excavator.
1—1½, 2 and 3-in. No. 1 Iron Pipe.

All in first-class used condition. Prices right. We have all kinds of Road Equipment. Immediate shipment.

Write—Phone—Wire.

EDWARD JOBBINS
Marquette Bldg., Chicago, Ill.

ROAD EQUIPMENT

1—13 E. Foote **paver, steam power,** distributing chute, two-speed traction. Used about 25 days. Ohio.
1—No. 12 Milwaukee Chain-Belt **paver** with 20-ft. boom and bucket, traction steam engine. Used five weeks. Indiana.
1—6-ton **steam roller** Erie tandem, new in 1916. Indiana.
1—Hayward **Orange Peel bucket** 1¼-yd. Used 60 days. Indiana.
1—Warren Bros. **portable asphalt plant.** Will lay bitulithic concrete or sheet asphalt. **A-1** condition. Indiana.
40—Western **steel frame dump cars** 1½-yd. **capacity. Illinois.**
1—McMyler **Locomotive Crane,** full revolving, 30-ft. boom, ¾-yd. clam shell bucket. Missouri.

Wire or Write.

LEONARD F. SMITH & COMPANY
South Bend, Indiana.

ROAD ROLLERS

3—**Buffalo-Pitts** 3-wh., **10-ton** Road **Rollers.**
2—**Buffalo-Pitts** 3-wh., **12-ton** Road **Rollers.**
1—**Buffalo-Pitts** Tandem **6-ton** Road **Roller.**
2—**Kelly-Springfield** 3-wheel, **10-ton**
1—**Kelly-Springfield** Tandem **6-ton**
1—Monarch 3-wheel, **10-ton** Road **Roller.**

EXCAVATORS

1—Keystone **Excavator Shop No. 133.**
1—Keystone **Excavator Shop No. 328.**

STEAM SHOVELS

1—Marion No. 31 **Steam Shovel with extra** drag line boom.
4—0 Thew **Revolving Steam Shovels.**

Also a complete line of hoisting engines, crushers, concrete mixers, air compressors, locomotives, dump cars and track.

RALPH R. LEWIS CO.
538 **Commercial Trust Bldg.,** Phila., Pa.
Race **1249** — Phones — Spruce 3392

FOR SALE

PAVING MIXERS

Three Austin Cube Mixers, 1918 model, steam engine and boilers, booms and buckets, capacity 14 cu. ft. dry material. Two at $1550 each and one at $1100, f.o.b. cars; condition very good.

R. S. SHEPHARD
705 D. S. Morgan Bldg., Buffalo, N. Y.

Steam Road Rollers and Paving Mixers

We have several, in excellent condition, ready for shipment.

WM. B. GRIMSHAW CO.
1040 Drexel Bldg., Philadelphia, Pa.

MACGOVERN & COMPANY INC. POWER MACHINERY

114 Liberty St. New York, N. Y.

PROMPT SHIPMENT FROM STOCK

Alternating Current Reciprocating Units

60 Cycle

1—450 Kw. Gen. Elec., 2300 volt, 100 r.p.m., dir. conn. to 22 in. and 42 in. x 48 in. E. P. Allis cross compd. engine.
2—340 Kva. Westg., 220 volt, 150 r.p.m. Engine type. No engine.
1—325 Kva. Gen. Elec., 2300 volt, 120 r.p.m. dir. conn. to 24 in. x 36 in. Cooper Corliss engine.
1—300 Kw. Gen. Elec., 2300 volt, 150 r.p.m., dir. conn. to 18 in. and 30 in. 22 in. McEwan T.C. non-condensing engine.
1—120 Kw. Bullock 2400 volt, 277 r.p.m. Engine type. No engine.
1—50 Kva. Fairbanks-Morse, 2300 volt. 300 RPM. Engine type. No engine.
1—50 Kw. Ft. Wayne, 2300 volt, 300 r.p.m., dir. conn. to 11 in. x 12 in. Chuse, RH, horiz. 4-valve engine.

Oil Engine Unit

60 Cycle

1—125 Kw. Gen. Elec., 240 volt, 200 r.p.m., dir. conn. to 14 in. x 21 in. Diesel 3-cyl. vertical oil engine, type A-3, complete with all usual appurtenances.

Direct Current Reciprocating Units

250 Volts

1—850 Kw. Westinghouse, 16 pole, 90 r.p.m., dir. conn. to 26½ in. and 44¼ in. x 48 in. Allis-Chalmers C.C. engine.
1—500 Kw. Ft. Wayne, MPL, 10-pole, 90 r.p.m., dir. conn. 22 in. and 38 in. x 48 in. Bates C. C. engine.
1—75 Kw. Bullock, 6-pole, 275 r.p.m., dir. conn. to 11 in. and 18 in. x 11 in. Shepherd vertical engine.
1—60 Kw. Thompson-Ryan, 10-pole, 275 r.p.m., dir. conn. to 13 in. x 12 in. McEwen engine.

125 Volts

1—150 Kw. Crocker-Wheeler, CCD, 125 vole, 8 pole, 225 r.p.m., dir. conn. to volt, 8 pole, 225 r.p.m., dir. conn. to engine.
1—50 Kw. General Electric, 120 volt, 6 pole, 275 r.p.m., dir. conn. to 13 in. x 17 in. Armington & Simms horital engine.
1—50 Kw. Bullock, 120/125 volt, 6 pole, 275 r.p.m., dir. conn. to 12 in. x 12 in. Payne horizontal engine.
1—30 Kw. Westinghouse, 125 volt, 352 r.p.m., dir. conn. to 9 in. x 15 in. x 9 in. Westinghouse automatic engine.

Gas and Oil Engine Units

Direct Current

1—160 Kw. Bullock, 250 volt, 160 r.p.m., dir. conn. to 16 in. x 24 in. Diesel vert. 3-cyl. oil engine.
2—150 Kw. units, each consisting of one 150 Kw. Ft. Wayne gen., 250 volt, 165 r.p.m., dir. conn. to 16 in. x 24 in. Diesel vert. 3-cyl. oil engine.
1—130 Kw. Crocker-Wheeler, CCD, 250 volt, 225 r.p.m., dir. conn. to Alberger size No. 16 Buffalo twin tandem gas engine.
1—7¼ Kw. Fairbanks-Morse, 110-115 volt, 350 r.p.m., dir. conn. to 8 in. x 10 in. Fairbanks-Morse vertical gas engine.

We shall be glad to mail complete list of Electrical, Steam and Hydraulic Machinery upon request.

**Pittsburgh Office:
498 Union Arcade Building**

ROAD BUILDERS

Look over our stock before placing your order for

ROAD ROLLERS **PAVING MIXERS**
CRUSHERS **STEAM SHOVELS**

We **Rebuild** all of our equipment. Prompt shipments assured.

We also have complete line of

Hoisting Engines, Locomotives, Cars, Concrete Mixers, Air Compressors, Boilers, Pumps, Buckets, etc.

WE BUY **WE SELL** **WE RENT**
WIRE **'PHONE** **WRITE**

PITTSBURGH MACHINERY & EQUIPMENT CO.
Fulton Building, Pittsburgh, Pa.

FOR SALE

1—6-ton Buffalo-Pitts Tandem Roller.
1—10-ton Monarch Road Roller.
1—Milwaukee Steam Traction Concrete Mixer, with boom and bucket.
9—Dump Wagons.
1—Little Winner Road Machine.
1—Adams Combination Scarifier and Scraper, with adjustable Engine Pole.

E. McGREEVY, Agt.
309 Robinson Bldg., Elmira, N. Y.

FOR SALE

2 Jewel Continental

FILTERS

size 10-ft. 6-in. x 9-ft.; mechanical rakes, motor, etc., complete and in excellent condition.

TIFFIN WATER WORKS
Tiffin, Ohio

FOR SALE

COMPLETE ROAD BUILDERS' OUTFIT

TRACK

50,000 feet Koppel Industrial road builders track, 24 in. gauge, sections 15 ft., 6 and 7 ties, 20 lb. rail.

CARS

150 Koppel Cars, 24 in. gauge, 1½ yard capacity, spring couplers, extra heavy construction, brass journals, "V" shape body.

LOCOMOTIVES

2 Plymouth gasoline operated locomotives, 24 in. gauge.
1 Whitcomb gasoline operated locomotive, 24 in. gauge.

STEAM SHOVEL PLANT

1—70C BUCYRUS SHOVEL, new 1912. Used approximately 4 months.

2—4 wheel, saddle tank, 36 in. gauge PORTOR LOCOMOTIVES. Excellent condition.

30—2-way WESTERN DUMP CARS, 4 yard capacity, 36 in. gauge. Steel underframe. Excellent condition.

10—16 yard air dump, steel underframe WESTERN CARS. Excellent condition.

FOR SALE OR RENT

BROWNING LOCOMOTIVE CRANE 20 ton capacity, 50 ft. boom, 8 wheel M. C. B., steam brakes. Massachusetts-Ohio standard boiler, full cab. Excellent condition. Located Chicago.

CHESTER A. PHILLIPS & CO.
Old Colony Bldg., Chicago, Ill.

ROAD ROLLER BARGAINS

1—10-ton Kelly 3-Wheel, Gasoline.
1—10-ton Kelly 3-Wheel, Steam.
1—10-ton Kelly 3-Wheel, Steam, with Scarifier.
1—10-ton Huber 3-Wheel, Steam.
3—10-ton Buffalo-Pitts, 3-Wheel, Steam.
1—6-ton Buffalo, Steam, Tandem.

All in A1 condition, for Immediate Delivery.

The T. J. LANE EQUIPMENT CO.
1026 West Main St., Springfield, O.

Paving Mixer for Sale

Smith-Chicago Paving Mixer No. 509 Steam. Almost new, bargain price, ½-yd. capacity.

BROWN & CO., Henderson, Ky.

FOR SALE

LAKEWOOD PAVER

16 ft. dry capacity with Engine, Boiler, Boom and Bucket at Morton Terminal, Albany, N. Y., bought new 1916—used 4 months, needs cleaning and few repairs—$900.00.

J. M. TREVOR COMPANY
50 Church St., New York, N. Y.

For Sale for Prompt Stock Shipment

Stock No.

AIR COMPRESSORS

156 Sullivan, 396 cu.ft. steam driven, class W. B.-2, 2-stage air cylinders, size 12-14-9 x 11.

BOILERS

163 75 H.P. Scotch; dry back, corrugated furnace butt strapped; 125 lb. working pressure.

167 60 H.P. Ames Portable Return Tubular; 100 lb. pressure.

103 Two 80 H.P. Heine, water tube; new 1911; used 6 years, Maryland Casualty Co. certificate; 180 lb., 1 drum, butt strapped.

107 150 H.P., 125 lb. pressure, horizontal tubular, 72 in. x 18 ft., full front, complete including stack, new 1916, used 2 years; Hartford certificate.

173 100 H.P., 125 lb. pressure, horizontal tubular, 66 in. x 16 ft., full front, complete.

BRICK MACHINERY

168 Complete new plant; capacity 40,000 brick per day; "Special Imperial" Brick Machine, Brick Table, Side-Cut Die, Disintegrator, Granulator, Boiler, Engine, ten steel cars, etc. Will sell all or any part.

CARS

364 10 single deck all-steel new brick.

365 Single-track transfer, for hauling cars; stock No. 364.

368 2 bottom-dump clay, 1 yd.

369 Standard gauge, platform 8 ft. x 10 ft., 6 ft. 6 in. x 8 ft. 3 in., 6 ft. 3 in. x 8 ft. 9 in.

370 5 Koppel, all steel, side dump, ¾ yd.; 24 in. gauge.

CRUSHERS

30 Jaw Type—No. 218, 30 in. jaws; and No. 207, 18 in. jaws, made by the Western Wheeled Scraper Company.

126 Jaw Type—5 in. x 14 in., with extra jaws.

161 No. 5 Austin Gyratory, No. 2591; capacity 15 to 30 tons.

384 No. 7½ Gates Gyratory, style D, capacity 90 to 150 tons.

Stock No.

DERRICKS

340 Two sets complete irons for guy derricks, including galvanized guy lines.

DRYER

381 American Process Co., direct heat, 56 in. x 31 ft. complete; almost new.

DRAG LINE BUCKETS

119 1½-yd., 5 teeth, ¾ yd., 4 teeth, 1 yd., plain.

ELEVATORS

307 Chain Bucket—30 Buckets, 18 in. projection, 12 in. wide, 22 in. deep, complete, with framework.

316 Chain Bucket—50 Buckets, 24 ft. shaft, centers 6 in. projection, 6 in. deep, 10 in. wide, perforated front and back; one chain in center.

342 Belt Bucket—40 ft. centers, 14 in. belt, 108 buckets 14 in. wide.

GASOLINE ENGINES

132 15 H.P. Fairbanks-Morse, type Z, kerosene oil, stationary.

120 Fairbanks-Morse, 8 H.P. portable gasoline, on truck, steel wheels, friction clutch pulley.

383 Fairbanks-Morse, 10 H.P., portable, kerosene, on truck, steel wheels, friction clutch pulley.

HOISTING ENGINES

156 6 x 10, D.C., D.D., Stroudsburg, skeleton frame.

157 4—6 x 10 D.C., D.D., Stroudsburg, with boilers, complete.

329 Engine—First motion, reversible, double cylinder, 16 in. x 30 in., mine hoisting, double drums, wood logged, 5 ft. dia., 6 ft long.

MOTOR

377 60 H.P.—3 phase, 60 cycle, 220 volt, 690 R.P.M. slip ring, with sliding base, pulley, and starter

Stock No.

PIPE

245 Unusual bargain, 1000 ft.—2 in. black, 500 ft.—3 in. black, 500 ft.—5 in. black, 1500 ft.—6 in. black, 300 ft.—8 in. black.

PUMPS

290 Centrifugal—8 in. suction, 6 in. discharge, pulley 24 in. x 8½ in.

362 Pulsometer, 3 in.

228 Steam—5—3 x 2 x 3 Worthington Duplex, 1—4½ x 2¾ x 4 Duane Duplex, 1—7½ x 4½ x 10 Knowles Duplex, 1—14 x 9 x 18 Cameron single cylinder.

STEAM ENGINES

327 16 in. x 30 in., double, slide valve, throttling, wheel 12 ft. x 36 in.

9 Farquhar, 16 in. x 24 in., slide valve; wheel, 96 in. x 17 in.

352 American Blower Co., 3¼ x 3, type A, vertical enclosed, self-oiling, steam.

10 Tanner & Delaney, 12 x 18, center crank, slide valve.

STONE QUARRY TOOLS

159 5 surfacing machines, 50 plug drills, 100 hand carving tools, 100 stone axes, 50 spalling hammers, etc.

TANKS

36 Pressure: 6 ft. dia., 12 ft. 6 in. long, 5/16 in. thick, 2652 gallons.

332 Pressure: 24 in. x 10 ft.

136 7 enamel lined; dia., 8 ft.; height, 10 ft.; ¼ in. steel, closed tops, 3750 gals.

137 1 steel, cone bottom; dia., 9 ft.; height, 7 ft.; thickness, 3/16 in.; closed top, 3325 gals.

385 Pressure: 42 in. x 10 ft., 125 lb. air.

TRACTOR

104 50 H.P. Case, steam; engine 10 x 12—150 lb. pressure.

WIRE ROPE

151 Special bargain—1000 ft.—1¼ in.—6 x 19 plow steel.

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HACKLEY MORRISON COMPANY

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CABLEWAY OUTFIT

1—900-ft. span Lidgerwood, 18-ton cableway, complete with 70-hp. Mass. Standard Boiler, 85-ft. towers, and all fittings. 1—Lidgerwood special 12 x 12 cableway engine.

DRAGLINE EXCAVATOR

1—500-ft. span Dragline Excavator, with towers, 1½-cu.yd. bucket, cables, complete.

1—90-hp. 2-drum 2-speed Thomas Electric Hoist, 220 volts, 3-phase, 60-cycle; motor suitable for excavator.

HOISTING ENGINE

1—10 x 12 Lidgerwood 3-drum skeleton hoist.
1—10 x 12 Lambert 3-drum skeleton hoist.
1—10 x 12 Mead-Morrison 3-drum skeleton hoist.
1—8¼ x 10 Lidgerwood 2-drum, with boiler.

LOCOMOTIVES

1—Vulcan 35-ton, 14 x 20, 0-4-0 Std. gauge, Airbrakes.
1—Plymouth 3½-ton, Std. gauge. 1 Bell 6-ton, Std. gauge.
1—American 10 x 16, 36-in. gauge. 1 Bell 4-ton, 24-in. gauge.

DERRICK

1—Traveling Derrick, 90-ft. boom, complete.

BOILERS

2—50-hp. Portable Locomotive type, Mass. Std.

HUBBARD-FLOYD CO. Inc.

Main Office: 90 West St., New York City. **Boston Office: Old South Building**

Get your copy in early—

Owing to the holiday next week, the forms for the Searchlight Section of the

July 3rd Issue

of

ENGINEERING NEWS-RECORD

will close for press at 4 P. M., Monday, June 30th.

FOR SALE

Buffalo-Pitts double cylinder 10-ton road

STEAM ROLLER

In A-1 condition Shop No. 9130.

JOSEPH A. MURPHY
Irvington, N. Y.

Koehring Mixer Bargain

½-cu. yard capacity. Used about six weeks. Outfit looks and is almost like new. Equipped with power loader and water tank. Guaranteed first-class condition. Can make immediate shipment. Price f.o.b. cars Milwaukee, $1300.

KERN-HUNTER, Inc., Milwaukee, Wis.

FOR SALE

FOOTE PAVER

27 ft. dry capacity, with engine, boiler, 18 ft. chute, late model, used one year, overhauled and ready to work, a bargain, located in Schenectady.

J. M. TREVOR CO.
50 Church St., New York, N. Y.

FOR SALE

Revolving Shovel, Dragline, Deck Scow, Motors, Pumps

175-B Bucyrus Revolving Shovel, 75 ft. boom; 3½ yd. dipper.

175-B Bucyrus Dragline, 125 ft. boom.

1—Steel Tug, 72 ft. long, 15 ft. beam; Lake Michigan.

1—500 ton Deck Scow for heavy derrick or whirlie use; reinforced concrete; Hunt inspection.

Various 60-cycle Motors.
Various Centrifugal Pumps, etc.

JAMES O. HEYWORTH, Harvester Building, Chicago

FOR SALE

1—Marion Model 60 **Shovel.**
20—K. & J. 6-yd. Std. Gage **Dump Cars.**
1—**Field Tower Dragline,** 2½-yd. Bucket.
1—5-ton Buffalo-Pitts **Roller.**
1—5C **Champion Crusher.**
1—Byers **Auto Crane,** Model B.
1—10-ton Iroquois **Roller.**
1—**Derrick Boat** with 1-yd. Clamshell.
1—**Motor Boat** 36 ft. long. Speed 18 Miles

J. T. WALSH
246 Tremont St., No. Tonawanda, N. Y.

FOR SALE

Byers Auto Crane, 35-ft. boom, ½-yd. bucket; first-class condition, ready for immediate shipment.

Quincy 100-ft. gasoline driven portable **Air Compressor.**

Allis-Chalmers 48 x 60 **Jaw Crusher.**

A-1 Thew traction **Steam Shovel,** shop No. 854.

Osgood Model 18 traction **Steam Shovel.**

15-ton Brown Hoist 8-wheel **Locomotive Crane.**

Chain-Belt No. 15 (mixed material) **Paver,** with boom and bucket.

2—Buffalo-Pitts 10-ton 3-wheel **Road Rollers.**

Locomotives, Cars of All Types, Steel Rails and Portable Track, Engines and Boilers, Portable Crushers, Unloading Plants, Hoisting Engines and Derricks.

Maryland Equipment & Supply Co.
Equitable Bldg., Baltimore, Md.

48-TON STEAM SHOVEL

1½-cu.yd. Bucyrus, R.R. trucks, 280 deg. swing, new digging teeth, short rail sections. Guaranteed complete and in first-class condition.
For Rent or For Sale, **$8000 f.o.b. Oak Ridge, N. J.**

HEYMAN & GOODMAN CO.
15 Exchange Place, Jersey City, N. J.

STEAM SHOVELS
and other equipment

Model 76 Marion Model 60 Marion
Model 41 Marion Model 0 Thew
3—Keystone **Excavators.**
125 HP. Ames Economic **Boiler.**
No. 5 Champion **Crusher.**
No. 3 Champion **Crusher,** elevators and screens.

Complete tunnel plant consisting of compressors, drills and all accessories.

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1—**Knox Semi-Trailer,** 10-ton capacity, steel tired, good as new, $600.

Bucket: 1¼-yd. Hayward Orange Peel Bucket, first-class usable condition, $700.

1—8¼ x 10 **Lidgerwood D.D. D.C. Engine,** with geared swinger and boiler, cheap, thoroughly overhauled.

1—No. 110 **Smith Tilting Mixer,** no power, arranged for either gasoline, steam or electric, with power charger; good usable condition.

Full Line of Other Equipment.

Brandeis Machinery & Supply Co.
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FOR SALE FOR RENT

NEW AND REBUILT

Rental on ½ and ¾-yd. buckets, $2.75 per day.
Rental on 1-cu.yd. buckets, $5.00 per day.

Send for Catalog.

GEORGE HAISS MFG. CO.
140th St. and Rider Ave., New York City

FOR SALE

Thew full swing traction A-1

STEAM SHOVEL

ready to run. No. 4 yd. dipper. Can give immediate shipment.

GENEVA LIMESTONE CO., Inc.
Oak Corners, N. Y.

Miscellaneous Contractors' Equipment

Immediate Delivery
Attractive Prices

1—¾-yd. "Hayward" **Orange Peel Bucket.**
3—**Concrete Dump Buckets.**
2—¼-yd. "Lakewood" **Elevator Concrete Buckets.**
4—**Concrete Buggies.**
1—**Drop Bottom** Concrete Car.
"Harrington," "Box," "Yale & Towne" Chain **Hoists,** 4000 to 16,000 lb. capacity.
Concrete Mixers, 5 to 16 ft. capacity.
Gyratory and Jaw **Rock Crushers.**
1—Set of **Cutter Teeth for Hydraulic Dredge.**
1—Lot of **Wire Cable.**
1—Lot of **Chain,** assorted sizes.
5—"Chicago Pneumatic" **Coal Cutters.**
1—1/16-in. "Ingersoll-Rand" **Rock Drill.**
1—1-in. "**Haesler**" **Air Drill.**
Number of "Keller" and "Oldham" **Pneumatic Hammers.**
1—Lot of **Suction Hose,** 3 to 10 in.
Several **Hydraulic Jacks,** 8 to 10 tons.
5—"Wells" Gasoline **Lights.**
1—"Anderson" Diamond **Stone Saw.**
2—"Oldham" Pneumatic **Stone Surfacers.**
1—**Painters Scaffold.**

Also a large stock of Hoisting Engines, Air Compressors, Pumps, Electric Motors, etc.

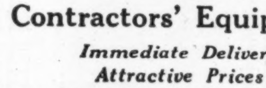
L. F. SEYFERT'S SONS, INC.
437 N. 3rd Street, Philadelphia, Pa.

BUCYRUS SHOVELS

Bucyrus steam shovel on locomotive trucks weight 65 tons, dipper 2½ yd.
Bucyrus steam traction, about 15 tons, dipper ½ yd.

Good condition, immediate shipment.

D. B. STRALEY, Crown Point, Ind.



Miller & Ross Co.
Sales Agent Erie Steam Shovel Co.; Electric Shovels.

Steam Shovels, Railroad Ditchers, Locomotives, **Cranes, Clam Shells, Draglines. Also New** and Second-Hand **Contractors' Railway Supplies and** Equipment
311-312 Atlas Block, Salt Lake City, Utah.

Rebuilt Equipment for Sale or Rent

AIR COMPRESSORS

(Belt Driven)

42—58-235-470-cu.ft.

(Steam Driven)

115—235-250-350-460-537-888-1200-cu.ft.

BOILERS

1—250-hp. Erie City Water Tube, two years old.
1—72 x 18, 150 lb.
2—72 x 18-in. Battery, complete, stack, heater, pump, etc., 2 years old.
1—150-hp., Locomotive Type, 125 lb.
1—125-hp., Locomotive Type, 125 lb.
2—100-hp., Locomotive Type.
3—70-hp. Economic.
15—Locomotive Type, 20 to 50-hp.
50—Vertical Boilers, 8 to 50-hp.

BUCKETS

1½—2½ and 4-yd. Dragline Buckets.
½—1 and 1½-yd. Clamshell.

CONCRETE MIXERS

1—No. 2 Koehring Paver, boom and bucket.
4—No. 14 Koehring Pavers, boom and bucket.
1—No. 15 Chain-Belt Paver.
10—No. 6 Koehring Paver.
2—½-yd. Milwaukee, with side loaders and power hoists, electric drive.
3—½-yd. Marsh-Capron, with side loaders, electric drive.
24—Mixers, 4 to 27 ft. capacity, gasoline and steam.

ELECTRIC

A.C. Motors, 1 to 200-hp., 60-cycle, 2 and 3-phase, 220-440-volt.
—50-kw. Turbo-Generator, 125-volt.

CRUSHERS

1—No. 4 Champion, with engine, boiler, elevator and bin.
1—No. 5 Champion.
2—Coal Crushers, 100 and 200-ton capacity.
1—36-in. Stedman Pulverizer.
1—30 x 8-in. Kennedy Pulverizer.

CARS

10—1½-yd., 24-in. gage Koppel.
11—4 -yd., 36-in. gage K. & J.
20—4 -yd., 36-in. gage Western.
6—6 -yd., Standard gage.
2000 ft., 24-in. gage Track.

CRANES

1—15-ton, 4-wheel.
1—15-ton, 8-wheel.
1—20 ton, 8 wheel.
1—50-ton Wrecking Crane.

LOCOMOTIVES

3—3½-ton, 36-in. gage Milwaukee, gasoline.
1—3½-ton, 36-in. gage Whitcomb, gasoline.
1—6 x 10, 16-ton, 24-in. gage American.
1—8 x 14, 10-ton, 36-in. gage Porter.
8—9 x 14, 14-ton, 36-in. gage Porter and Vulcan.
3—10 x 16, 18-ton, 36 in. gage Davenport.
1—10 x 16, 18 ton, 36 in. gage American.
1—10 x 16, 20-ton, standard gage Porter.
1—10 x 16, 22-ton, standard gage Vulcan.
1—17 x 24, 0-6-0, standard gage American, saddle tank.

ROLLERS

2— 5-ton Tandem.
1— 6-ton Tandem.
3—10-ton, 3-wheel.

STEAM SHOVELS

1—Marion Model 28 traction.
1—Marion Model 31 traction.
1—Marion Osgood Model 18 traction.
1—Erie traction.
1—No. 0 Thew traction.
1—Marion 25 Tunnel.
1—Marion Model 60.
—Bucyrus, 70 ton.

HOISTING ENGINES

58—In stock with one, two or three drums, for derrick, mine, incline, pile driving or cableway service. Sizes 5 x 6 up to 10 x 12.

PUMPS

150—In stock including triplex, centrifugals, Emersons, Pulsometers and Nye. Steam, Motor, Belt, Gasoline Driven.

TANKS

25—Pressure Tanks, 24 to 72-in. diam., 4 ft. to 20 ft. long.
100—Steel storage Tanks, all sizes up to 40 x 40 ft.
1—50,000 gal. Steel Tank and Tower for water supply.

STEEL STACKS

30, 36, 40, 60, 66-in. diameter.

Ask for 25-page Stock List

We recently purchased several large Industrial Plants and can make attractive prices on all kinds of machinery, equipment and supplies.

WIRE PHONE WRITE

CONTRACTORS MACHINERY & SUPPLY CO.

509-11 Wabash Building, Pittsburgh, Pa.

ERIE STEAM SHOVELS

Two ¾-yd., full revolving, on traction wheels. Very good order. Prompt shipment.

Also several **Osgood, Thew, Marion and Bucyrus, ⅝ to 1¼-yd.**

WM. B. GRIMSHAW CO.
1040 Drexel Bldg., Philadelphia, Pa.

¾-YD. ERIE "B" SHOVEL

1—Erie "B," ¾-yd. full revolving traction type shovel, Shop No. 165, complete with Ohio boiler, butt strapped, triple riveted, No. 125 working pressure, manganese lip and teeth on dipper, first-class working order, used about ten months, as good as new.

Marsh-Bothe Machinery Company
975 Old Colony Bldg., Chicago, Ill.

STEAM SHOVELS

1—No. 1 Shipper Shaft Boom, Thew Automatic Traction Shovel, shop No. 834, used only on one job, good as new.
1—No. 1 Trolley Boom Thew Automatic Shovel, shop No. 538, new boiler and new boom, first-class condition.
3—Special Thew "O" ¾-yd. Dipper, high lift, counter weighted for deep trench work, shop Nos. 1320, 1321 and 1322, first-class condition, will load wagons on bank in 14-ft. cut.

LOCOMOTIVE

1—Vulcan narrow gauge Locomotive, 12 tons, cylinders 9 in. x 13 in., good working condition.

ROAD ROLLERS

1—10-ton Buffalo-Pitts Roller, new, used only on one job, good as new.
1—12-ton Julian Schoel Road Roller, good condition.

CARS, RAILS, ETC.

5—Two-way Continental Dump Cars, good condition.
About 1 mile of 40-lb. Rail, including Switches, Fish Plates and Ties, good condition.
2—Pierce, 5-ton Sand Trucks, nearly new.
1—No. 10 Sunbury Automatic Car Unloader, never used.

JOSEPH F. STABELL CO.
1105 Niagara St., Buffalo, N. Y.

FOR SALE

1—"O" Thew **Revolving Traction Shovel**, with ⅝-yd. dipper.
1—6-A Foote **Steam Traction Concrete Mixer**, with chute.
1—Milwaukee **Steam Traction Concrete Mixer**, with boom and bucket.
1—10-ton **Buffalo-Pitts Steam Roller.**
1—2½ Climax **Portable Crusher**, jaws 10 x 20, complete with folding elevator, 30-ton portable bin with screens.

E. McGREEVY, Agt.
309 Robinson Bldg., Elmira, N. Y.

Contractors' Tools

In stock at our warehouse

Several hundred New and Used

Picks and Shovels

and Miscellaneous small Tools at considerably under new prices

E. H. WILSON & COMPANY
COMMERCIAL TRUST BUILDING
PHILADELPHIA

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Even the swift Post-Planes carry the message of "Searchlight" advertising. And swift are the results for advertisers who use the "Searchlight" to tell readers of McGraw-Hill papers their needs or business propositions.

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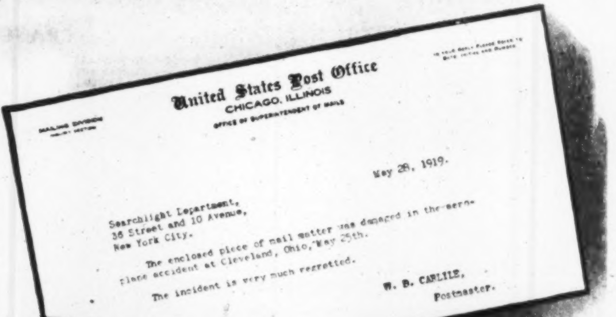


United States Post Office
CHICAGO, ILLINOIS
OFFICE OF SUPERINTENDENT OF MAILS

MAILING DIVISION

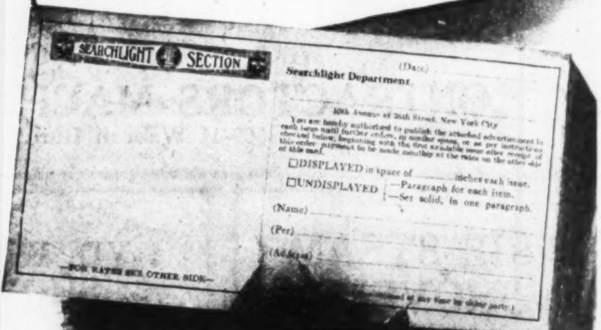
May 28, 1919.

Searchlight Department,
36 Street and 10 Avenue,
New York City.

The enclosed piece of mail matter was damaged in the aero-plane accident at Cleveland, Ohio, May 25th.

The incident is very much regretted.

W. B. CARLILE,
Postmaster.



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FOR SALE OR RENT

Owned by Us and Sold Under Absolute Guarantee

ROAD BUILDING EQUIPMENT

1—10-Ton Austin Gasoline Road Roller, slightly used.
1—12-ton Austin Gasoline Road Roller.
7—3-yd. Troy Reversible Dump Wagons
23-1½-yd. and 2-yd. Western Bottom Dump Wagons; practically new

STEAM SHOVELS

4—70-C Bucyrus, shop Nos. 1474, 1371, 1126, 2½-yd. dippers.
1—Model 70 Marion Steam Shovel, Shop No. 2694, 3-yd. dipper.
1—Model 60 Marion, Shop No 2079, 2½-yd. dipper
1—Model 76 Marion Special, shop No. 2777. Equipped with both 2½-yd. and 3-yd. Manganese faced Dippers. Clear height of lift 21 ft. length of boom 35 ft.; length of dipper arm 24 ft.
1—45-C Bucyrus, shop No. 1202 1¾-yd. dipper.

REVOLVING TRACTION SHOVELS

2—Model 28 Marion Revolving Traction Shovels, ¾-yd. dippers; Shop Nos. 2803 and 2804
1—Erie B Revolving Traction Steam Shovel, ¾-yd. dipper. Shop No. 149
1—Model 18 Marion-Osgood Shovel, Shop No. 521, ¾-yd. dipper.
1—Bucyrus 18-B Revolving Traction Shovels ¾-yd. dipper, Shop Nos. in 2100 series.

DUMP CARS

100—12-yd. standard gage Western air dump cars
20—12-yd. standard gage Oliver side dump cars
18—16-yd. standard gage Western Side Dump Cars.
2—6-yd. standard gage K. & J. side dump cars.
40—4-yd., 36-in. gage Western.
75—4-yd. heavy duty Western, 36 gage, side dump cars.
20—2 yd., 24-in. gage Western Side Dump Cars, steel frames
20—1½-yd., 24-in gage Western Dump Cars.

LOCOMOTIVES

1—17x24 cylinder, Schenectady 6 wheel switcher with tender. Weight 43 tons on drivers; 44 in. wheel centers; 11 ft. rigid wheel base; 150 lb. steam pressure.
1—16x22 cylinder, 32 ton, 4-wheel switchers with tenders, C. M. & St. P. Ry., class J2 locomotives.
1—10 x 16 cylinder, standard gage, Porter, saddle tank locomotive (042 type) weight 21 ton, with 18 ton on drivers; air brakes and automatic couplers.
5—36-in. gage, 10 x 16 cylinder Porter, 18-ton saddle tank Locomotives, Shop Nos. 5235, 5067, 4499, 4495 and 4260; extended saddle tanks, wide fire boxes, steam brakes and most modern design and equipment.
10—36-in. gage, 10 x 16 and 9 x 14 Davenport American and Vulcan saddle tank locomotives
1—7 x 12 cylinder, 24-in. gage Davenport, saddle tank locomotive. Weight 9 tons.

RAIL, SWITCHES, SPIKES, ETC.

1—Carload 4½, 5 and 5½-in spikes.
10 tons angle bars for 70-lb. and 75-lb. rail.

BOILERS, MIXERS, DERRICKS, COMPRESSORS, Etc.

3—Brownell, 72-in. x 18-ft. Horizontal Tubular Boilers, with 4-in. tubes.
1—20 x 22½ x 15½ x 21 AA2 Ingersoll-Rand Compressor. 1600 ft. capacity.
1—66 x 18 vertical air receiver, complete.
1—30 x 6 vertical air receiver, complete.
1—16 x 16 x 18-in. Laidlaw-Dunn-Gordon Air Compressor with reservoir, weight 15,000 lb.
1—Stationary Engine, horizontal center crank type, 10 x 12-in. cylinder, slide valve type, 25 hp.
2—Milwaukee (16 cu.ft.) Mixers.
1—American 10-ton Derrick, 60-ft. boom, 12-ft circle.
1—American, 10-ton Derrick, 76-ft. boom, 12-ft. circle.
3—1-yd. Concrete Buckets.
6—24-in. gage, 1-yd. Koppel Cars, approximately 1000 ft. 24-in. gage Koppel track.
1—No. 44 Koehring Concrete Mixer.

CLAPP, NORSTROM & RILEY EQUIPMENT CO.

12 and 14 South Canal St., Chicago **Northwestern Branch: 1308 Pioneer Bldg., St. Paul, Minn.**

FOR SALE OR RENT

HOISTING ENGINES

2—8¼ x 10 Lidgerwood, D.C., D.D., skeleton
1—7¼ x 10 Lidgerwood, D.C., D.D. skeleton
2—6-hp., 1—8-hp. Boss Gasoline Hoists.
1—Mead-Morrison Independent Swingers.

BUCKETS

1—Smith ¾-yd. orange peel
4—¾-yd. Contractors tip-over Buckets
10—1-yd. Contractors tip-over Buckets

STIFF-LEG DERRICKS

1—5-ton stiff-leg Derrick, 48-ft. boom
1—2-ton hand Derrick
1—Complete set of Lambert Stiff-Leg Derrick Fittings, 14 x 14 boom.
1—Set of Terry & Tench, 3-ton Travelling Derrick Fittings, with bull wheel and double flanged car wheels

PUMPS

1—No. 7 Pulsometer Pump, rebuilt
1—Each Nos. 4, 5 and 6 Pulsometer Pumps
1—No. 4 Emerson Steam Pump, complete.
1—No. 5 Emerson Steam Pump, complete.
1—6-in. Morris Centrifugal Sand Pump.
1—4-in. Suction Nye Pump.
1—3-in. suction Nye Pump.

ROAD ROLLERS

2— 5-ton Tandem Iroquois
1—10-ton, 3-wheel Ohio gasoline Roller.

KOPPEL CARS

6—36-cu.ft. capacity, 30-in gage, two way.
3—24-in. Rotary Dump Cars

CONCRETE MIXERS

2—½-yd. Smith, with steam power.
1—½-yd. Lakewood on trucks with steam engine and batch measuring hopper.
1—22-ft. Boss Mixer.
2—8-ft. Boss Mixers, gasoline engine and barrow hoppers, on trucks
2—10-ft. Boss Concrete Mixers on trucks with gasoline engine
2—10-ft. Boss Mixers, gasoline engine, power loaders
1—15-ft. Boss Gasoline Engine and power loader

STREET PAVING MIXERS

1—No. 5 A Foote concrete mixer with chute loader and steam power.

ROLLERS

1—50-hp. Nagle Boiler, on wheels.
1—35-hp. O. & S. Boiler, on wheels.

EDWARD EHRBAR, Inc.

Phone, Canal 8473. 270 West St., New York City

HOISTING ENGINES

1—Lidgerwood 14 x 18, D.C. three tandem drums, suitable for cableway.
1—Shannon 7¼ x 10, D.C., D.D., with boiler.
1—Mundy 6¼ x 10, D.C., D.D skeleton.
2—Mundy's 6¼ x 10, D.C., D.D., with boiler.

STATIONARY ENGINE

1—350-hp. Green Slide Valve Engine, equally as good as new, size 22-in. x 48-in., wheels 16-ft. x 32-in.

PIPE

4000-ft. strictly first-class 6-in. wrought steel pipe, equally as good as new.
1000 ft. strictly first-class 20-in. dia. steel riveted flange pipe, lengths 20 ft. each.

STEAM SHOVEL

1—65-ton Bucyrus, 2½-yd. dipper, standard gauge.

CENTRIFUGAL PUMP

1—Morris No. 12 14-in. suction, 12-in. discharge, direct connected to horizontal engine, 18 x 10, 4500 gallons capacity per minute.

RAILS

400 tons 70 lb. 200 tons 30 lb. First-class condition.
Also other weights from 20 to 100 lb.

HENRY A. HITNER'S SONS CO.
Gaul and Hazzard Sts., Philadelphia, Pa.

FOR SALE

1—7 x 10 D.C., D.D. Flory Hoist, 30-in. drums, with boiler. Fine condition.
1—No. 3 Marsh-Capron Concrete Mixer, complete with boiler and engine.
1—10-in. Goulds **Centrifugal** Pump, belt driven.
1—Size 6, Morris **Centrifugal** Pump, d.c. to steam engine with 65 ft. of 8-in. flange pipe.
1—8 x 5¼ x 3½ Gardner **Duplex** Pump.
1—20-hp. International Gas **Engine.**
1—5 x 5 **Steam Engine.**
1—90-hp. **Horizontal** Boiler.
1—Stiff-Leg **Derrick,** Mast 42 ft., Boom 55 ft., timbers 12 x 12.
1—1-yd. Hayward **Orange** Peel **Bucket.**

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10-ton, 47 ft. boom, single line, 4-wheel, st. gauge, overhauled; location, Cincinnati, Ohio.

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50,000 ft. hoisting

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50,000 ft. guy rope.
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Sound Plant in Good Operating Condition For Sale

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10,000 ft. 1½ in. iron pipe.

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1—1¼ yd. Lidgerwood 60-ft. boom.
1—Monighan Walker 2 yd. 60 ft. boom.
1—3-yd. Dragline Bucket.

TRUCKS

6—4-wheeled House Moving Trucks.

LOCOMOTIVES

3—9 x 14, 13-ton, H. K. Porter, Dinkeys, 36-in. gauge.
1—10 x 16, 18-ton H. K. Porter, Dinkey, 36-in. gauge.
1—10 x 16, 18-ton Vulcan Dinkey, 36-in. gauge.
2—20 x 26, 125-ton Brooks Locomotives, standard gauge.
1—15 x 24-in., 32-ton, 4-wheeled, standard gauge.

BOILERS

1—150-hp. R. T. Butt and Strap, with front and fittings, 150 lb. pressure.
3—50-hp. Locomotive type, on skids.
1—20-hp. Vertical type.
1—20 hp. Scotch Marine.
2—12-hp. Vertical type.
1—40-hp. Locomotive type, on wheels.

CRUSHERS

2—No. 3 B Gates Gyratory Crushers.
1—No. 6 B Gates Gyratory Crusher.
1—9 x 15 Blake Jaw Crusher.

CARS

14—Standard gauge, 6-yd., Peteler Dump Cars.

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2—18 x 18¼ x 24 Ingersoll-Sargent Steam Driven, straight line.
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1—Ransome, 1-yd. on skids, with steam engine, but no boiler.

1600 sq. ft. of Blaw Panel Forms.

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2 tons Black Diamond flat tool steel.

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2—10-hp. A.C. Motors, 220 volts, 60 cycle, 3 phase.
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7—Hoisting Engines, from 5 to 20 hp.

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8—Tanks, 10 x 16-ft.
8—Tanks, 10½ x 16½-ft.
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1—Pressure Tank, 6½ x 24-ft.
All Stock for Immediate Shipment

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Steel and Wood Tackle Blocks of all diameters. For immediate shipment.

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2—27 ft. 6 in. bridges; 1—29 ft. bridge; 4—32 ft. 6 in. bridges.; 4—42 ft. 6 in. bridges; 2—54 ft. 2 in. bridges; 2—59 ft. bridges; 1—64 ft. 5 in. bridge; 2—64 ft. bridges; 2—64 ft. 11 in. bridges.

Total weight 771,034 *lb.*

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1—24¼ ft. 3—43 ft. 2—45 1/6 ft

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Weight 129,479 *lb.*

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1—12-ton Good Roads full telescopic **Stone Bin**, practically new, mounted, F.O.B. Cleveland	400
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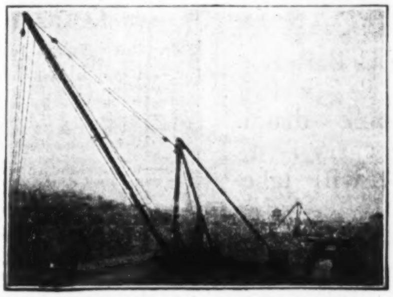

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1—10-ton Iroquois Macadam Roller.
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1—Austin Combination Roller and Lawn Mower, (gasoline).

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2—1/3 yard Austin Cube Pavers (steam) 20 ft., boom and bucket.
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1—1/3 yard Foote Paver, with 15ft. spout, (steam)

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1—600 gallon Studebaker Sprinkling Wagon.

HOISTING ENGINES WITH BOILERS

1—6¼ x 10 D.C.D. Stroudsburg.
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1—No. 3 Dake Swinging Engine.

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1—Type B Emerson, Jr., Pump.
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1—Wicks Cent. Pump, 8-inch suction, 6 inch discharge.

CARS

6—1 yard 36 in. gauge Koppel Cars.
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MISCELLANEOUS

1—12-ton Champion Portable Stone Bin, elevator and screen.
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USED CONTRACTORS' EQUIPMENT

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7¼ x 12, D.D., D.C. Mundy, with Boiler.
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No. 5 Dake Swinging Engine.
6-hp. Schramm D.D. Gasoline Hoist.
2—6-in. direct connected Morris Centrifugal Pumps, complete, with hose and suction.
40-hp. Upright Boiler.
20-hp. Upright Boiler.
35-hp. Farquhar Portable Boiler, with 30-hp. Engine attached, 100 lb. pressure.
Derricks, Gasoline and Steam Pumps.

Logan Construction Company, Inc.
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NEW—12 lb., 16 lb., 20 lb., 25 lb., 30 lb., 40 lb.
NEW—60 lb., 70 lb., 75 lb., 80 lb., 85 lb., 90 lb.
RELAYERS—30 lb., 35 lb., 40 lb., 45 lb., 56 lb., 60 lb.
RELAYERS—70 lb., 80 lb., 85 lb., 90 lb., 100 lb.
FASTENINGS—New Bolts, Nuts and Spikes.

New Frogs, Switches, Crossing, and All Accessories
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9½ miles 20-lb. 24-in. ga.
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1800 ft. Track in 15-ft. sections.
2 Turnouts (right and left).
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First-class condition, immediate shipment.

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McKEEN MOTOR CAR

1—200 h.p., in good condition, 84 seating capacity.

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DERRICK CAR

on standard M.C.B.R.R.; traction trucks 8¼ x 10; American double drum *hoisting engine,* carry 1-yd. bucket. $2000. will take whole outfit.

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200 Tons 20-lb. Relayers
125 Tons 30-lb. Relayers
25 Tons 50-lb. Relayers
200 Tons 70-lb New
40 Tons 85-lb. New
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5700 Feet 24-in. Industrial Track.

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2000 ft. Lackawanna Arch Web Piling, 25-ft. and 30-ft. lengths.

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50 tons 30s with bars.
350 tons 35s with bars.
75 tons 40s with bars.
Located in the South. Will make very low price for quick shipment.
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1—7-in. x 12-in. Cylinder, 4-Wheel Saddle Tank, 36-in. Gauge

DAVENPORT LOCOMOTIVE

Practically New.

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STANDARD GAUGE LOCOMOTIVE

45-Tons, Four Driver Saddle Tank

New 1916. Immediate delivery.

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STANDARD GAUGE LOCOMOTIVES

2—43-ton Vulcan four-driver saddle-tank, built 1917.
2—40-ton Baldwin four-driver saddle-tank.
1—20-ton 11 x 16 in. Vulcan.
2—18-ton 10 x 16 in. Porter.
1—50-ton 18 x 24 in. six-wheel switcher.
1—40-ton 17 x 24 in. four-wheel switcher.
1—10 x 16 in. 18-ton, 36 in. gauge Porter.
20—6-yd. standard gauge **Western dump cars,** steel draft sills.
1—Model 76 Marion **steam shovel.**
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Locomotive Cranes, Steam Shovels, Narrow and standard gauge Cars, etc.

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1800 tons NEW 16-lb. RAIL

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Locomotive Cranes, Derricks, Concrete Mixers, Steam Shovels, Locomotives, Cars, Rails, Hoisting Engines, Electric Hoists, Cableways.

All necessary equipment for complete plant.

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STANDARD RAIL & STEEL CO.

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RE-LAYING RAILS

All Weights and Sections

Spikes, Bolts and Accessories

Buy and Sell SCRAP IRON AND STEEL

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4—20-ton 11 x 16 standard gauge 4-wheel Vulcan saddle tank locomotives, MCB Equipped, 165 lb. steam pressure, built 1915.

2—33-ton 13 x 18 standard gauge 4-wheel Vulcan saddle tank locomotives, MCB Equipped, 165 lb. steam pressure, built 1917.

1—55-ton 16 x 24 standard gauge 4-wheel Vulcan saddle tank locomotive, MCB Equipped, 165 lb. steam pressure, built 1912.

STEAM SHOVELS

1—40-R Bucyrus Steam Shovel, Shop number 1338.

1—70-C Bucyrus Steam Shovel, Shop number 1519.

2—Type B, Erie Revolving Shovels, Shop numbers 582 and 583.

LOCOMOTIVE CRANES

3—Brown Hoist 15-ton 8-wheel cranes, bucket operating, built 1916.

1—Browning 30-ton 8-wheel crane, bucket operating, built 1914.

MISCELLANEOUS

1—Type 00 Austin Trench Excavator, built 1918, nearly new.

1—Model 15 Koehring Paving Mixer, built 1918, nearly new.

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SADDLE TANK LOCOMOTIVES

4-ft. 8½-in. Gauge

Two 30-ton, 13 x 18-in. Vulcan, built 1916. Fine condition.

Four 19-ton, 10 x 16-in. Vulcan. Overhauled and in splendid condition.

Many others, various gauges and weights.

Cars of all kinds, Relaying Rails, etc.

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30,000 ft. of 20 lb. portable **Track**, 24-in. gage, in first-class condition.
50—1½-yd. **Koppel Cars.**
4—3-ton Plymouth **Locomotives.**
1—5-ton Whitcomb **Locomotive.**
1—¾-yd. Erie Steam Shovel.

Cars, Shovel and three of the Locomotives bought new little over year ago.

THE HILL DREDGING CO.
Somerset and Atlantic Aves., Ventnor, N. J.

Locomotives
Cars
Steam Shovels
Relaying Rails
Locomotive Cranes
Road Rollers
Concrete Mixers
60—24-in. Gage Koppel Cars
Spring Draw Bars, 1½ Yard Capacity, f.o.b. Chicago

We buy, sell and rent. If you have anything to offer list it with us. Anything you don't see listed write or wire us.

100 miles 2-in. used Iron Pipe, threads and couplings, in good condition. Pipe not pitted.

Full line of contractors' used equipment on application.

WM. BROCK GRIMES
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SALE OF LOCOMOTIVE

belonging to the Navy at the Navy Yard, Brooklyn, N. Y. There will be sold one Locomotive, 4 wheel, saddle tank, standard gauge, weight 25,300 lb. Diameter driving wheels 28 in.; length over all 17 ft.; width 7 ft. 9 in., height 9 ft. 2 in. The terms of sale contain full specifications and description. The sale will be for cash to the highest bidder by sealed proposals received up to

10 A. M., July 10, 1919

at the office of the Senior Member, Board of Survey, Appraisal and Sale, Building 15, Navy Yard, Brooklyn, N. Y. The locomotive may be inspected and schedules containing forms of proposal and terms of sale obtained upon application to the above Board. Josephus Daniels, Secretary of the Navy.—6-9-19.

Locomotive for Sale

10 x 16—36 in. gauge Baldwin. Located Jersey City, N. J. Bargain price.

JAS. S. BRADEN
26 Cortlandt St., New York City.

100,000 Sq. Ft. NEW STEEL FACTORY SASH

Just Purchased from the Government

Manufactured by David Lupton's Sons Co.

In original crates—Standard sizes—immediate shipment.

25,000 sq. ft. Steel Sash—Ventilating type—6 ft. x 7 ft. 5 openings wide, 4 openings high. Size openings 14 in. x 20 in.

75,000 sq. ft. Steel Sash—Stationary type—in three sizes—6 ft. x 7 ft., 5 ft. x 7 ft. and 3 ft. x 7 ft. 5 openings wide by 4 high. Also 5 openings wide by 3 high. Size openings 14 in. x 20 in.

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LOW PRICE—QUICK ACTION.
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300 CONTRACTORS' DUMP CARS

One or all at a Bargain Price

We offer 300 Two-Way Dump Cars (Wood and Steel Construction). Heap capacity 1½ cubic yards, 20 in. gauge.

165—Western and Oliver, 12 yard all steel, either side standard gauge dump cars.
7—Steel Dump Cars, 36 in. gauge, two yard capacity. Koppel make.
17—Three yard Western Cars, including eight brake cars, 36 in. gauge.
25—Kilbourn & Jacobs wood body contractors' cars; capacity, 30 cubic feet; 24 in. gauge.

We have all kinds of contractors' supplies, as well as machinery and equipment of every description. Write for complete bulletin No. 307.

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4—12-ton cap. Power Guy Derrick; timbers in boom 12 in. x 12 in.; in mast 14 in. x 14 in.; length of boom 46 ft.; length of mast 50 ft.
1—12-ton cap. Full Circle Stiff Leg Derrick; length of boom 42 ft.; length of mast 50 ft.; 12 ft. diam. bull wheel, made of 6 in. x 4 in. angles. Complete with 7 in. x 10 in. double cylinder, double drum Flory hoisting engine with boom swinger and boiler.
1—15-ton cap. Stiff Leg Derrick, hand power, mast 24 ft. high, boom 36 ft. long. Equipped with double drum triple geared hand power hoist.
1—15-ton cap Stiff Leg Derrick, hand or power, mast 32 in. high, 16 in. x 16 in. timber; boom 48 ft. long, 14 in. x 14 in. timber.
1—Twin Stiff Leg Full Circle Double Derrick, cap. of each derrick 12 ton, mast 56 ft. high, boom 40 ft. long, 8 ft. dia., geared turntable. Each derrick is equipped with 6 in. x 8 in. double cylinder, double drum, geared vertical steam hoisting engine and boiler.

HOISTING ENGINES

1—9 in. x 10 in. Russell, double cylinder, double drum, skeleton frame.
1—7¼ in. x 10 in. Mundy, double cylinder, double drum, skeleton frame.
1—6¼ in. x 8 in. Flory, double cylinder, single drum, skeleton frame.
1—¼ in. x 8 in. Flory, double cylinder, single drum, with boiler.
1—5000 lb. cap. American, double drum Hoist, geared to a 10 H.P. electric motor.

PUMPS

1—12 in. Morris Sand and Dredging Pump.
1—8 in. Morris Sand and Dredging Pump.
1—24 in. Centrifugal Water Pump.
1—6 in. Centrifugal Water Pump.
1—4 in. Centrifugal Water Pump.
1— 8 in. x 12 in. Fairbanks Duplex Power Pump.
1— 4 in. x 4 in. Deming Triplex Power Pump.
1—18 in. x 14 in. x 10 in. Worthington Duplex
1—16 in. x 7 in. x 12 in. Stillwell Bierce Duplex
1—12 in. x 7 in. x 10 in. Worthington Duplex Pump
1—10 in. x 6 in. x 10 in. Prescott Duplex Pumps.
1—10 in. x 6 in. x 10 in. Prscott Duplex Pump.
2—5¼ in. x 3½ in. x 6 in. Worthington Duplex
2—4½ in. x 2¾ in. x 4 in. Worthington Duplex
1—10¼ in. x 7 in. x 18 in. Simplex Cameron

STEAM SHOVELS

12—70-ton Bucyrus Steam Shovels, standard ga.
4—95-ton Bucyrus Steam Shovels, standard ga.
1—No. 20 Marion, standard gauge.
Will rent or sell.

RELAYING RAIL

10 ton of 12 lb.
20 ton of 16 lb.
60 ton of 20 lb.
80 ton of 25 lb.
350 ton of 35 lb.
40 ton of 40 lb.
250 ton of 70 lb.
125 ton of 85 lb.
2500 pair Angle Bars for 70 lb. rail, 4 hole.
3 Mile Portable Track, 25 lb. rail with steel ties, 36 in gauge.
1 Mile of Portable Track, 20 lb. rail with steel ties, 36 in. gauge.

STONE CRUSHERS

1—No. 6 McCully Gyratory Stone Crusher.
1—No. 5-K Allis-Chalmers Gyratory Stone Crusher.
1—No. 3 Allis-Chalmers Gyratory Stone Crusher.

20 in. SPIRAL PIPE

40,000 ft. 20 in. Spiral Pipe, No. 10 gauge with bolted joint couplings.
1—No. 5-B Eureka Jaw Stone Crusher, 8 in. x 24 in.

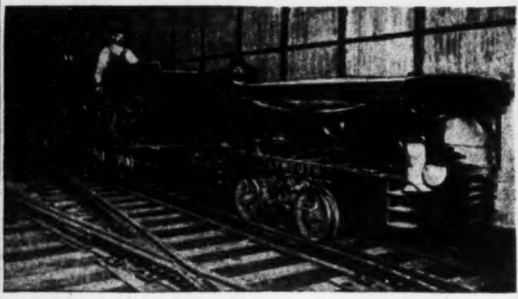
BOILERS

2—100 H.P. Marine Type, 125 lb.
1—100 H.P. Fire-Box, 90 lb.
1— 80 H.P. Fire-Box, 90 lb.
1— 45 H.P. Fire-Box, 90 lb.
1— 45 H.P. Vertical, 90 lb.
1— 20 H.P. Vertical, 90 lb.
1— 12 H.P. Vertical, 90 lb.

Harris Bros. Co.
35th and Iron St., CHICAGO

NEW RAILS RELAY

FROGS AND SWITCHES
TRACK ACCESSORIES
MORRISON & RISMAN, Buffalo, N. Y.



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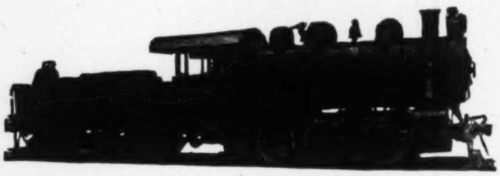

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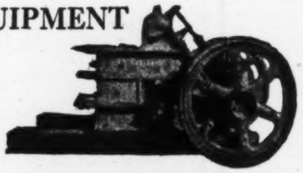

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He wonders how he could have been so opaque all the while.

Then he usually makes up for lost time. And that is why we keep right on shouting and sassing and smiling. We know the "Old Man" will catch on in due course.

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Good night! He goes right on making blunders big and little and the first thing he knows a good client's next job goes to some fellow who knows what it really means to "Hook 'er to the Biler."

There are so-called "conservative" (back number) engineers who can't even dig up a Ridgway catalog in their offices notwithstanding over 2000 of the biggest and best concerns all over the land are driving us as hard as we can go for these wonderful elevators.

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And yet in spite of this there are architects and engineers who have not yet found out what it means to

"Hook 'er to the Biler"

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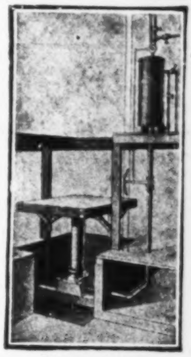
ELEVATOR MAKERS TO FOLKS WHO KNOW



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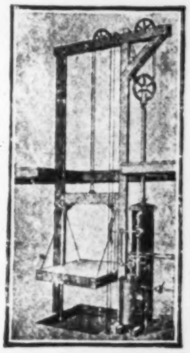

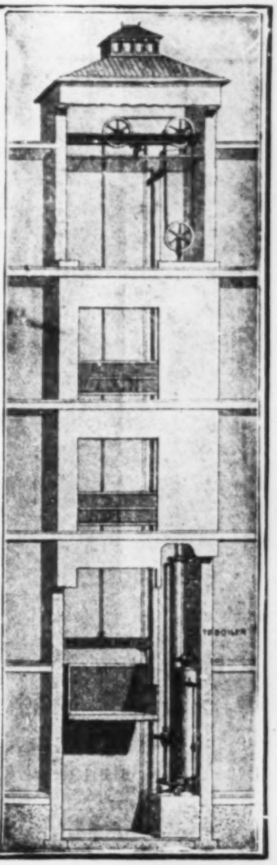

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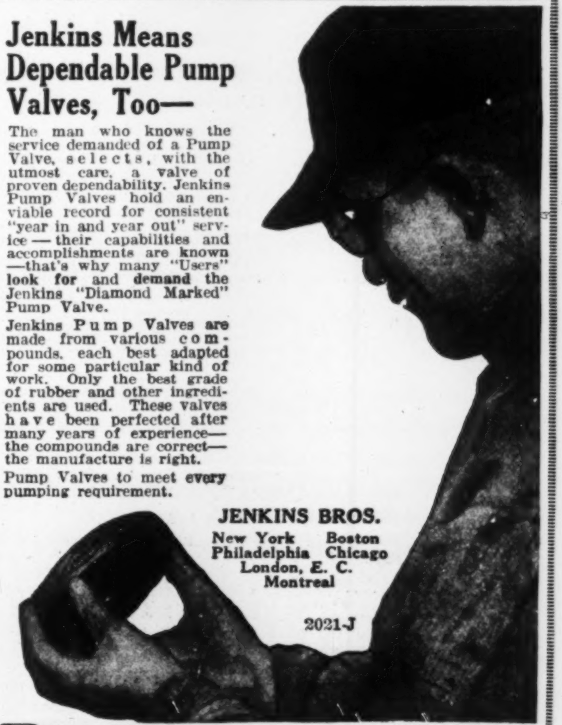

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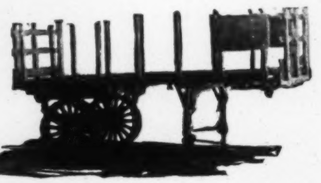

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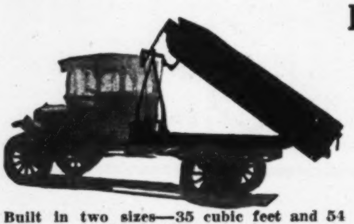

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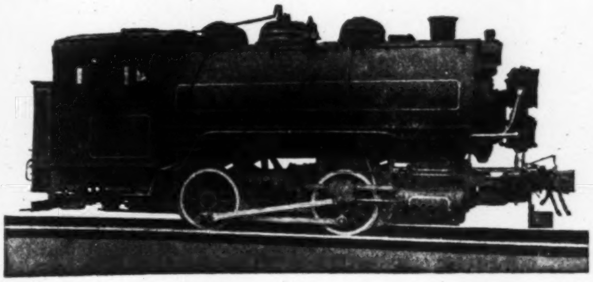

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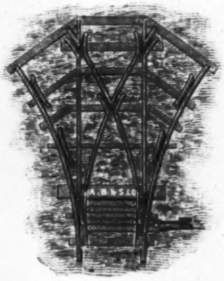

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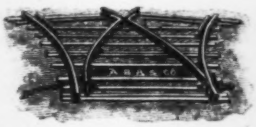

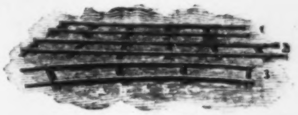

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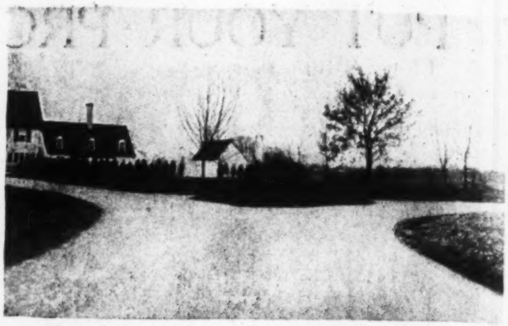

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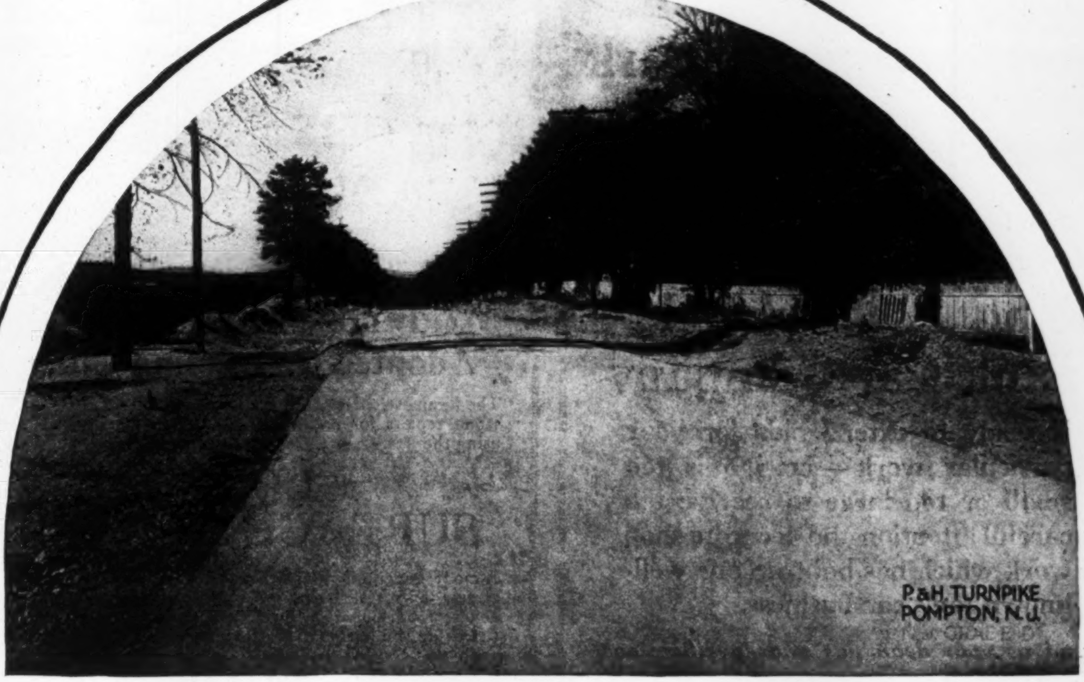

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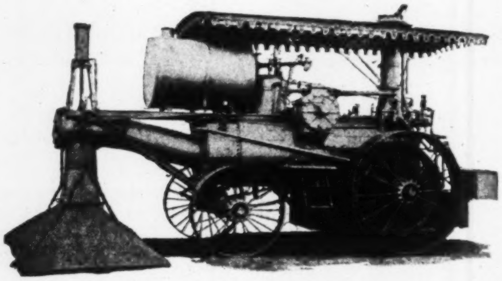

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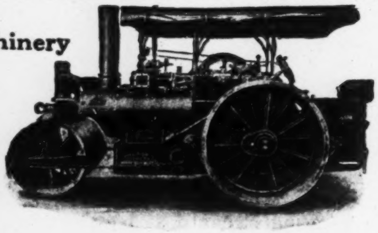

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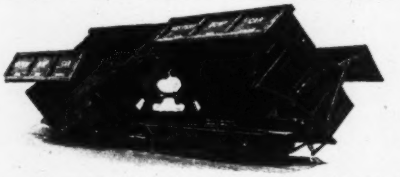

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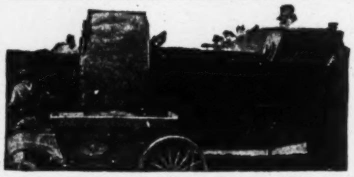

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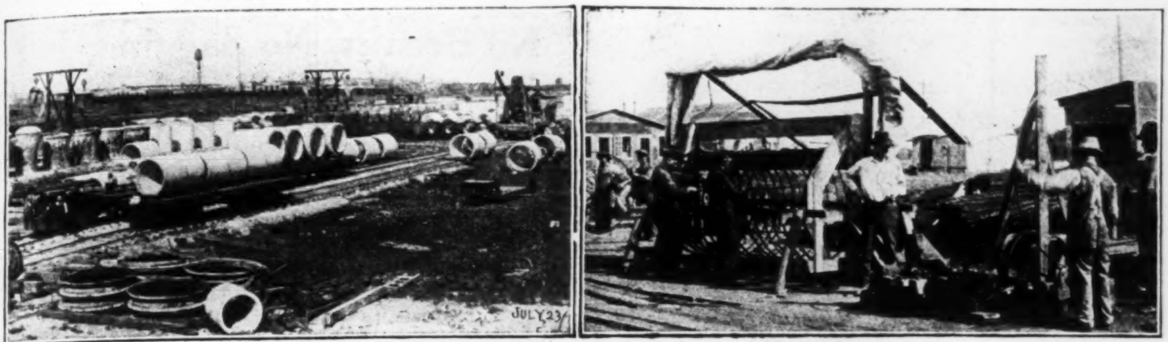

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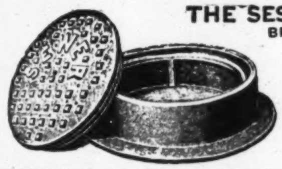

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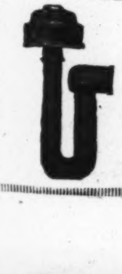

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Are Reduced in Iron to Increase Its Rust-Resisting Powers

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Is Added to Steel for the Same Purpose

"Genuine Open Hearth Iron"

sheets are 99.875% Pure and also contains not less than .25% *Copper*. In addition the square foot of exposed surface carries *not less* than 2 *ozs. of Spelter*.

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The Newport Culvert Co., Inc.
641 West Tenth St. Newport, Ky.
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Anti-Corrosive NO-CO-RO METAL Galvanized

Can be assembled right in the ditch in places where full circle culvert would be out of the question. Write now for catalog 24 and delivered prices.

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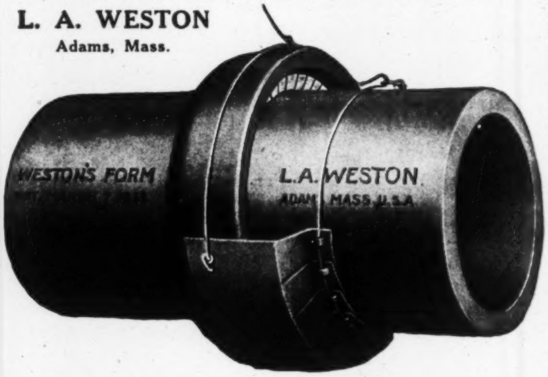

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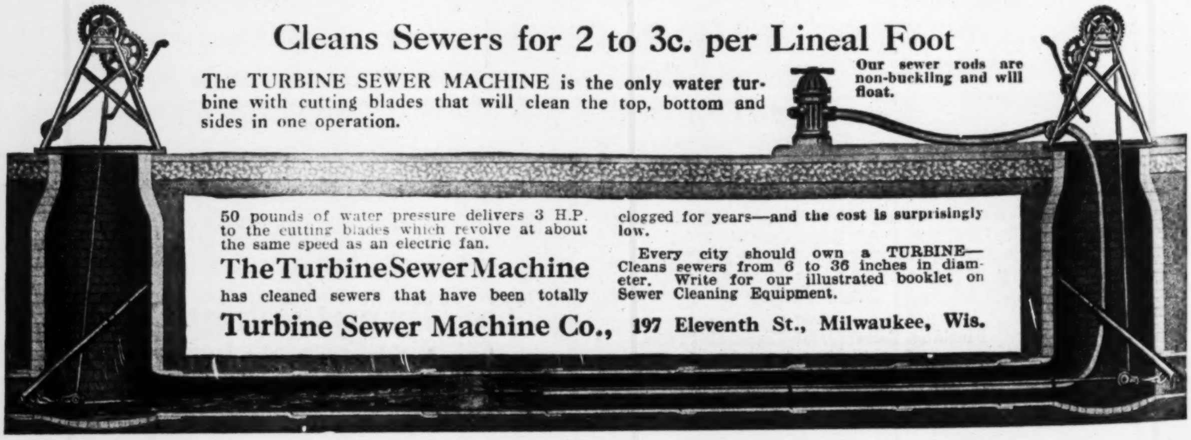
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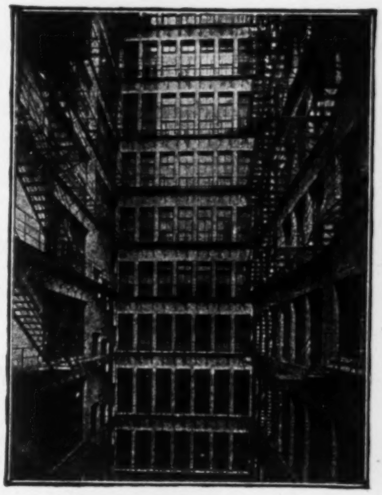

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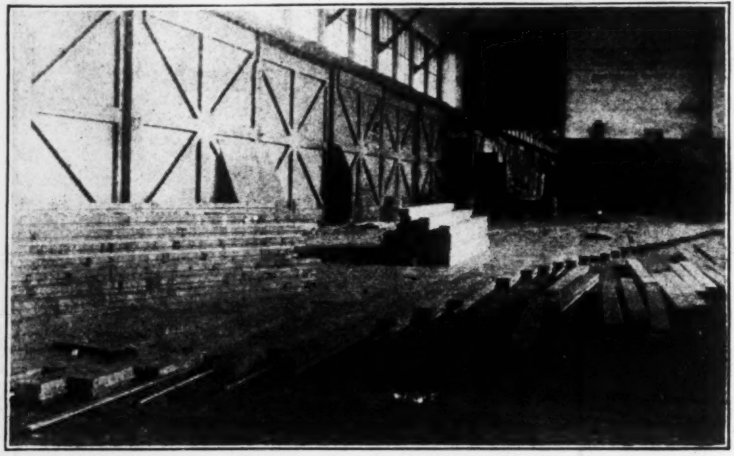

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End of grain exposed to wear. Sections average 7½ ft. long.

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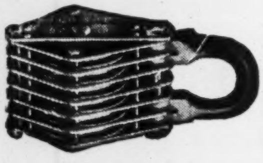

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The Ideal Method of Providing for Expansion in Improved Pavements

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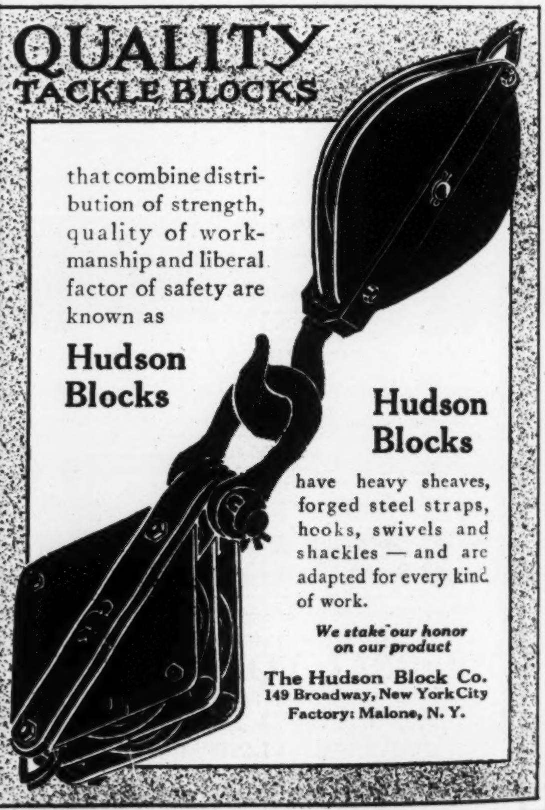

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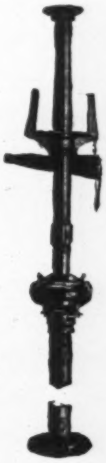

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Let us give you details.

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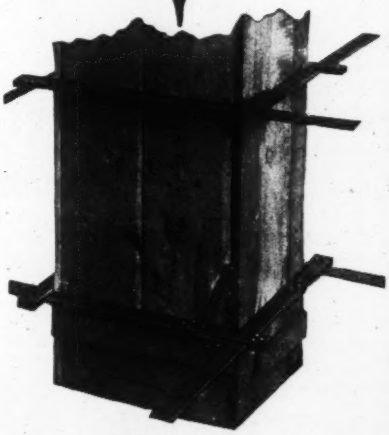

"The **JIFFY** Column Clamp is another big labor saver. It is a practical investment; a decided improvement over any clamp on the market. Assembled, tightened and set in one minute—removed in less time. Requires no wedging—no dead space in its adjustment—can be set to any degree of tension—automatically squares a column and *positively closes all cracks.* Simple and strong. Made for both round or square columns. Get a letter off—now—ask for comparative cost data and prices!"

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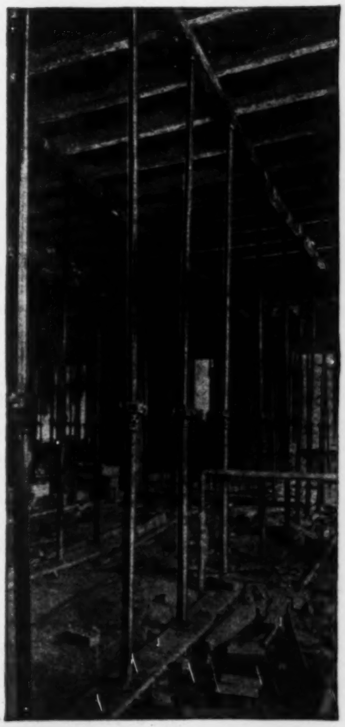

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for details and prices on Jiffy Labor Savers for concrete construction. They will soon pay for themselves.

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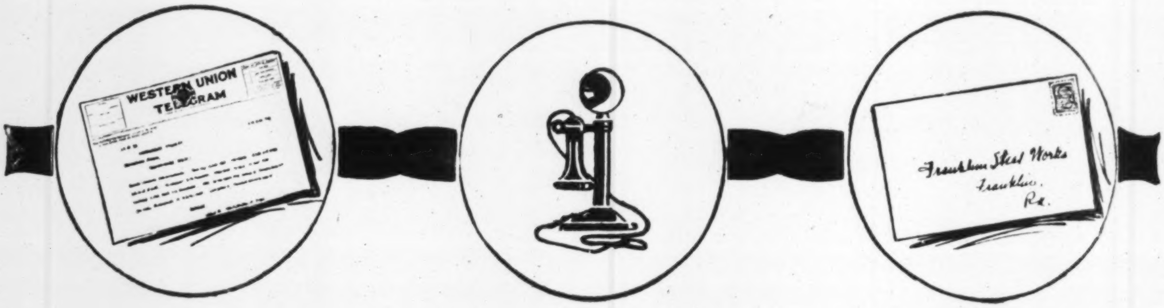

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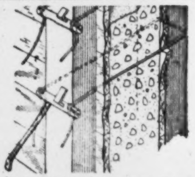

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for wall, beam or column forms
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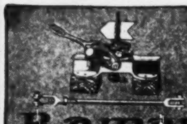

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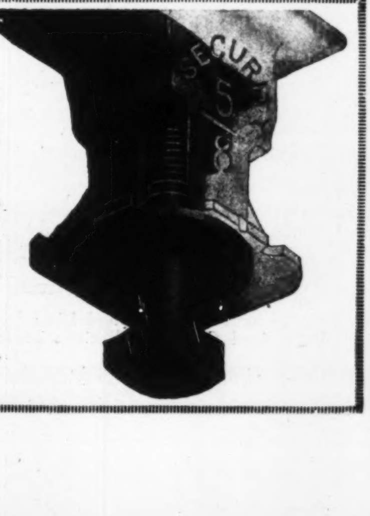

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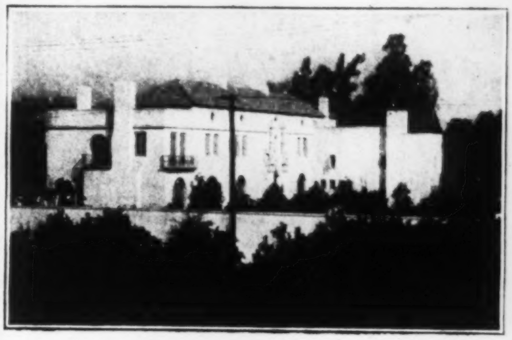

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was used on the interior of all exterior walls, and for the backing of all ornamental cut stone—and rightly so! No. 232 is preeminently the paint for such situations; a black, waterproof, elastic, tacky material. It makes furring and lathing unnecessary and bonds perfectly with plaster. No. 232 is the ideal preparation for the protection of all worthwhile structures, above the ground level.

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NOR CONCRETE DUST!

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Do you use muriatic or sulphuric acid? Don't! They produce a spongy surface of no strength. If the acid seeps through the porous concrete and reaches the steel your reinforcing system is endangered. *The only safe and certain way is LIVING-STONE.*

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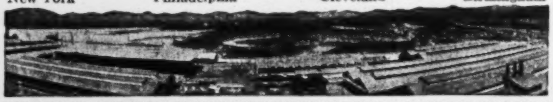

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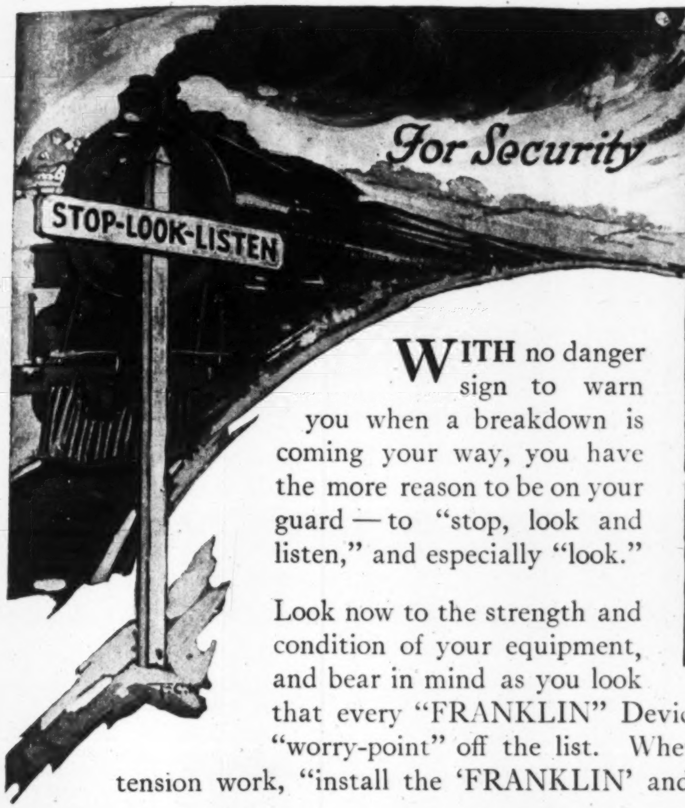

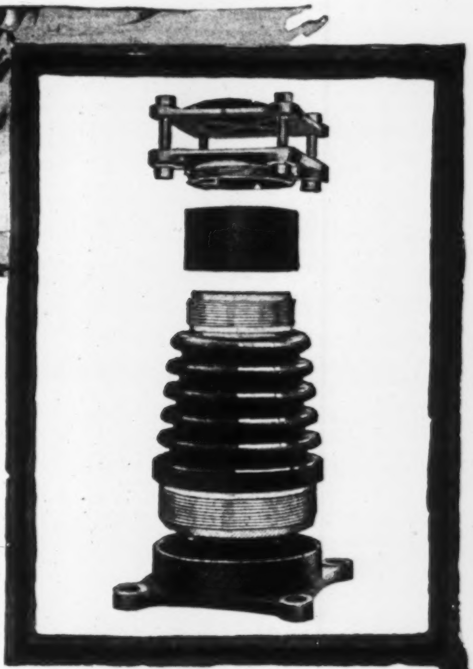

WITH no danger sign to warn you when a breakdown is coming your way, you have the more reason to be on your guard — to "stop, look and listen," and especially "look."

Look now to the strength and condition of your equipment, and bear in mind as you look that every "FRANKLIN" Device you install crosses one more "worry-point" off the list. Whether for replacements or in extension work, "install the 'FRANKLIN' and forget it."

In "FRANKLIN" Post Type Insulators, **metal bushings moulded to the porcelain** do away with clamped or cemented fittings. By the even distribution of strains brought about by the intimate contact of these bushings with every point of the porcelain's circumference, the carrying capacity of the insulators is greatly increased, and the likelihood of breakdown reduced to the minimum. This distinctive and important feature is supported by marked general superiority in design and structure.

In addition to Post Type Insulators, "FRANKLIN" Specialties for Generating Stations comprise Disconnecting Switches, Potheads, Doors for Bus and Switch Compartments, Instrument Cutout Switches, Cleat Type Insulators, Air Pressure Relays, and the new "FRANKLIN" Fuse. Write for descriptive Bulletins.

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INDUSTRIAL building necessitates rapidity of construction, maximum of strength and space with minimum of supporting walls and columns. Economy, durability and ability to stand the shock of machinery, makes concrete the logical choice.

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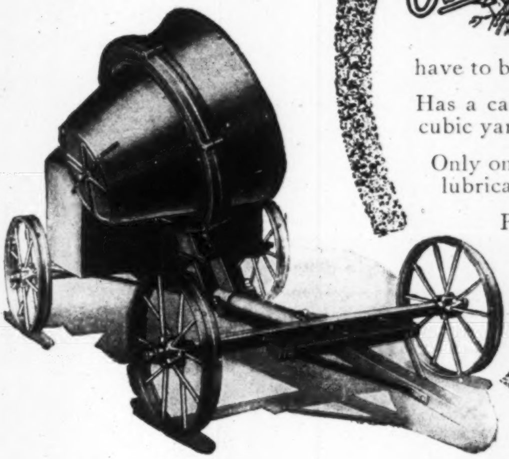
Doubles the Profits on Small Jobs

Automatic Discharge —no tilting of Drum.



If you could double your profits on the ordinary small job, it would really be worth taking.

That's just what you can do with an Eveready Mixer. It not only doubles the profit, but it cuts the time in half. The

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was specially built to handle small jobs economically—jobs that would otherwise have to be done by hand.

Has a capacity of 4 cu. ft. mixed material and delivers 35 to 50 cubic yards per 8-hour day.

Only one gear, one shaft and two ball bearings. One oil hole lubricates the entire mixer.

Powered by special 2-hp. gasoline engine.

And the price **complete with power** is only $260.

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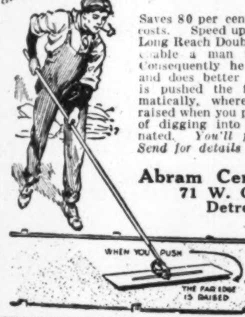
ABRAM Double Action Finisher


WHEN YOU PUSH
THE FAR EDGE IS RAISED

Saves 80 per cent. of concrete finishing costs. Speed up your job with ABRAM Long Reach Double Action Tools. They enable a man to work on his feet. Consequently he is far more efficient and does better work. When the tool is pushed the far edge raises automatically, whereas the near edge is raised when you pull. Thus all danger of digging into the surface is eliminated. *You'll find our prices right. Send for details TODAY.*

Abram Cement Tool Co.
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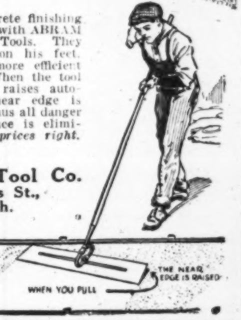
WHEN YOU PULL
THE NEAR EDGE IS RAISED

"THE STANDARD" Mixers Are Low Charging

The patented low charging design of "The Standard" Mixers permits the aggregates to be wheeled up short, slightly inclined runways to a low, wide platform, which is portable with the mixer. Improved design enables "The "Standard" Mixer to turn out perfectly mixed concrete at the rate of a batch a minute and keep up this pace indefinitely.

Write TODAY for our Complete Catalog.

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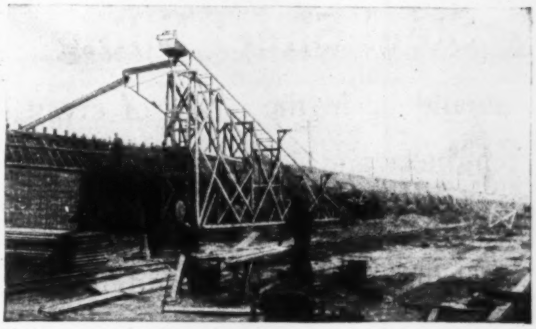

Gives Speed and Economy to Concreting

It takes your concrete from the mixer to the job in a fraction of the time—it replaces the men required to do this work—it is run by the same man who looks after the mixer.

Let us explain in detail how it is an asset to practically any job.

Catalog on request.

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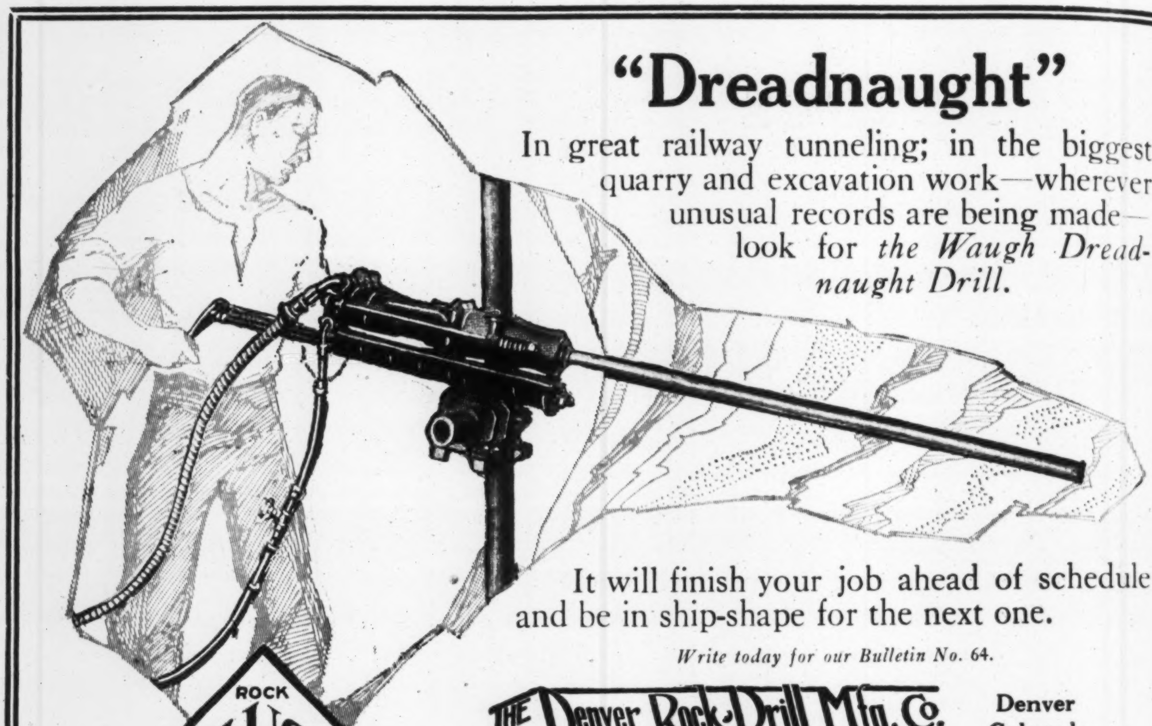
"Dreadnaught"

In great railway tunneling; in the biggest quarry and excavation work—wherever unusual records are being made—look for *the Waugh Dreadnaught Drill.*



It will finish your job ahead of schedule and be in ship-shape for the next one.

Write today for our Bulletin No. 64.

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The pamphlet

Steel Sheet Piling

should be in the hands of every engineer and contractor engaged in excavation work. It contains many original tables and much valuable information.

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Thor

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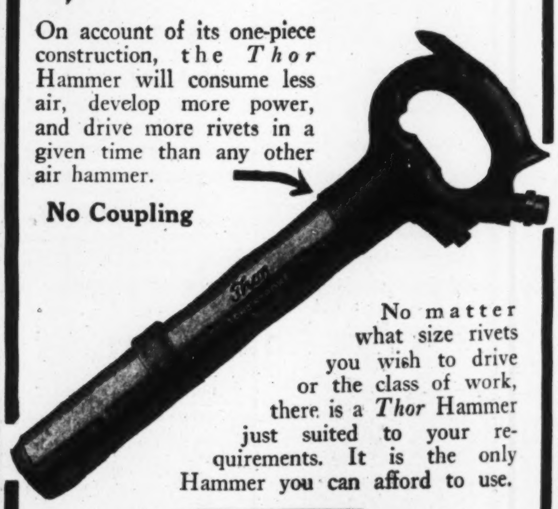
The Hammer for Real Economy

On account of its one-piece construction, the *Thor* Hammer will consume less air, develop more power, and drive more rivets in a given time than any other air hammer.

No Coupling



No matter what size rivets you wish to drive or the class of work, there is a *Thor* Hammer just suited to your requirements. It is the only Hammer you can afford to use.

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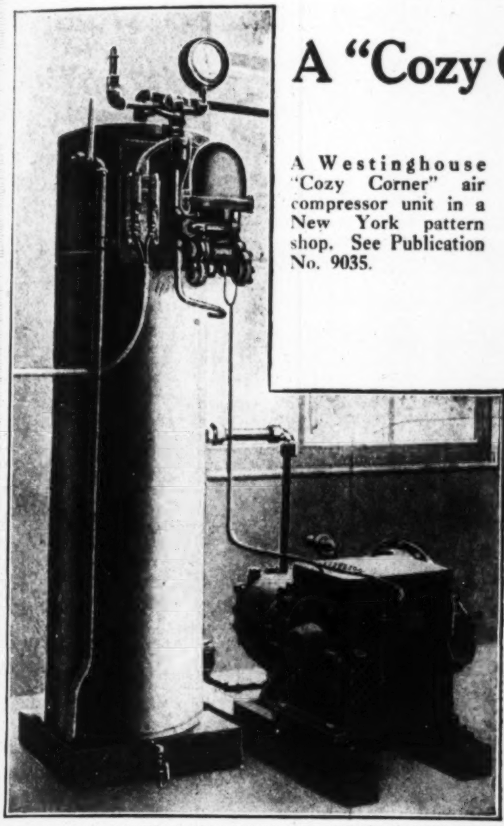
A "Cozy Corner" Compressor Unit



A Westinghouse "Cozy Corner" air compressor unit in a New York pattern shop. See Publication No. 9035.

Westinghouse air compressor units are specially designed for the particular use required of each one whether its work is to be light or heavy, inside or out of doors, mild or rough. The nature of the work and the installation space available determines the selection of the unit. Tell us your conditions and we'll do the figuring. Engineering advice and catalogues free. Address our nearest office.

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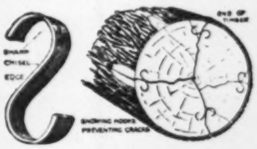

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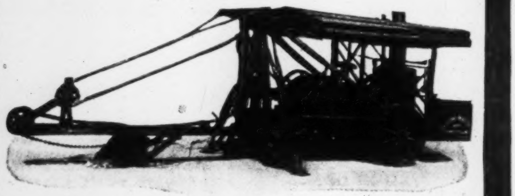

THE machine is sturdily built and will stand up to hard digging in cemented gravel, shale or old macadam. At the same time it is unusually light (10 tons), has a long wheelbase (10 ft.), with 54-inch tread-wheels and wide tires. No planking necessary on dry ground. Puts minimum strain on light bridges.

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The eleven-foot horizontal crowding movement and powerful thrust make it more efficient than other machines for shallow grading in hard material.

Saves you money in first cost, operating and moving charge, and upkeep.

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from ditches to crown —and at just a fraction of the usual cost.

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A big time saver and labor economizer.

It fills 'em—
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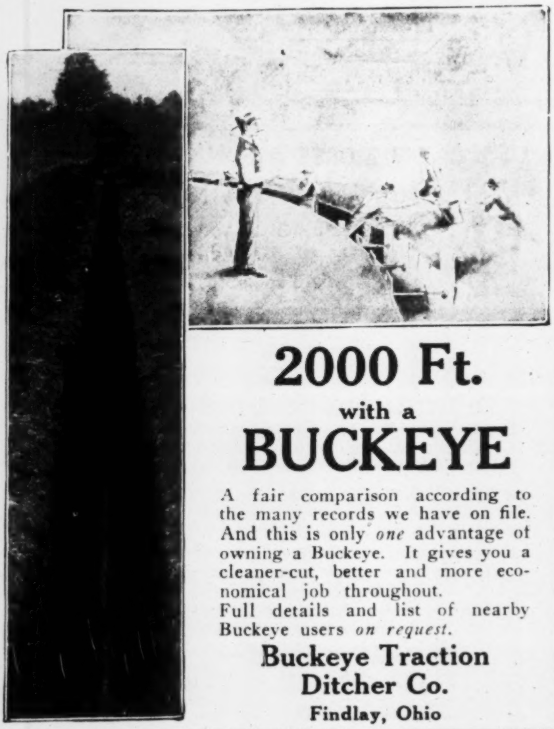

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A fair comparison according to the many records we have on file. And this is only *one* advantage of owning a Buckeye. It gives you a cleaner-cut, better and more economical job throughout.

Full details and list of nearby Buckeye users *on request.*

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SAUERMAN DRAGLINE CABLEWAY EXCAVATORS

—dig, convey, lift and dump in one continuous operation; entirely controlled by one man

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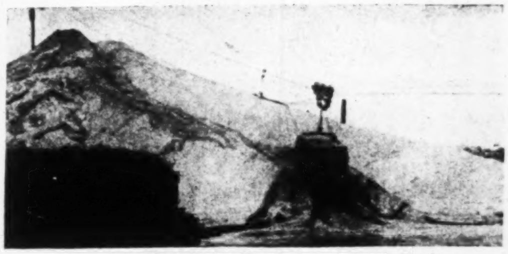

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The development of Sauerman Dragline Cableway Excavators can be traced to the need for a machine which would dig over long spans and to depths beyond the reach of the dipper arm of a steam shovel or the boom of a boom dragline excavator.

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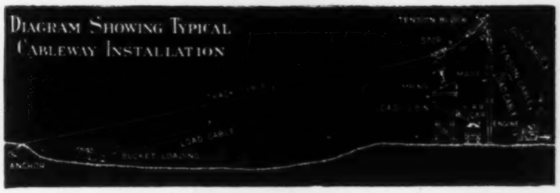
Cableway Excavators *Cableway Accessories* *Power Scrapers*



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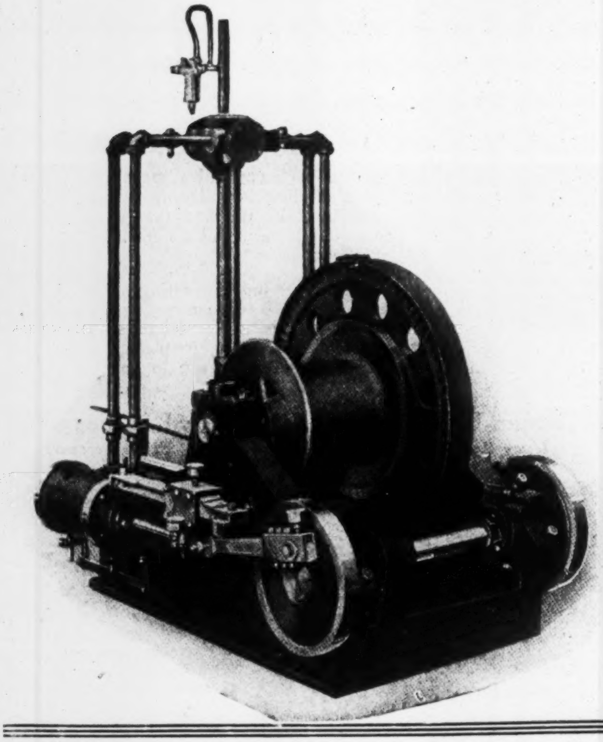

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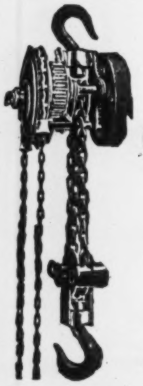

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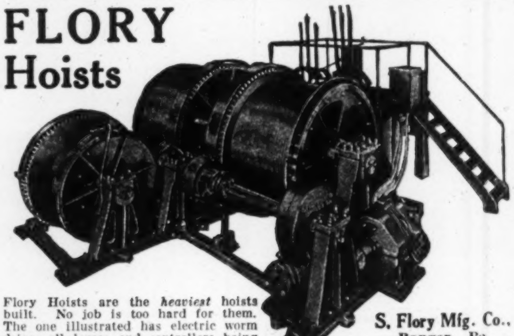

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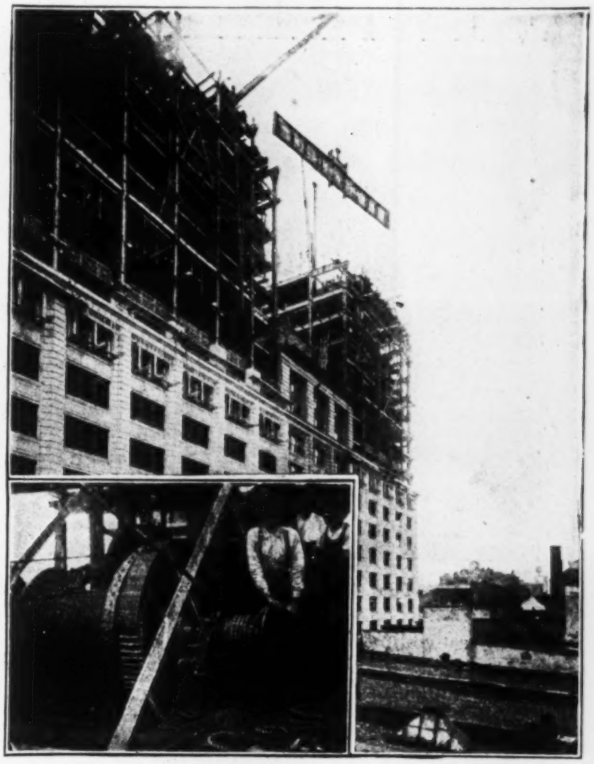

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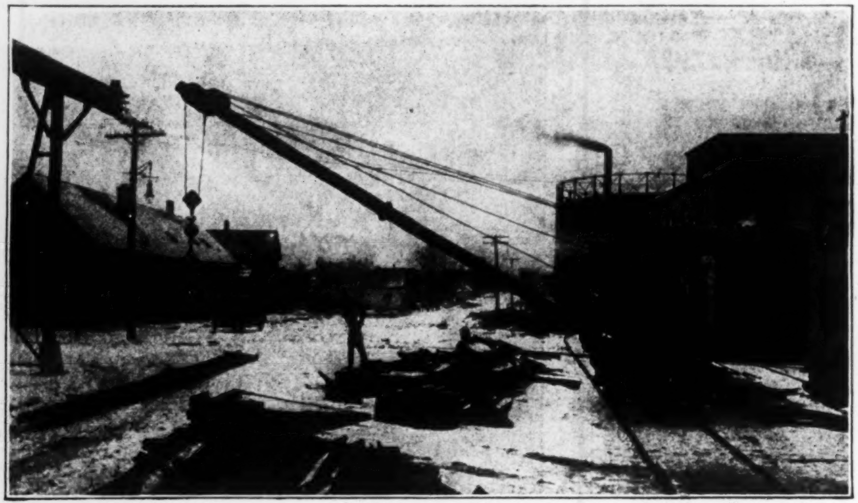

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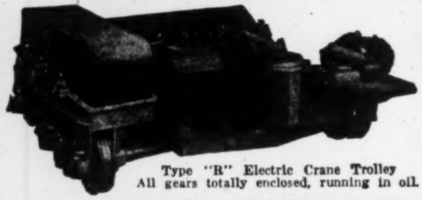

Type "R" Electric Crane Trolley
All gears totally enclosed, running in oil.

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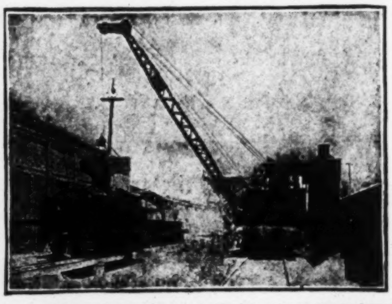

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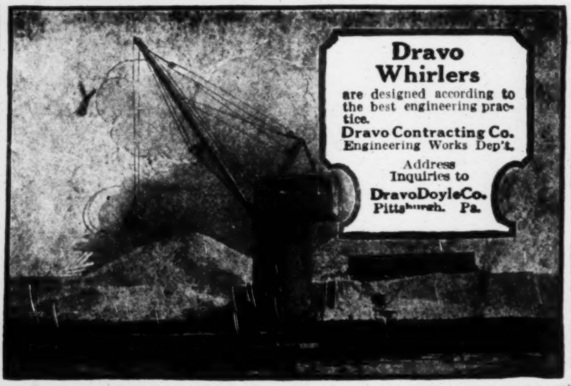

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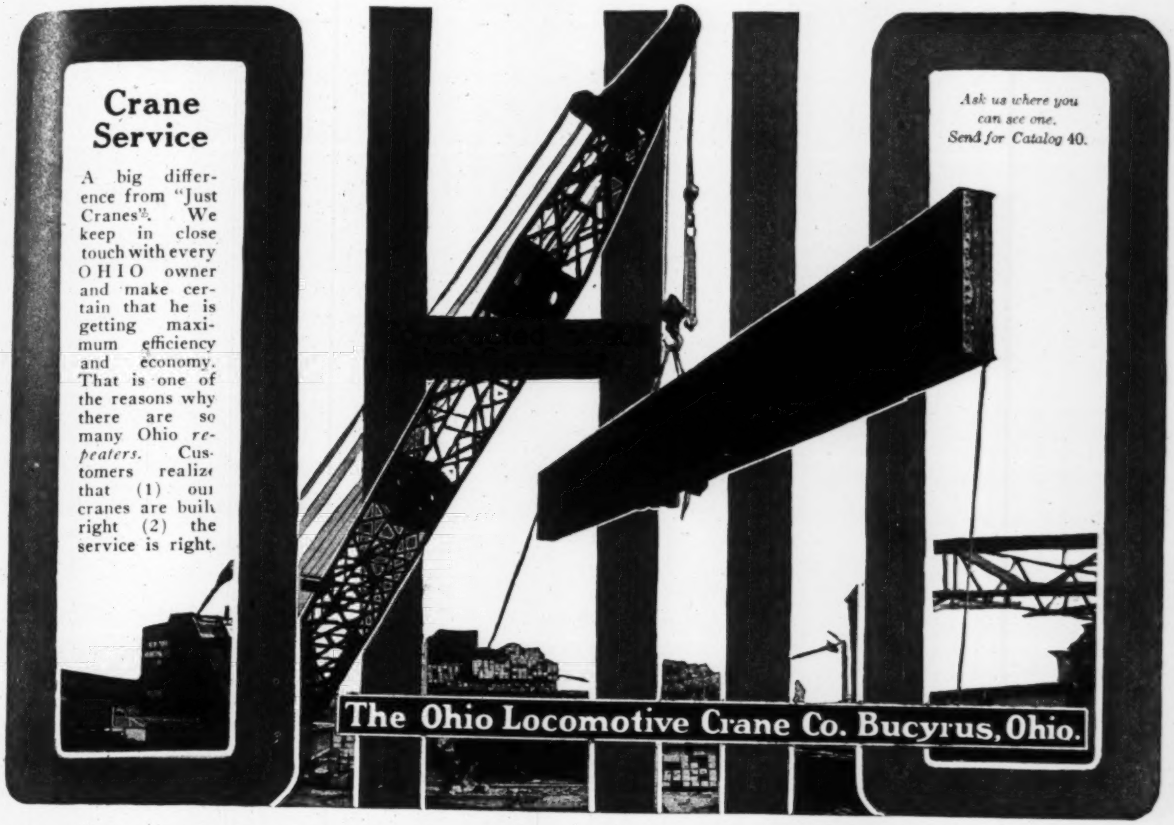


Crane Service

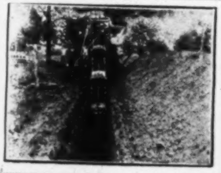
A big difference from "Just Cranes". We keep in close touch with every OHIO owner and make certain that he is getting maximum efficiency and economy. That is one of the reasons why there are so many Ohio *repeaters.* Customers realize that (1) our cranes are built right (2) the service is right.

Ask us where you can see one.
Send for Catalog 40.

The Ohio Locomotive Crane Co. Bucyrus, Ohio.

Monighan Dragline

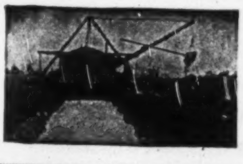
Monighan Machine Co.
2036 Carroll Ave., Chicago



We Sub-Contract Trench Work

by lineal foot for Sewers, Water Mains, Gas Lines, Conduits and Street Railway Trenching.

General Engrg. & Const. Co.
608 Trust Bldg. - - Rockford, Ill.

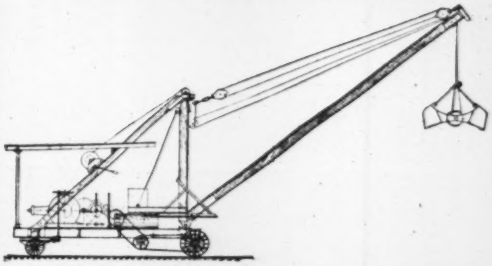


"Walking Land Dredges"

Spans the cut. Built any width. Steel construction. Two men can operate. Equipped with oil engine. Ideal for clean out work. *Write for details.*

Bay City Dredge Works
2601 Center Ave. Bay City, Mich.

TERRY TRACTORCRANE



NO OUTRIGGERS NEEDED
SWINGS 300 DEGREES
RUGGED AND EFFICIENT

OIL, GASOLINE OR ELECTRIC POWER

Type "S" capacity 2 tons or ½-yd. Bucket at a radius of 25 feet

Type "T" capacity 3 tons or ¾-yd. Bucket at a radius of 25 feet.

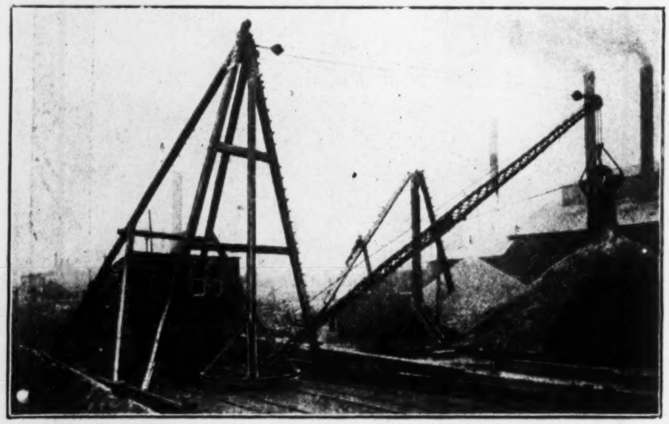
Length of Boom 35 feet.

Ask for bulletin No. 4.

EDW. F. TERRY MFG. CO.

Cranes and Derricks
Grand Central Terminal, New York City
Works, Harrison, N. J.

Mead-Morrison Equipment for Dependable, Low Cost Operation



ASK any user of MEAD-MORRISON Equipment for his opinion. He'll tell you that you can't beat an M-M Hoist, Bucket or Engine for low upkeep and operating costs. Moreover, it's DEPENDABLE. There's no danger of a breakdown at the critical moment.

It is just this extra MEAD-MORRISON quality that pays dividends.

This illustration shows a MEAD-MORRISON Hoist operating a 1½-yd. Type "D" MEAD-MORRISON Bucket.

Write for our latest Bulletins

Hoists
Buckets
Auto Truck Winches
Car Pullers

REGISTERED IN UNITED STATES PATENT OFFICE
MM
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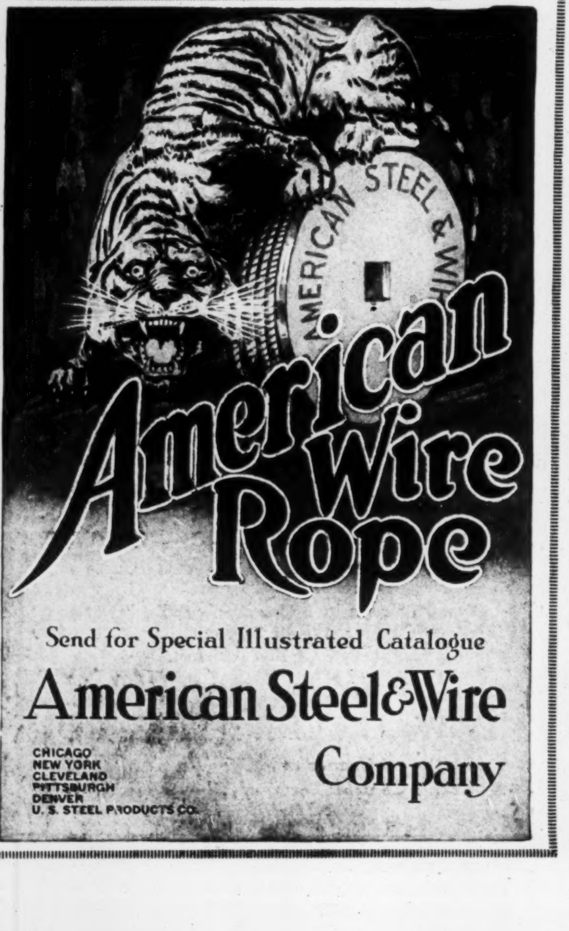
M

Mead-Morrison Mfg. Co.
Works and Executive Offices:
East Boston, Mass.
Branches: New York, Chicago



American Wire Rope

Send for Special Illustrated Catalogue

American Steel & Wire Company

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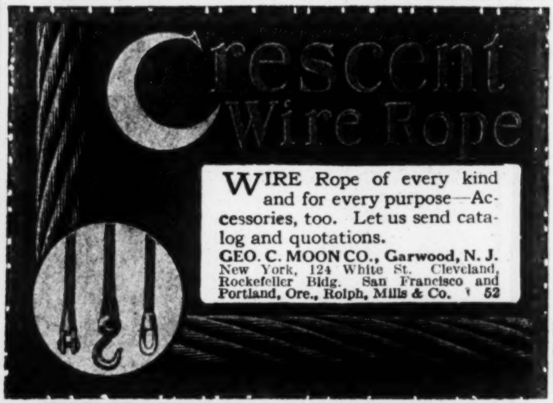
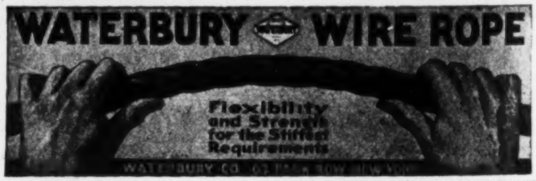
NEW YORK
CLEVELAND
PITTSBURGH
DENVER
U. S. STEEL PRODUCTS CO.



Crescent Wire Rope

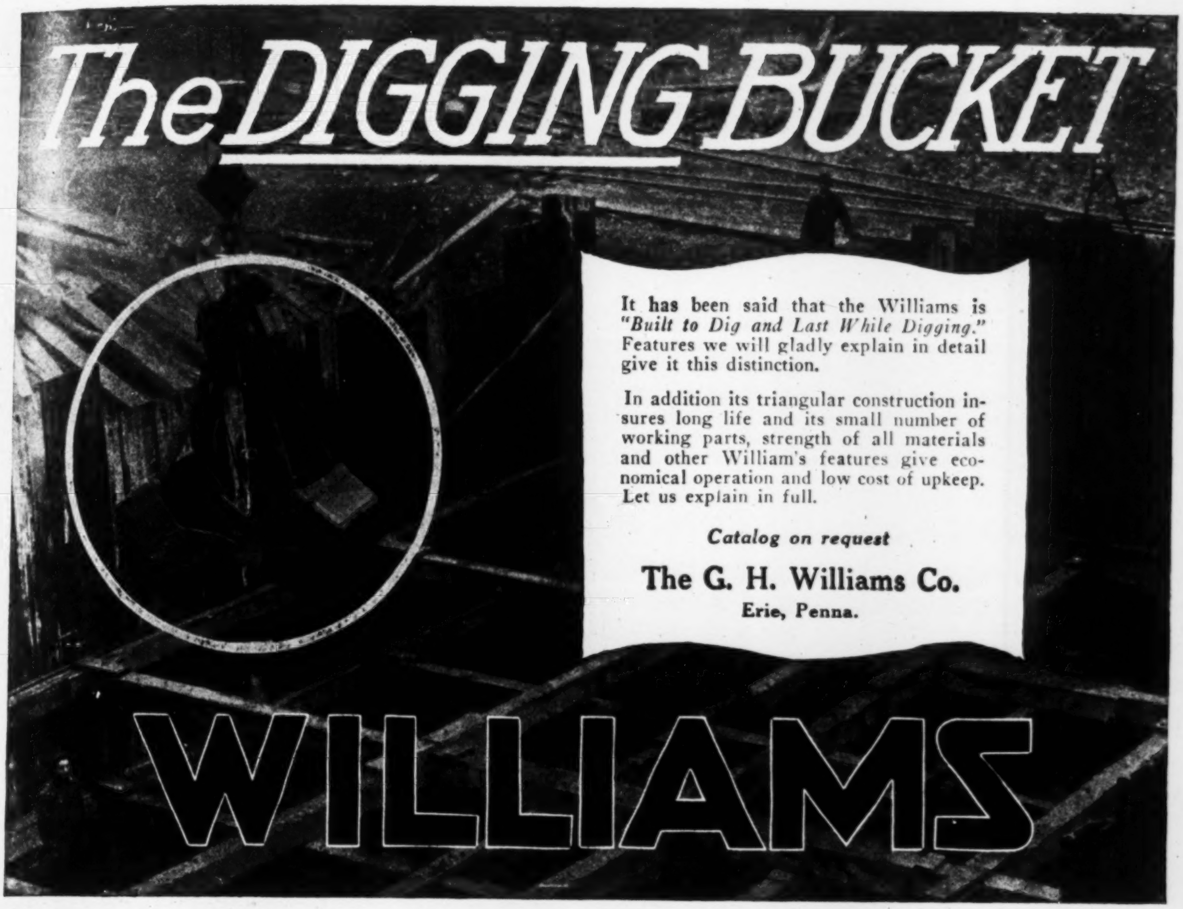
WIRE Rope of every kind and for every purpose—Accessories, too. Let us send catalog and quotations.

GEO. C. MOON CO., Garwood, N. J.
New York, 124 White St. Cleveland, Rockefeller Bldg. San Francisco and Portland, Ore., Rolph, Mills & Co. 52


WATERBURY WIRE ROPE
Flexibility and Strength for the Stiffest Requirements
WATERBURY CO. 63 PARK ROW NEW YORK

BROWNHOIST

Engineers and Manufacturers of Heavy Dock Machinery, Bridge Cranes, etc., as well as smaller Cranes and Hoists
THE BROWN HOISTING MACHINERY CO.
Cleveland, Ohio



The DIGGING BUCKET
WILLIAMS

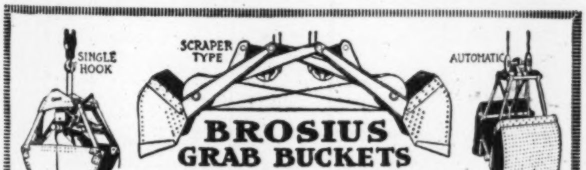
It has been said that the Williams is *"Built to Dig and Last While Digging."* Features we will gladly explain in detail give it this distinction.

In addition its triangular construction insures long life and its small number of working parts, strength of all materials and other William's features give economical operation and low cost of upkeep. Let us explain in full.

Catalog on request

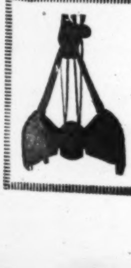
The G. H. Williams Co.
Erie, Penna.

ROEBLING WIRE ROPE
John A. Roebling's Sons Company
TRENTON, NEW JERSEY

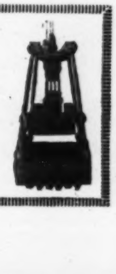


SINGLE HOOK
SCRAPER TYPE
AUTOMATIC

BROSIUS GRAB BUCKETS
EDGAR E BROSIUS, PITTSBURGH, PA.



ADEN
Grab Buckets
Send for new catalog
The Advance Engineering Company
Cleveland, O.



OWEN
OWEN *Clam Shell* BUCKETS INSURE A BIGGER DAYS WORK
BUCKETS

Your crane is not a real paying investment unless the bucket it operates is up to the same high standard. Equip your crane with an Owen Bucket. Utilize 100% of its energy by getting capacity loads every trip. The Owen is simple durable and self-lubricated. No costly delays. Investigate today.

The Owen Bucket Co.
533 Rockefeller Bldg., Cleveland Ohio

HAISS

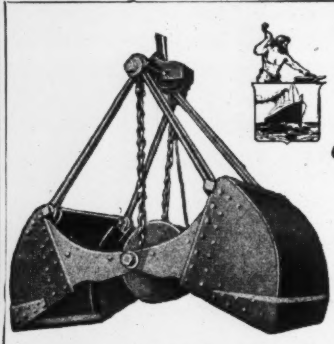
"Type" Contractor
CLAM SHELL BUCKETS

TRADE MARK

Write for Catalogues

The GEO. HAISS M'F'G. CO.
140th Street and Rider Avenue
NEW YORK CITY

HYDRAULIC DREDGES



Clam Shell

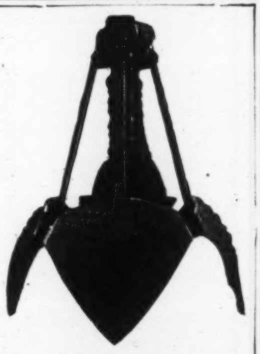
BUCKETS—

For All Classes of Work

Contractors Clam Shells—Orange Peels

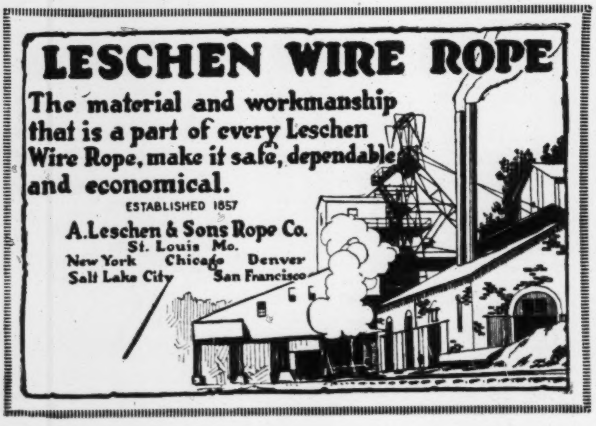
Positively the last word in bucket construction. Substantially built, easy to operate, few wearing parts. Large stock on hand—reasonable in price.

VULCAN IRON WORKS, INC
JERSEY CITY, N.J.



Orange Peel

BUCKET DREDGES



LESCHEN WIRE ROPE

The material and workmanship that is a part of every Leschen Wire Rope, make it safe, dependable and economical.

ESTABLISHED 1857

A. Leschen & Sons Rope Co.
St. Louis Mo.
New York Chicago Denver
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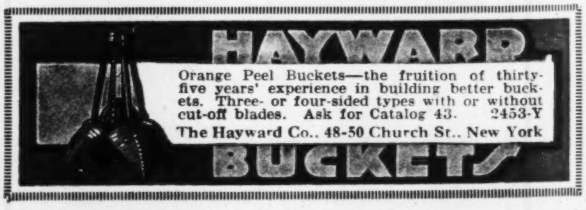
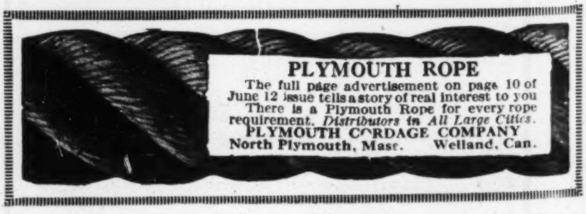


HAYWARD BUCKETS

Orange Peel Buckets—the fruition of thirty-five years' experience in building better buckets. Three- or four-sided types with or without cut-off blades. Ask for Catalog 43. 2453-Y

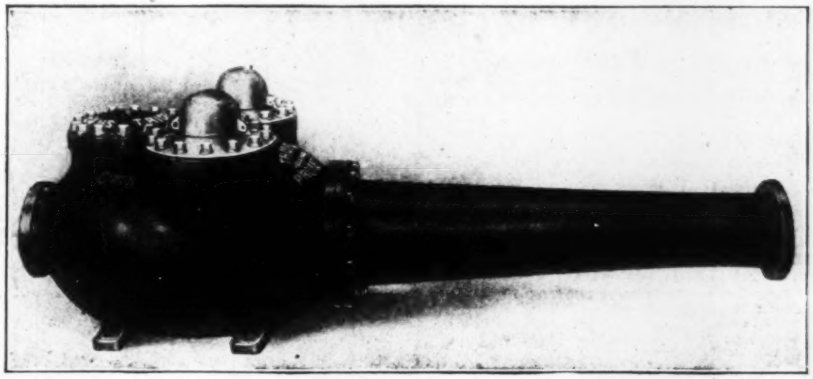
The Hayward Co., 48-50 Church St., New York



PLYMOUTH ROPE

The full page advertisement on page 10 of June 12 issue tells a story of real interest to you There is a Plymouth Rope for every rope requirement. *Distributors in All Large Cities.*

PLYMOUTH CORDAGE COMPANY
North Plymouth, Mass. Welland, Can.



Bought on Performance

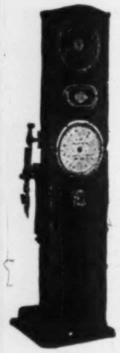
A city in western New York, run by a City Manager, was in the market for 2500 meters. His idea of economy was to accept the lowest bid. There wasn't anything else to do in his opinion.

"But before you do that, hadn't you better look at the records of the meters we have in service and compare them on that basis?" asked the Water-works Superintendent. Mr. City Manager did.

Maintenance and repair charges were so much greater than the difference in first cost that the entire 2500 were bought of the highest bidder.

Wherever Performance is given Preference over Price, Trident Meters are specified.

NEPTUNE METER COMPANY
NEW YORK



For Water Works

The importance of accurately measuring water flow both to and from the pumping station and through the distribution mains is the reason why so many leading municipal and private water companies have equipped their lines with

VENTURI METERS

1. They indicate the momentary flow: register the total flow; and trace a continuous chart record of all changes in the rate of flow.
2. Permanently accurate.
3. Not subject to clogging.
4. Occupy small space.
5. No delicate mechanism.
6. Detect leaks in the mains.
7. Check pump efficiency, showing when different pumps were started and stopped.
8. Can be used to control automatically the chemical feed.
9. Can be arranged to control automatically the effluent from filter beds.
10. Accurately measure feed input to the boilers.

Write us for Bulletin No. 848 now.

Builders Iron Fdry. "Builders of the Venturi" **Providence, R. I.**

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Portland, Ore. Toronto, Ont. Vancouver, B. C.

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Keystone Arctic
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COLUMBIA, S.C. KANSAS CITY
Water Meters
Pittsburgh Meter Co.
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LOS ANGELES SEATTLE

Sluice Gates
Gate Valves
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Coffin Valve Co.
BOSTON, MASS.
Makers of the Largest Sluice and Gate Valves in America.

Check Valves
Flap Valves
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Sewer Gates

Hydraulically, Electrically and Hand Operated Gate Valves and Sluice Gates
For Waterworks, Power Plants and Filtration Systems
Write for Catalog

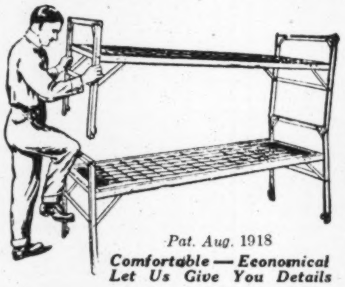
SLUICE GATES, CHECK VALVES, INDICATOR POSTS, ETC.
OUR LINE
GATE VALVES **EDDY** FIRE HYDRANTS
Hydraulically and Electrically-Operated Valves and Sluice Gates
Valves Designed for all Kinds of Service.
EDDY VALVE COMPANY, WATERFORD, N. Y.
New York Chicago Boston San Francisco Philadelphia

Norton Self-Lowering Jacks Are the Fastest Jacks Made

They lower the full load with absolute safety by pressing the button—you do not have to pump or crank them down as with other jacks.

25 to 100 tons capacity—Plain and with foot lift. Send for complete illustrated Catalog No. 30.

A. O. Norton, Incorporated
440 Brookline Ave., Boston, Mass.



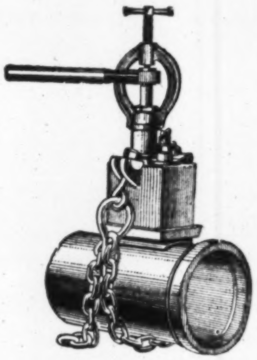
A JOB OF A FEW SECONDS

Pat. Aug. 1918
Comfortable — Economical
Let Us Give You Details

Fort Pitt Sectional Cots

are so constructed that it takes but a jiffy—and no tools—to assemble or dissemble a tier of them. And each cot is in but one piece that folds when idle. Their use makes large quarters of small rooms and provides as well that kind of rest that workmen need. One order has convinced many.

FORT PITT BEDDING COMPANY
North Side, Pittsburgh, Pa.



Easily Carried By One Man

This light, durable machine will be sent on approval for 30 days' trial. If not as represented, send it back.

Corporation Tapping Machine

Write for latest bulletins of this and other waterworks appliances.

The A. P. Smith Mfg. Co.
East Orange, N. J.

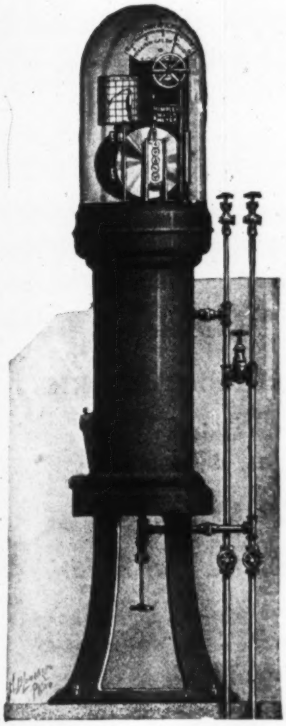
SLUICE GATES
Shear, Flap and Butterfly Valves
FLEXIBLE JOINTS
COLDWELL-WILCOX CO
NEW WINDSOR NEWBURGH N.Y.

Tycos Temperature Instruments
INDICATING - RECORDING - CONTROLLING

Demand *Tycos* on the instrument you install, the service delivered will be complete. The experience of many users sustain us in this claim. Let us send information—a request incurs no obligation.

Taylor Instrument Companies ROCHESTER N.Y.

Simplicity—Efficiency—Accuracy



Every feature you demand is embodied in

SIMPLEX
Registering Meters

They stand alone.

The ROLLER TRACTION WHEEL is especially important. This simple device *rolls.* It eliminates sliding and thus practically all friction. *It insures accuracy in low flows.*

Let us explain this feature in full.

Write for our latest bulletin.

Simplex Valve and Meter Company
625 Wood Street, Philadelphia, Pa.

New England Representative—Geo. W. Stetson, 141 Milk St., Boston, Mass.
Pacific Coast Representatives—Water-Works Supply Co., San Francisco and Los Angeles.
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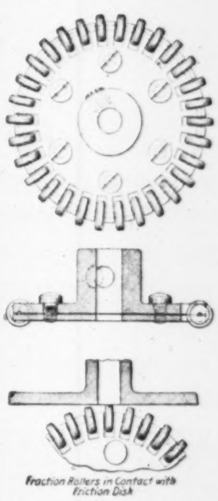

Simplex Roller Traction Wheel, showing construction and position taken in bearing against the rotating disc.

Let's Go

"WATCH DOG"

WATER METERS

Accurate
Durable
Efficient

GAMON METER COMPANY
Main Office and Works:
NEWARK, NEW JERSEY

GRAVITY **PRESSURE**

FILTERS

Water Softening Plants
Hypochlorite Apparatus

and all Sorts of Chemical Feeding Devices

Over 350 Municipal Filtration Plants
Installed—Total Daily Capacity
900,000,000 Gallons

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GENERAL OFFICES: NUTLEY, N. J.

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Municipal and Industrial Purposes
Gravity and Pressure Types
Re-filtration Systems
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The "Holyoke" Fire Hydrant

FOR TOWNS, CITIES AND FACTORIES

One of the Oldest
One of the Best

IN USE OVER 35 YEARS

It will pay you to send us your inquiries

Norwood Engineering Company
Florence, Mass., U. S. A.

TRADE **"LEADITE"** MARK
Registered U. S. Patent Office

Requires No Caulking
For Jointing Cast-Iron Water Mains

Leadite lessens labor. It fills every crevice from the yarn out to face of bell. Saves 50% to 65%. The efficient water main joint. Write for information. Specify Leadite.

"Leadite Joints Increase in Strength With Age"

THE LEADITE COMPANY, Inc.
Land Title Building **PHILADELPHIA, PA.**

BEFORE CLEANING
AFTER CLEANING

Clean Water Mains
Deliver Full Capacity

We are glad to confer
with municipal officials
or Water Companies.

National Methods are patented

National Water Main Cleaning Company, 84 Church Street
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Water Filters and Softeners

Purification of water for technical and
industrial purposes.

1110 Pennsylvania Building, Philadelphia, Pa.

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Cast-Iron Water, Gas and Flange Pipe. Special Castings,
Fire Hydrants, Valves, General Foundry and Machine Work.
253 BROADWAY **NEW YORK CITY**

WATER SOFTENING AND
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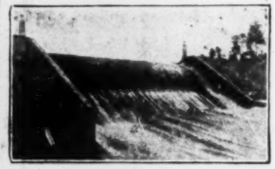
INTERNATIONAL FILTER CO.
30 South Dearborn St., Chicago
New York Office: Woolworth Building



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RESULTS BY
NUMEROUS
AMERICAN
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American patents controlled by the owners,
BARRAGES AUTOMATIQUES S.A.,
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FARGO ENGINEERING CO., JACKSON, MICH.
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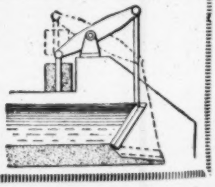
Agents wanted in the Western States.

FOR THE
CONTROL
OF
WATER
LEVEL
—
MANY
STYLES



MICHIGAN
PRODUCTS

Fire Hydrants
Gate Valves
Sluice Gates
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Foot Valves
Shear Valves
Tide Valves
Sleeve Valves
Indicator Posts
Valve Boxes

Flower Valve Mfg. Company
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WATER
PURIFICATION SYSTEMS
SOFTENING & FILTRATION
FOR BOILER FEED AND
ALL INDUSTRIAL USES
WM.B.SCAIFE & SONS CO.PITTSBURGH, PA.

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WATER FILTERS for Municipal and Industrial Plants. Gravity and Pressure Types.
CHEMICAL DEVICES

GREEN CHAIN GRATES
Green Sealflex Arch
Green Pressure Water Backs
Green Steam Jet Ash Conveyors
Green Materials Transfer and Storage Hopper
GREEN ENGINEERING CO., East Chicago, Ind.

WATER SOFTENING AND FILTRATION PLANTS
AMERICAN WATER SOFTENER COMPANY
1009 CHESTNUT ST. PHILADELPHIA, PA.
No affiliation or working agreement with any of our competitors

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Castner Electrolytic Process
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CHLORIDE OF LIME
In 225, 450 and 750-lb. drums. Strongest, quickest-settling, most reliable.

LIQUID CHLORINE
Pure, anhydrous, for use with any control apparatus. In improved and convenient cylinders, 105 and 150 lbs. net.

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Sole Agents
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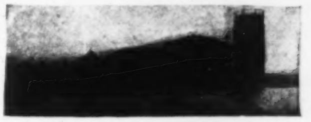
Any Apparatus Necessary for Pure Water

The PITTSBURGH line includes gravity and pressure filters, water softening plants, coagulant and sterilizing apparatus, and filter plant equipment.



Also Venturi Meters.

Purifying plants suitable for municipalities, factories, ice plants, breweries, laundries, etc.

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Formerly Pittsburgh Filter Mfg. Co.
PITTSBURGH, PA.
WORKS: OIL CITY, PA. KANSAS CITY

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Valve Boxes Indicater Posts Air Valves
"RENSSELAER" VALVES
All Sizes All Pressures All Purposes
Rensselaer Valve Co., General Offices, Troy, N. Y.
New York, Hudson Terminal, Church St. **Chicago**, Monadnock Block
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New England, Chas. L. Brown, Northboro, Mass.

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Locate Your Leaks Then Stop Them
Do it by the simplest and easiest method yet devised, a
PITOMETER SURVEY
Catalog ENR on request
THE PITOMETER COMPANY
51 Duane Street, New York

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WOOD STAVE PIPE

—is received by engineers with marked favor everywhere. Many of the largest Irrigation Projects, Power Companies and Municipalities are served by this pipe—it is giving service in all parts of the world.

Our Engineering Staff is maintained for your convenience.

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Wire wound and continuous stave wood pipe for—

Irrigation
Water Works
Railroads
Mines, Etc.

Water pipe—made of clear Washington Yellow Fir. Steam pipe casing—made of Washington Cedar asbestos or tin lined for insulating underground steam pipes

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"STANDARD" WOOD PIPE

Meets Many Requirements.
Durability and Economy.

Engineers know its real Value. Will furnish Pipe to suit Conditions. Write for our New Catalogue, where it gives you full information.

Standard Wood Pipe Company
Williamsport, Pa.

WHY DON'T YOU USE

Wyckoff Wood Pipe

OTHERS DO

Over 1000 miles of Wyckoff Wood Pipe have been installed in the last three years. It can be furnished and laid at half the cost of cast iron.

IT LASTS AS LONG.

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Johnson-Peters Co., Pittsburgh Terminal Warehouse, Pittsburgh, Pa.
551 West 14th Place, Chicago, Ill.

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Pacific Tank and Pipe Co

A Mining Catalog Is Ready for You!

All we need is your name on our mailing-list to send you a copy.

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Such technical data and information are given that the complete catalog makes the most valuable book you have ever seen.

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THE STANDARD SINCE '88
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Marion Shoes for Wood Pipe

This Mark on a Casting—

—means that it's made of Marion malleable iron, offering great resistance to shock, having high elastic limit, resisting oxidation, wears better, is free from slag holes, shrinkage cracks, etc., and is not subject to fatigue or crystallization.

Malleable iron castings for every purpose.

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Builders of TURBINE MACHINERY, including Steam Turbines of all capacities for high or low-pressure steam and for direct connection or for belt or rope drive. Complete Turbo-Generator Sets. Centrifugal Pumps for all Heads and Capacities. Centrifugal Blowers and Air Compressors. Double Helical Speed Reducing Gears.

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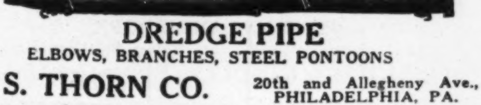

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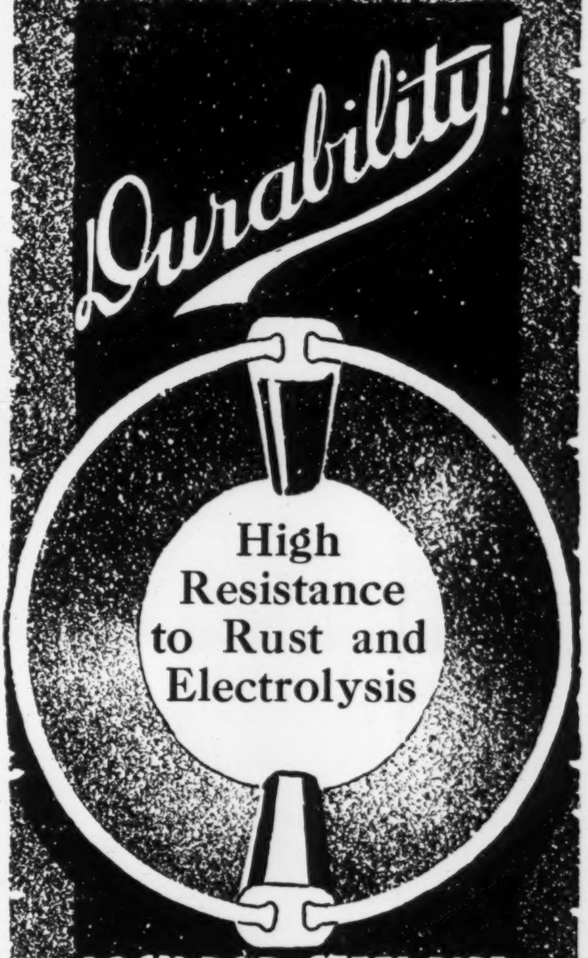
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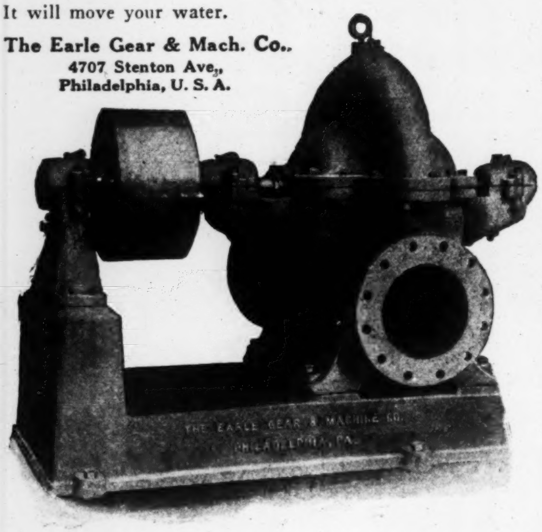

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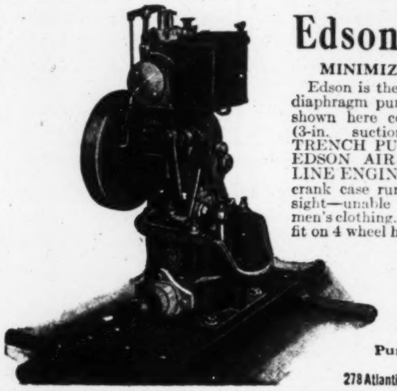

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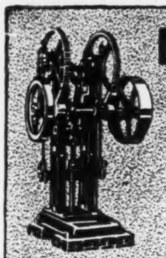

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The Lea-Courtenay Centrifugal Fire Pump has been accepted by all insurance boards.

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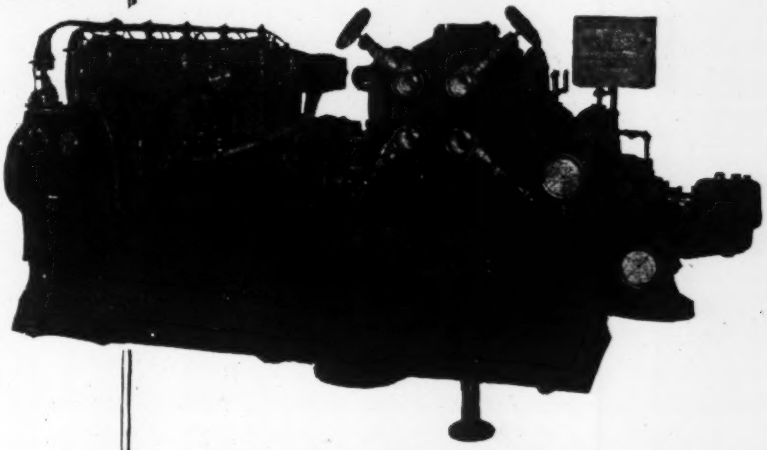

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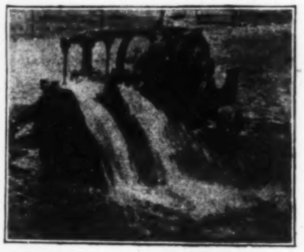

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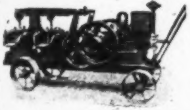

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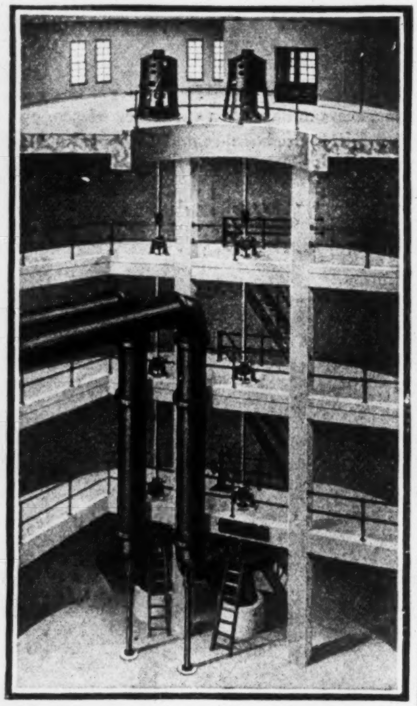

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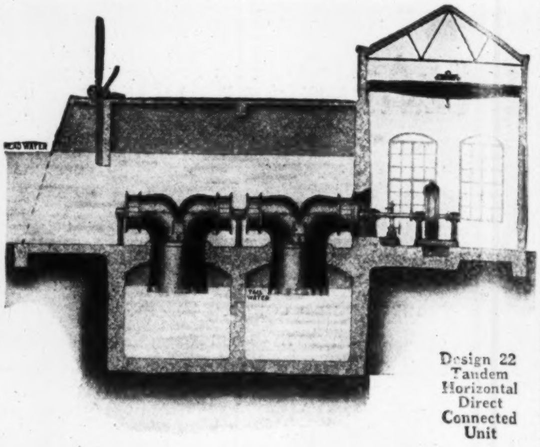

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Horizontal
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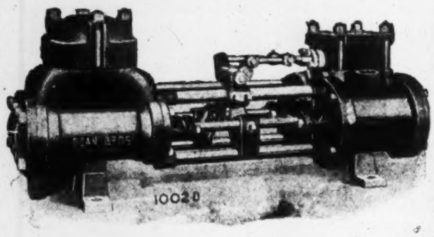

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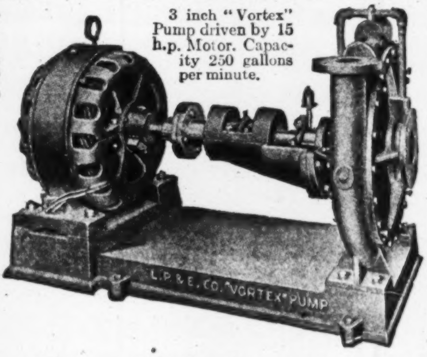

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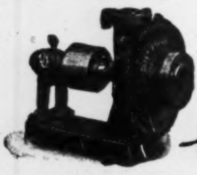

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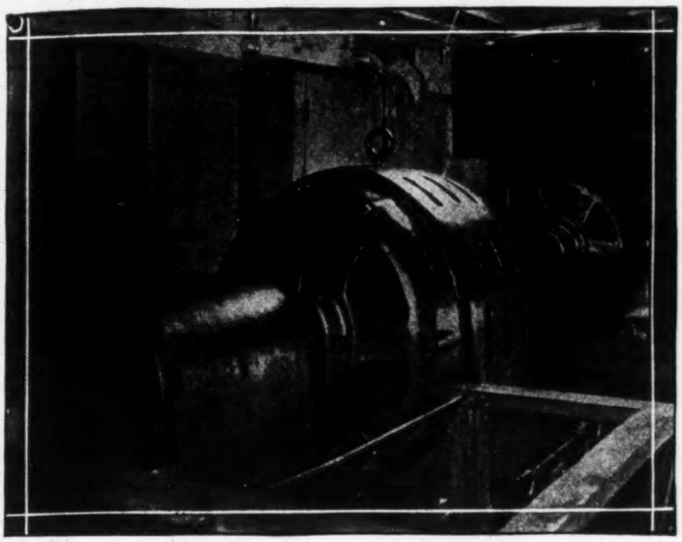

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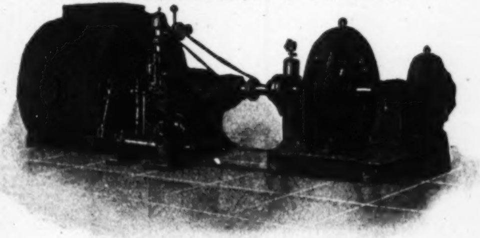

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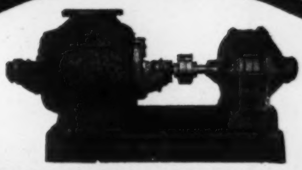

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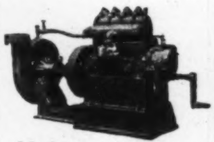

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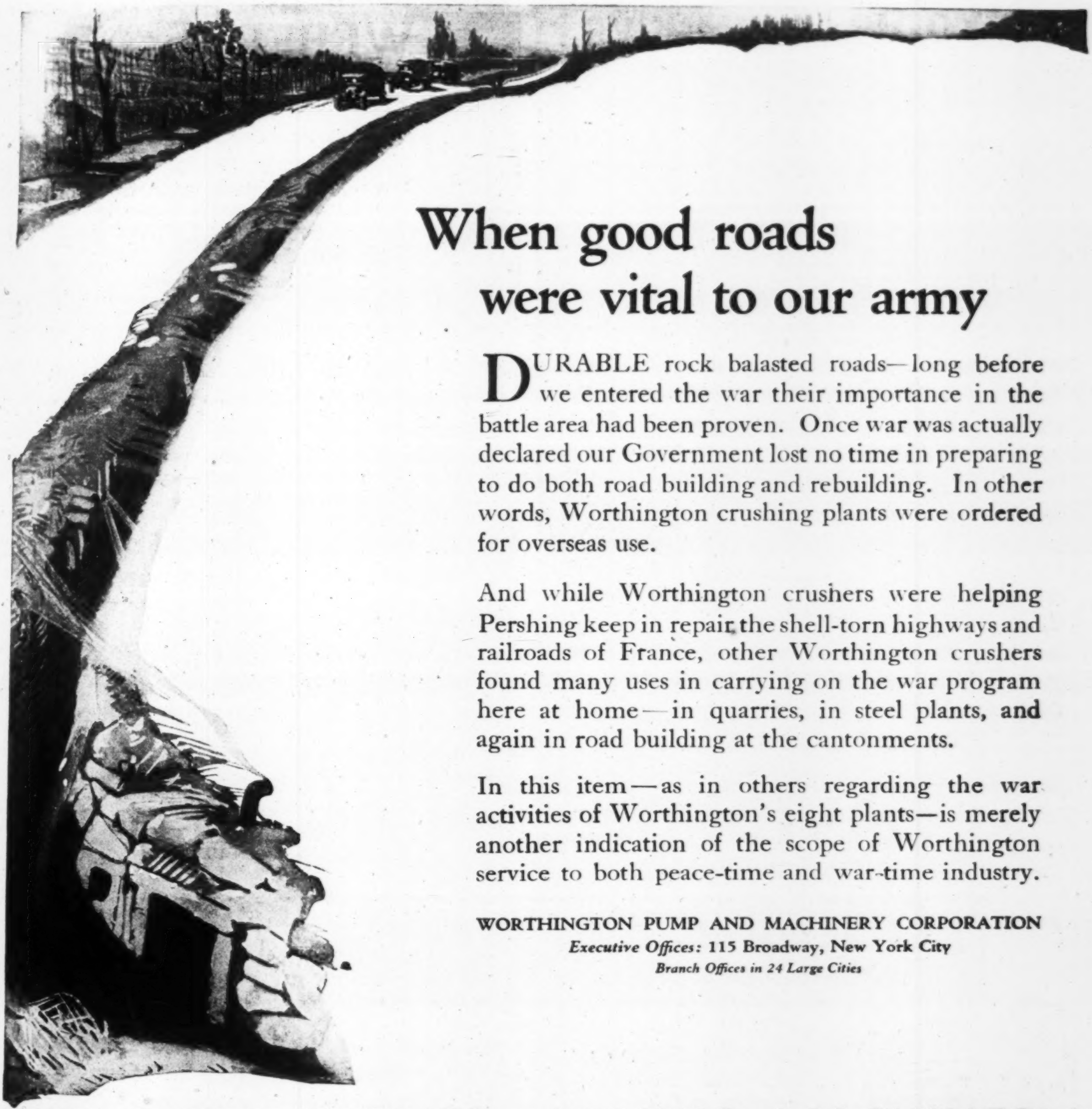

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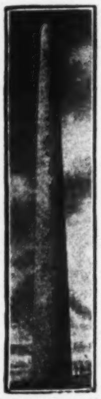

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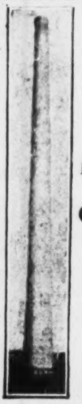

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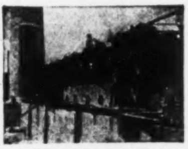

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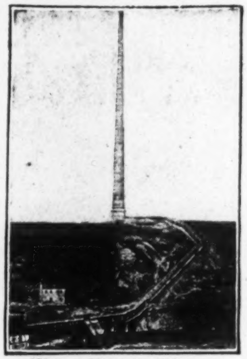

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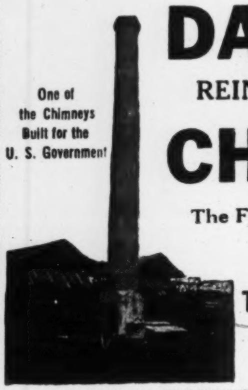

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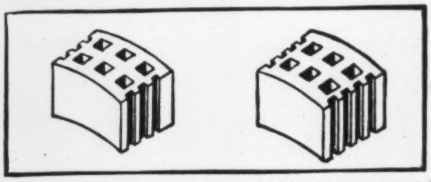

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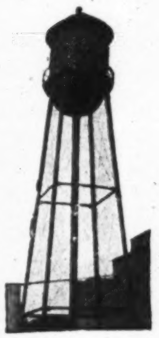

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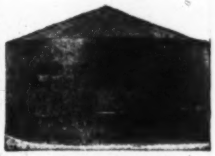

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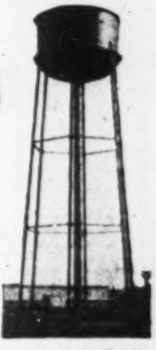

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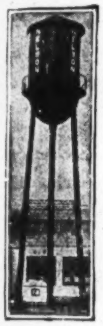

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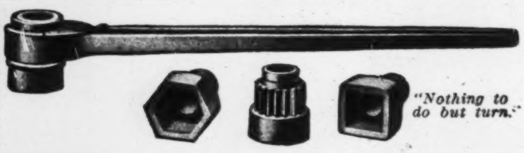

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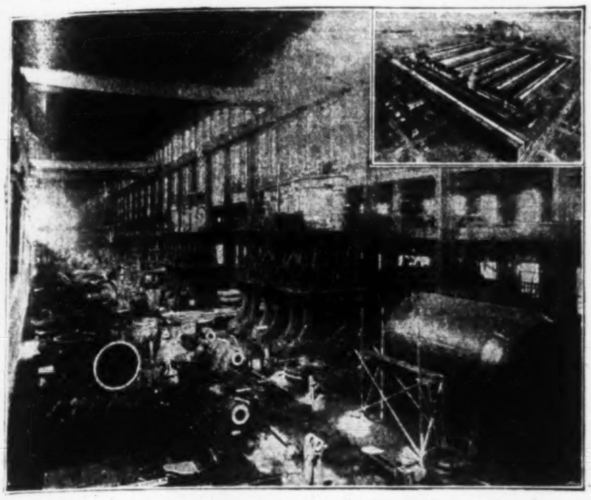

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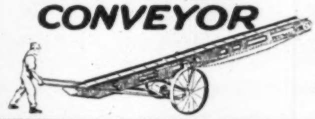

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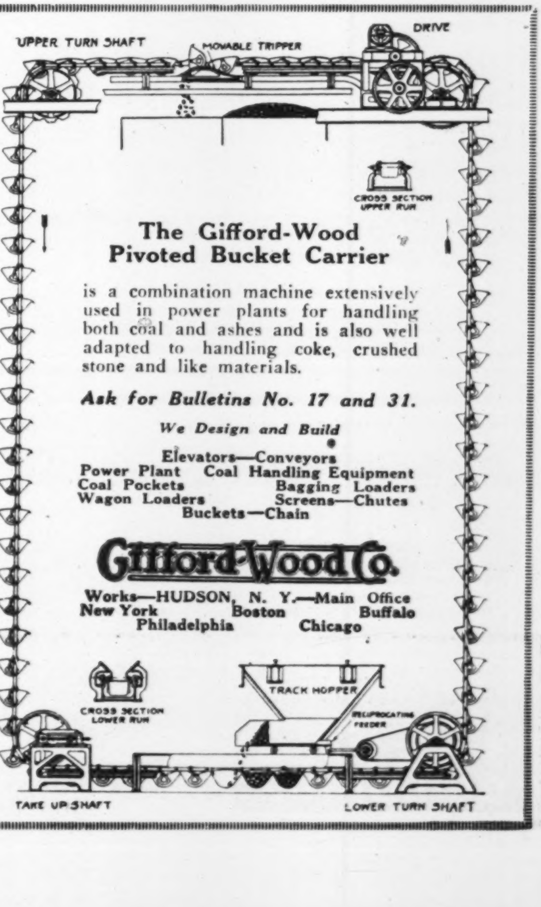

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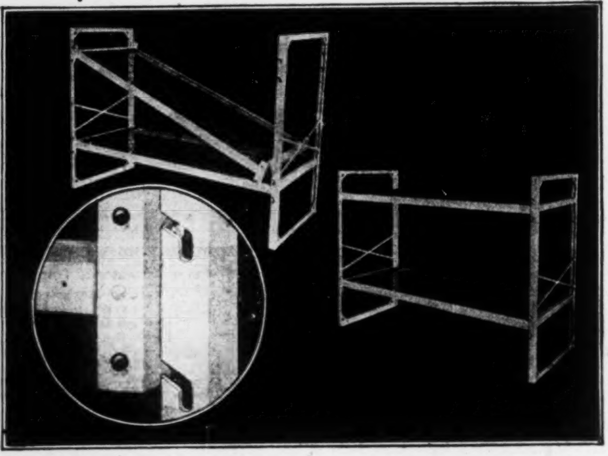

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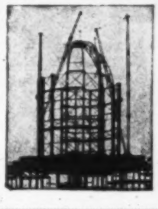

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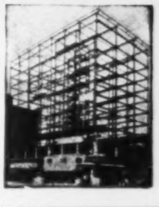

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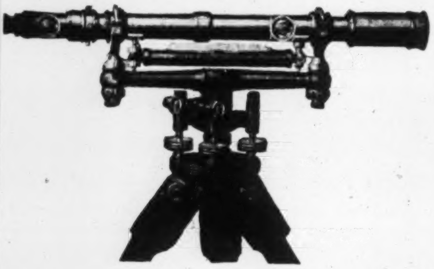

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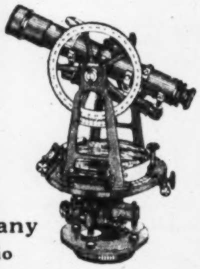

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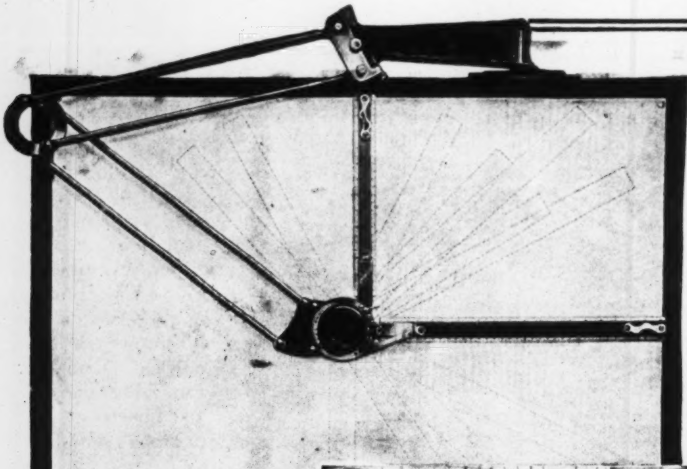

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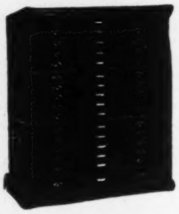

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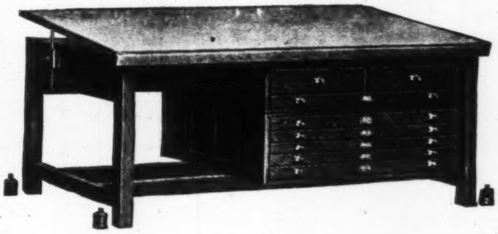

No. 47B
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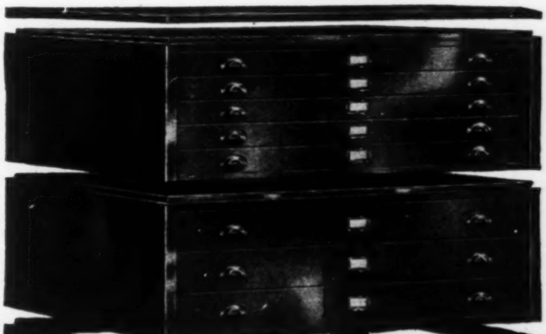

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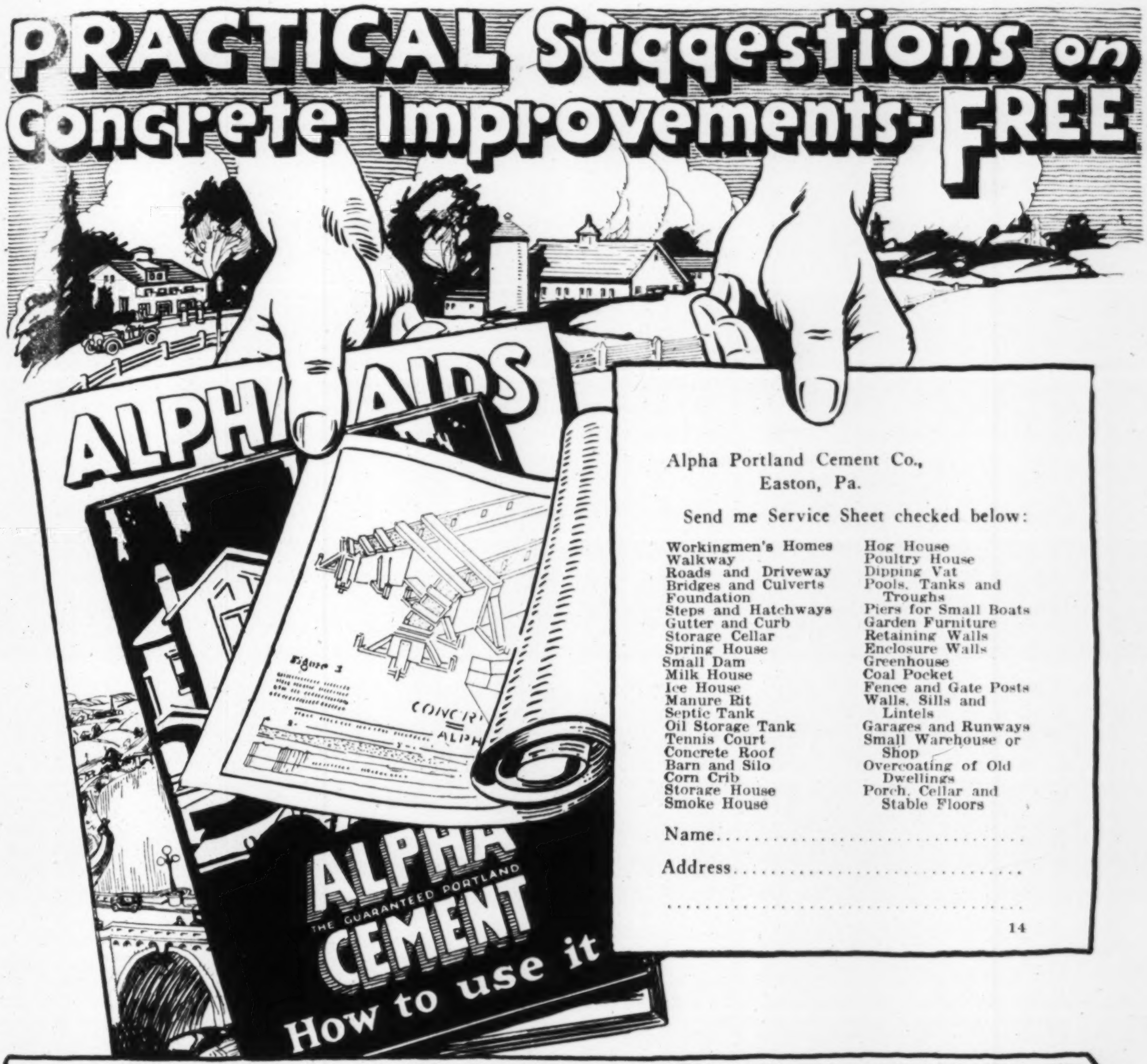

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Byers Machine Co., J. F.
Fritz & Co., Inc., W. G.
Marion Steam Shovel Co.
Owensboro Ditcher & Grader Co.
Pawling & Harnischfeger Co.

Excavators, Dragline
Austin Co., Inc., F. C.,
Bucyrus Co.
Byers Machine Co., J. F.
Hayward Co.
Marion Steam Shovel Co.
Osgood Co., The
Pawling & Harnischfeger Co.

Expanded Metal
Berger Manufacturing Co.
Consolidated Expanded Metal Cos.
Truscon Steel Co.

Export Agencies
Allied Construction Machinery Corp.
American Steel Export Co.

Fences, Wire
American Fence Constr. Co.
Cyclone Fence Co.

Filing Cabinets
Economy Drawing Table Co.

Filters, Water, Municipal & Industrial
Amer. Water Softener Co.
Hungerford & Terry, Inc.
International Filter Co.
N. Y. Continental Jewell Filtration Co.
Norwood Engineering Co.
Pittsburgh Filter Manufacturing Co.
Roberts Filter Manufacturing Co.
Scaife & Sons Co., Wm. B.
Simplex Valve & Meter Co

Filing Cabinets
Berger Manufacturing Co.

Fire Engines, Auto
White Co.

Fire Hydrants
Flower-Stephens Manufacturing Co.

Fireproof Material and Construction
Berger Manufacturing Co
Detroit Steel Products Co.
Keasbey & Mattison Co.

Floor Hardener, Concrete
(See Concrete Floor Hardener.)

Floor, Wood Block
Barrett Co.
Carter Bloxonend Flooring Co.
Republic Creosoting Co.
Jennison-Wright Co.

Flooring, Fireproof
Irving Iron Works

Forgings
Carnegie Steel Co.

Form Clamps
Insley Mfg. Co.
M. & M. Adjustable Wire Clamp Co.
Marion Malleable Iron Works
Universal Clamp Co.

Forms, for Culverts, Roads, Sewers, Tunnels, etc.
Blaw-Knox Co.
Foote Concrete Machinery Co.
Heltzel Steel Form & Iron Co.
Northwest Steel & Iron Works

Forms for Curbs & Gutters
Blaw-Knox Co.

Forms for Walls, Building Construction, Etc.
Berger Manufacturing Co
Heltzel Steel Form & Iron Co.

Foundations
American Bridge Co
Cranford Construction Co.
Lackawanna Steel Co.
MacArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.
Smith, Hauser & MacIsaac, Inc.
Underpinning & Foundation Co.
Westinghouse, Church Kerr Co.

Foundry Equipment
Whiting Foundry Equipment Co.

Frogs and Switches, Railway
Lakewood Engineering Co.
Ramapo Iron Works

Furnaces, Annealing and Tempering
American Gas Furnace Co
General Electric Co.

Furnaces, Gas
American Gas Furnace Co

Garbage-Disposal Apparatus
Jeffrey Manufacturing Co. The

Gas Chlorine
Electro Bleaching Gas Co..

Gas Producers
Allis-Chalmers Manufacturing Co.
Worthington Pump & Mchry. Co.

Gates, Sluice
Coffin Valve Co.
Coldwell-Wilcox Co.
Fargo Engineering Co
Flower Valve Manufacturing Co.

Gauges, Loss of Head
Simplex Valve & Meter Co

Gears, Silent
General Electric Co.

Gauges, Rate of Flow
Simplex Valve & Meter Co

Generators, Electric
Allis-Chalmers Manufacturing Co.
General Electric Co.
Universal Motor Co.

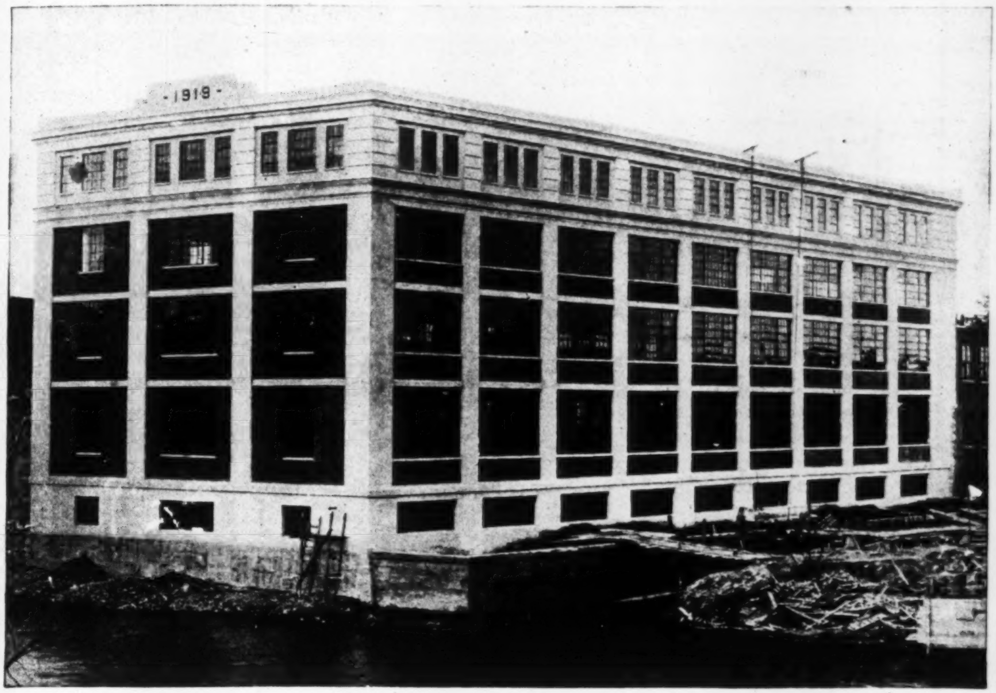
Glass Construction
Detroit Steel Products Co

Glass, Fireproof
(See Wire Glass)

Governor, Waterwheel
Woodward Governor Co.

Graders, Road
Koehring Machine Co
Ownesboro Ditcher & Grader Co.
Western Wheeled Scraper Co.

Granite
Rockport Granite Co



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(Our Second Contract for this Client.)

C. R. Makepeace & Co. Engineers

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- Humble Oil & Refining Co., Houston, Tex.
- Ford Motor Co., Kearny, N. J.
- Bristol-Myers Co., Hillside, N. J.
- U. S. Leather Co., Elizabeth, N. J.
- Howe Rubber Co., New Brunswick, N. J.
- Sanford Mills, Sanford, Me.
- Amer. Agr. Chem. Co., Everett, Mass.
- Hills Bros. Co., New York
- E. Greenfield's Sons, Brooklyn, N. Y.
- The Gt. A. & P. Tea Co., Jersey City, N. J.
- Wappler Electric Co., Inc., Brooklyn, N. Y.
- The Scranton Lace Co., Scranton, Pa.
- Pirika Chocolate Co., Brooklyn, N. Y.
- Robertson-Cataract Electric Co., Buffalo, N. Y.

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BUFFALO
Prudential Bldg.

BOSTON
Oliver Ditson Bldg.
178 Tremont Street

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Dixon Crucible Co., Joseph

Grates, Chain
Green Engineering Co.

Grating, Subway
Irving Iron Works

Gravel Washing Plants
Sauerman Bros.

Hammers, Pneumatic
Independent Pneumatic Tool Co.

Hammers, Steel Pile
(See Pile Hammers, Steam)

Heaters, Concrete Water
Lakewood Engineering Co.

Hoists, Chain
Speidel, J. G.

Hoists, Concrete Tower
Insley Manufacturing Co.
Lakewood Engineering Co.

Hoists, Contractors' Electric
Buffalo Hoist & Derrick Co.
Byers Machine Co., John F.
Ingersoll-Rand Co.
Lidgerwood Manufacturing Co.
Mead-Morrison Manufacturing Co.
"New Way" Motor Co., The
Orr & Sembower Co.
Westinghouse Electric & Mfg. Co.

Hoists, Contractors, Gasoline
Lidgerwood Manufacturing Co.
Minneapolis Steel & Machinery Co.
Schramm and Son, Inc., Chris D.

Hoists, Contractors, Steam
Buffalo Hoist & Derrick Co.
Byers Machine Co., John F.
Flory Manufacturing Co., S.
Lidgerwood Manufacturing Co.
Vulcan Iron Works of Wilkes-Barre, Pa.

Hoists, Hydraulic Gates
Dilts Machine Works, Inc.

Hoists, Pneumatic
Ingersoll-Rand Co.
Whiting Foundry Equipment Co.

Hoppers, Concrete Gravity
Insley Manufacturing Co.

Hydrants
Eddy Valve Co.
Flower Valve Mfg. Co.
Norwood Engineering Co.
Rensselaer Valve Co.
Smith Manufacturing Co., A. P.
Wood & Co., R. D

Hydro Electric Construction
General Electric Co.

Inks
Higgins & Co., Chas. M.

Incinerators
Bartlett & Snow Co., C. O.
Jeffrey Manufacturing Co.
Power Specialty Co.

Inserts, Concrete
Security Insert Co.
Truscon Steel Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.
Weber & Co., F.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Buff & Buff Manufacturing Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Kolesch & Co.
Weiss Instrument Co.
White Co., David

Insulators, Cleat Type Switchboards
Philadelphia Electric Co. Supply Dept.

Insulators, Post Type
Philadelphia Electric Co. Supply Dept.

Insurance
Insurance Co. of North America

Iron Work, Structural and Ornamental
Christopher & Simpson Iron Works
Irving Iron Works
Snead Architectural Iron Works

Jacks, Lifting
Koch & Co., Paul W.
McKiernan-Terry Drill Co.
Norton, Inc., A. O.

Joints, Expansion, Paving
Barrett Co.
Carey Co., Philip
Truscon Steel Co.
Waring-Underwood Co.

Joint Filler, Paving
Barrett Co.
Standard Oil Co. of N. J.
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Ceneral Foundry Co., The
U. S. Cast Iron Pipe & Foundry Co.
Weston, L. A.

Kilns, Lime
Petroleum Iron Works Co.

Lamps, Arc & Incandescent
General Electric Co.
Westinghouse Electric & Mfg. Co.

Lamps, Flood
General Electric Co.

Lath, Expanded Metal
Berger Manufacturing Co.
Witherow Steel Co.

Lead Pencils
Dixon Crucible Co., Jos.

Leadite
Leadite Co., Inc., The
Robertson Co., H. H.

Lighting Plant
Universal Motor Co.

Lights, Contractors'
General Electric Co.
Milburn Co., Alex.

Lime, Hydrated
Kelley Island Lime & Transport Co.

Liquid Chlorine
Arnold, Hoffman Co.

Loaders, Wagon
(See Wagon Loaders.)

Lockers, Steel
Berger Manufacturing Co.
Lupton Sons Co., David

Locomotives, Compressed Air
Porter & Co., H. K.
Vulcan Iron Works of Wilkes-Barre, Pa.

Locomotives, Electric
American Locomotive Co.
Atlas Car & Mfg. Co.
Jeffrey Manufacturing Co., The
Lakewood Engineering Co.
Westinghouse Electric & Mfg. Co.

Locomotives, Fireless Steam
Porter Co., H. K.

Locomotives, Gasoline
Bell Locomotive Works, Inc.
Fate Co., J. D.
Vulcan Iron Works of Wilkes-Barre, Pa.

Locomotives, Steam
American Locomotive Co.
Bell Locomotive Works, Inc.
Davenport Locomotive Works
Porter Co., H. K.
Vulcan Iron Works of Wilkes-Barre, Pa.

Lubricants
Dixon Crucible Co., Joseph

Lumber
Great Southern Lumber Co.
Industrial Lumber Co.
Long Bell Lumber Co.
Southern Pines Sales Corp.
Tanner & Litchfield, Inc.

Manhole Covers
Central Foundry Co., The
Sessions Foundry Co.

Manometers
Simplex Valve & Meter Co

Metals, Perforated
Chicago Perforating Co.

Meter Boxes
Pittsburgh Meter Co.

Meter Provers
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry Co.

Meter Boxes
Cast Iron Pipe Publicity Bureau

Meters, Current
General Electric Co.
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry Co.
General Electric Co.
Union Water Meter Co.

Meters, Water, Oil, Etc.
Gamon Meter Co.
General Electric Co.
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Worthington Pump & Machinery Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Austin Co., Inc., F. C.
Blaw-Knox Co.
Cement-Gun Co.
Foote Concrete Machinery Co.
Jaeger Machine Co.
Lakewood Engineering Co.
Northwestern Steel & Iron Wks.
Oshkosh Mfg. Co.
Ransome Concrete Machine Co.
Schramm and Son, Inc., Chris. D.
Smith Co., T. L.
Standard Scale & Supply Co.
Worthington Pump & Machinery Corp.

Mixers, Grout
Lakewood Engineering Co.
Oshkosh Mfg. Co.
Union Iron Works

Mixers, Hot
Austin Co., Inc., F. C
Equitable Asphalt Maintenance Co.
Koehring Machine Co.

Mixers, Mortar
Austin Co., Inc., F. C.
Jaeger Machine Co.
Lakewood Engineering Co.
Oshkosh Mfg. Co.
Ransome Concrete Machinery Co.
Smith Co., T. L.

Mixers, Paving
Austin Co., Inc., F. C.
Foote Concrete Machinery Co.
Koehring Machinery Co.
Lakewood Engineering Co.
Waterloo Cement Machinery Corp.

Mixers, Pneumatic
Ransome Concrete Machinery Co.

Motors, Electric
General Electric Co.
Westinghouse Electric & Mfg. Co.
Westinghouse Traction Brake Co.

Motor Trucks
(See Trucks, Motor.)

Motor Truck Bodies
Economy Body Sales Co.

Packings
Jenkins Bros.

Paints, Metal Protective
Barrett Co.
Carey Co., Philip
Dixon Crucible Co., Joseph
Toch Bros.
Trus.-Con. Laboratories.

Partitions
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Lupton Sons Co., David

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Bitoslag Paving Co.

Paving Blocks, Brick
Metropolitan Paving Brick Co.

Paving Blocks, Granite
Rockport Granite Co.

Paving Blocks, Creosoted Wood
Jennison-Wright Co.
Republic Creosoting Co.
Wyckoff Pipe & Creosoting Co.

Penstocks
Lackawanna Steel Co.

Pile Drivers
Browning Co., The
McKiernan-Terry Drill Co.
McMyler Interstate Co.
Union Iron Works

Pile Hammers, Steam
McKiernan-Terry Drill Co.
Union Iron Wks.

Pile, Shoes
Janney-Steinmetz Co.

Piles, Concrete
Cranford Constr. Co.
MacArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Carnegie Steel Co.
Lackawanna Steel Co.
O'Rourke Engineering Co.

Pipe Bends
East Jersey Pipe Corp.

Pipe, Cast-Iron
Builders Iron Foundry Co.
Central Foundry Co., The
Fox & Co., John
Lynchburg Foundry Co.
U. S. Cast Iron Pipe & Foundry Co.
Van Nouhuys Machine Works
Warren Foundry & Machine Co.

Pipe, Concrete
Lock Joint Pipe Co.

Pipe, Corrugated
Canton Culvert & Silo Co.

Pipe Covering, Asbestos
Carey Co., Philip
Wyckoff & Sons Co., A.

Pipe Covering, Wood
Michigan Pipe Co.
Standard Wood Pipe Co.

Pipe, Dredge
Machold & Riddell
Thorn Co., J. S.

Pipe Fittings
Builders Iron Foundry Co.
Cast Iron Pipe Publicity Bureau
Central Foundry Co., The
U. S. Cast Iron Pipe and Foundry Co.
Westinghouse Traction Brake Co.
Weston, L. A.
Wood & Co., R. D.

Pipe Joint Compounds (Pressure)
Leadite Co., Inc., The

Pipe, Lap Welded
American Spiral Pipe Works

Pipe, Lock Bar
East Jersey Pipe Corp.

Pipe, Lock Joint
Lock Joint Pipe Co.

Pipe Lugs
Marion Malleable Iron Wks.

Pipe, Reinforced Concrete
Lock Joint Pipe Co.

Pipe, Riveted Steel
American Spiral Pipe Wks.
Blaw-Knox Co.
East Jersey Pipe Corp.
Machold & Riddell
Petroleum Iron Works Co.
Riter-Conley Co.
Tippett & Wood
Walsh's Holyoke Steam Boiler Works

Pipe, Spiral Riveted
Abendroth & Root Manuturing Co.
American Spiral Pipe Works
Blaw-Knox Co.

Pipe, Wood
American Wood Pipe Co.
Continental Pipe Manufeifacturing Co.
Michigan Pipe Co.
Pacific Tank & Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Sons Co., A.

Pipe, Wrought Steel
National Tube Co.

Poles, Cross Arms, Etc.
Jennison-Wright Co.

Plate Punch Tables
Terry Manufacturing Co., Edw. F.

Poles, Steel Structural
Blaw-Knox Co.
Milliken Bros. Manufacturing Co.

Poles, Tubular Steel
Franklin Steel Works
National Tube Co.

Pot Heads
Philadelphia Electric Co. Supply Dept.

Pressed Steel Products
Berger Manufacturing Co.
Blaw-Knox Co.

Pulverizers
Raymond Bros. Impact Pulverizer Co.

Pumps, Air Lift
Cameron Steam Pump Works, A. S.
Ingersoll-Rand Co.
McGowan Co., John H.
Sullivan Machinery Co.

Pumps, Boiler Feed, Steam
Cameron Steam Pump Works, A. S.
Dean Bros Steam Pump Works
Earle Gear & Machine Co
McGowan Co., John H.
Platt Iron Wks.
Worthington Pump & Machinery Corp.

Pumps, Centrifugal and Multi-Stage High Lift
Allis-Chalmers Manufacturing Co.
American Well Works, The
Cameron Steam Pump Works, A. S
De Laval Steam Turbine Co.
Earle Gear & Machine Co.
Erie Pump & Engine Co.
Lawrence Pump & Engineering Co.
Lea-Courtenay Co.
McGowan Co., John H.
Manister Iron Works
Morris Machine Works
Platt Iron Wks.
Taber Pump Co.
Universal Motor Co.
Worthington Pump & Machinery Corp.

Pumps, Contractors'
American Well Works, The
Barnes Mfg. Co.
Bond Co., Harold L.
Cameron Steam Pump Works
Deming Co., The
Edson Manufacturing Co.
Lea-Courtenay Co.
McGowan Co., John H.
Parker, A. A.
Schramm and Son, Inc., Chris. D.
Standard Scale & Supply Co.
Waterloo Cement Machinery Corp.
Worthington Pump & Machinery Corp.

Pumps, Deep Well
American Well Works, The
Cameron Steam Pump Works, A. S.
Cook, A. D.
Deming Co., The.
Keystone Driller Co.
McGowan Co., John H.
Worthington Pump & Machinery Corp.

Pumps, Diaphragm
Bond Co., Harold L.
Boston & Lockport Block Co.
Deming Co., The.
Edson Manufacturing Co.
McGowan Co., John H.
Manister Iron Works.
Topping Bros.
Van Noubuys Machine Works.
Waterloo Cement Machinery Corporation

Pumps, Dredging and Sand
Erie Pump & Engine Co.
Lawrence Pump & Engineering Co.
McGowan Co., John H.
Marion Steam Shovel Co.
Morris Machine Works Boiler Works
Parker, A. A.
Worthington Pump & Machinery Corp.

Pumps, Elevator
McGowan Co., John H.
Worthington Pump & Machinery Corp.

Pumps, Power
Cameron Steam Pump Works, A. S.
Cook, A. D.
Dean Bros. Steam Pump Wks.
Deming Co., The
Fairbanks-Morse Co.
Lea-Courtenay Co.
McGowan Co., John H.
Manister Iron Works.
Platt Iron Wks.
Manister Iron Works.
Worthington Pump & Machinery Corp.

Pumps, Underwriters Centrifugal
Earle Gear & Machine Co.
McGowan Co., John H.
Manistee Iron Wks.
Platt Iron Wks.

Purifiers, Feed Water
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Norwood Engineering Co.

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Taylor Instruments Co.

Rail and Rail Joints, Fastening Specialties
Carnegie Steel Co.
Lackawanna Steel Co.

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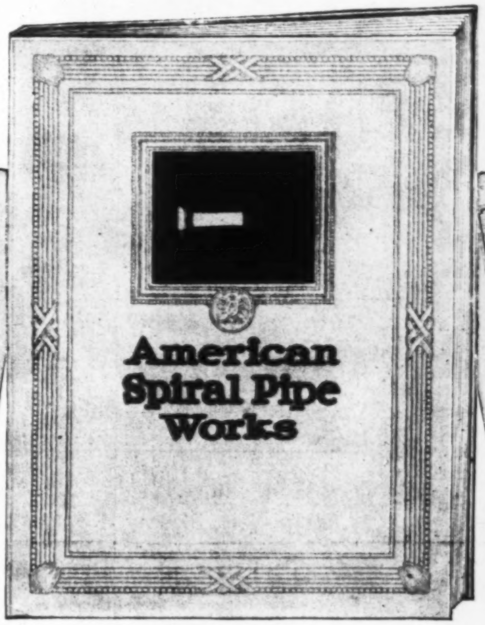

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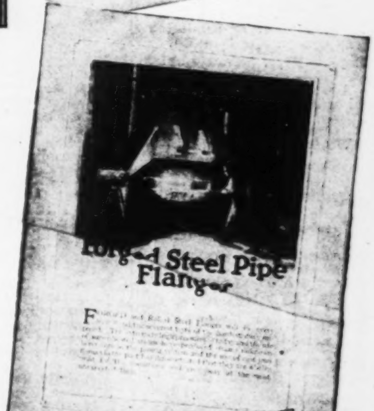
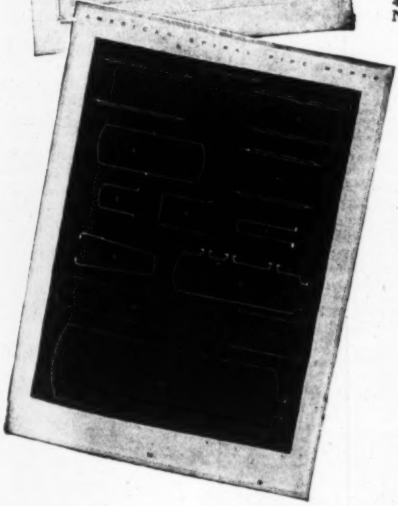
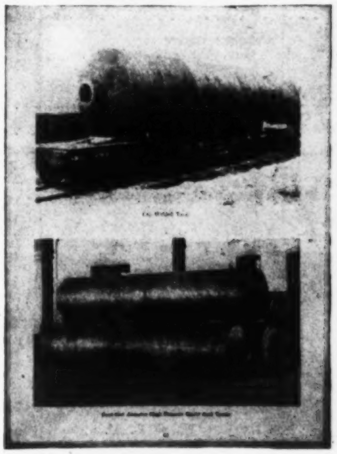
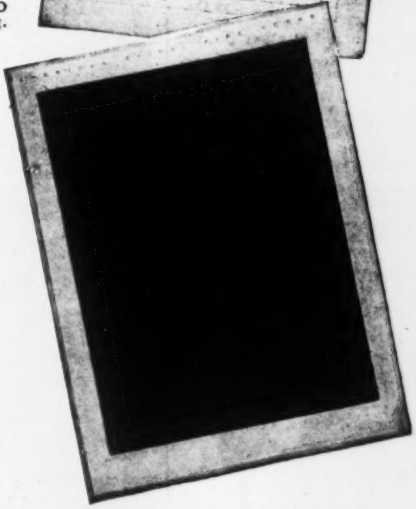


Forged Steel Pipe Flanges







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Ball Engine Co.

Railways, Industrial
Lakewood Engineering Co.

Reamers, Air
Independent Pneumatic Tool Co.

Recorders, Water Stage
Gurley, W. & L. E.

Reinforcing Concrete
(See Concrete Reinforcement)

Reinforcing Metal for Concrete
Berger Manufacturing Co.

Reservoirs, Aerating
Spray Engineering Co.

River and Harbor Work
Raymond Concrete Pile Co.

Road Oilers, Pressure
Barrett Co., The
Universal Road Machinery Co.

Road Oils and Preservatives
Barrett Co.
Buffalo-Springfield Roller Co.
Erie Machine Shops
Standard Oil Co., of N. J.
Standard Oil Co. of N. Y.

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Macon Concrete Roller Co.

Rolls, Crushing
Jeffrey Manufacturing Co.

Roofing, Metal
American Sheet & Tin Plate Co.
Carey Co., Philip

Roofing Prepared
Barrett Co.
Stark Rolling Mill Co., The

Roofing, Tile
American Cement Tile Manufacturing Co.
Barrett Co.

Rope, Manila, Transmission
Plymouth Cordage Co.

Rope, Wire, Transmission, Hoisting or Haulage
American Steel & Wire Co
Leschen & Sons Rope Co.
Moon Co., Geo. C.
Roeblings Sons Co., J. A.
Waterbury Co.

Sash Operating Apparatus
Detroit Steel Products Co.
Lupton Sons Co., David

Sash Steel, Window
(See Window Sash.)

Screens, Sand, Gravel and Coal
Austin Manufacturing Co.
Chicago Perforating Co.
Webster Manufacturing Co.

Screens, Well
American Well Works, The

Searchlights
General Electric Co.

Sewage Disinfection
Electro Bleaching Gas Co.

Sewage Disposal
General Filtration Co., Inc.

Sewer Cleaning Machinery
Turbine Sewer Machine Co.

Sewers, Water Intake
Chain Belt Co.

Sharpening Machines, Drill Bit
Ingersoll-Rand Co.

Shafting
National Tube Co.

Sheaves
Haiss Manufacturing Co., Inc., Geo.

Sheets, Iron and Steel
Standard Asphalt & Refining Co.
Stark Rolling Mill Co., The

Sheets, Roofing & Siding
Stark Rolling Mill Co., The

Shelving, Steel
Berger Manufacturing Co.
Lupton's Sons Co., David

Shovels, Picks, Crow-Bars, Etc.
Topping Bros.

Shovels, Electric
Ball Engine Co.
Bucyrus Co.

Shovels, Gasoline
Thew Automatic Shovel Co.

Shovels, Steam
Ball Engine Co.
Browning Co., The
Bucyrus Co.
Osgood Co., The

Skips, Stone
Insley Manufacturing Co.
Lakewood Engineering Co.

Skylights
Luptons Sons Co., David

Slag
Carnegie Steel Co.

Spray Nozzles
Spray Engineering Co.

Spreaders, Ballast
Jordan Co., O. F.

Standpipe Tanks and Towers
Amercian Bridge Co.
Blaw-Knox Co.
Caldwell Co., W. E.
Chicago Bridge & Iron Wks.
Pacific Tank & Pipe Co.
Petroleum Iron Works Co.
Pittsburgh-Des Moines Steel Co.
Tippett & Wood

Steam Specialties
Jenkins Bros.

Steel Plate Construction
Amercian Bridge Co.
Bethlehem Steel Bridge Co.
Blaw-Knox Co.
Chicago Bridge & Iron Works
Coatesville Boiler Works
East Jersey Pipe Corp.
Franklin Steel Wks.
Heltzel Steel Form & Iron Co.
Lackawanna Steel Co.
Pennsylvania Tank Car Co.
Petroleum Iron Works Co.
Pittsburgh Des Moines Steel Co.
Tippett & Wood
Union Iron Works
Vulcan Iron Works, Jersey City, N. J.
Walsh's Holyoke Steam Boiler Works.
Williams Co., G. H.

Steel, Structural
Amercian Bridge Co.
Bellefontaine Bridge & Steel Co.
Belmont Iron Works
Berlin Construction Co.
Bethlehem Steel Bridge Corp.
Blaw-Knox Co.
Boston Bridge Works
Carnegie Steel Co.
Christopher-Simpson Iron Works.
Eastern Bridge & Structural Co.
Fort Pitt Bridge Works
Franklin Steel Works
Kalamazoo Foundry & Machine Co.
Kellogg Structural Steel Co.
Kenwood Bridge Co.
King Bridge Co.
Lackawanna Bridge Co.
Lackawanna Steel Co.
Lakewood Engineering Co.
Louisville Bridge and Iron Co.
McClintic-Marshall Co
Milliken Bros. Manufacturing Co.
Milwaukee Bridge Co.
Minneapolis Steel & Machinery Co.
Missouri Valley Bridge & Iron Co.
Mitchell-Tappen Co.
Morava Construction Co.
Mount Vernon Bridge Co.
Penn. Bridge Co.
Phœnix Bridge Co.
Pittsburgh-Des Moines Steel Co.
Riverside Bridge Co.
Shoemaker & Co., Lewis F.
Snare & Triest Co.
Snead Architectural Iron Works
Terry & Tench Co., Inc.
Toledo Bridge & Crane Co.
Virginia Bridge & Iron Co
Whitehead & Kales Co.
Wisconsin Bridge & Iron Co.

Steel Tool
Carnegie Steel Co.

Stokers
Babcock & Wilcox Co.
Green Engineering Co.

Stop Crack Fasteners
Janney-Steinmetz & Co.

Strainers, Well
Cook, A. D.

Structural Steel
Ferguson Co., H. K.

Submarine Works
Westinghouse, Church, Kerr Co.

Superheaters
Babcock & Wilcox Co.
Locomotive Superheater Co.
Power Specialty Co.

Switches, Disconnecting
Philadelphia Electric Co. Supply Dept.

Switchboards
General Electric Co.

Tables and Boards, Drawing
Defiance Manufacturing Co.
Economy Drawing Table & Manufacturing Co.
Hamilton Manufacturing Co.

Tampers, Power
Pawling & Harnischfeger Co.

Tanks, Air Compressor
East Jersey Pipe Corp.
Petroleum Iron Works Co.
Westinghouse Traction Brake Co

Tank Lugs
Marion Malleable Iron Works

Tanks, Oil
Blaw-Knox Co.
Coatesville Boiler Works
Riter-Conley Co.

Tanks, Steel
(See Steel Plate Construction.)

Tanks, Wood
American Wood Pipe Co.
Caldwell Co., W. E.
Continental Pipe Manufacturing Co.
Pacific Tank & Pipe Co

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Hamilton Manufacturing Co.
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Tar
Barrett Co.

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Baker-Lockwood Mfg. Co.

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Fuller Engineering Co.
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Taylor Instrument Co.

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American Bridge Co.
Carnegie Steel Co.

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American Cement Tile Manufacturing Co.

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(See Hoists, Conc. Tower.)

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Milliken Bros. Manufacturing Co.

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Lakewood Engineering Co.
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Watson Wagon Co.

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Bacon, Earl C.
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Leffel & Co., Jas.
Westinghouse Electric & Mfg. Co

Treads, Safety
Concrete Steel Co.
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(See Braces, Extension Trench)

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Lakewood Engineering Co.

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O'Rourke Engineering Co.
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Norwood Engineering Co.
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Golden-Anderson Valve Specialty Co.
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Valves, Angle, Check, Gate and Globe
Flower Valve Manufacturing Co.
Golden-Anderson Valve Specialty Co.
Jenkins Bros.
Simplex Valve & Meter Co.
Westinghouse Traction Brake Co.

Valves, Automatic
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Valves, Regulating
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Westinghouse Traction Brake Co.

Valves, Return
Golden-Anderson Valve Specialty Co.

Valves, Safety
Golden-Anderson Valve
Westinghouse Traction Brake Co.
Specialty Co.
Republic Creosoting Co.

Valves, Sluice
Coffin Valve Co.
Eddy Valve Co.
Eagle Wagon Works

Ventilators
Lupton's Sons Co., David

Wagons, Asphalt
Eagle Wagon Works
Troy Wagon Works
Watson Wagon Co.

Wagons, Dump
Eagle Wagon
Troy Wagon W
Watson Wagon
Western Wheele Co.
White Co.

Wagons, Garbage
Eagle Wagon W
Troy Wagon W
Watson Wagon

Wagon Loaders
Byers Machine Co F
Clyde Iron Works
Gifford-Wood Co
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Amer. Water Softener Co.
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Water Wheels for Contr's. Equip.
Pelton Water Wheel Co.

Water Wheels, Turbine and Impulse
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Chain Belt Co.
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Jeffrey Manufacturing Co.

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Winches, Ship, Steam and Electric
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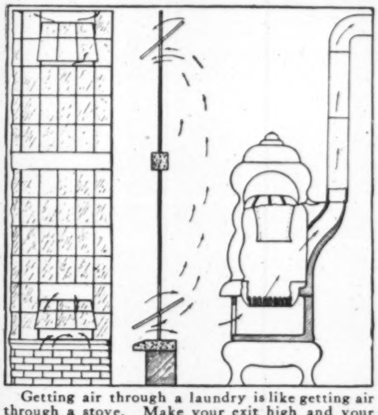
Republic Creosoting Co.

Wrenches
Lowell Wrench Co.

FOR EVERY INDUSTRY

The Banner Laundry, Detroit, is designed along modern lines. Fenestra Solid Steel Windows are used to assure proper daylighting and ventilation, as explained below.



Getting air through a laundry is like getting air through a stove. Make your exit high and your intake low. Ventilators placed like those shown at the left of the drawing give ventilation like that secured through the stove on the right.

The Laundry—

The two big problems of every laundry owner, have been solved.

You can eliminate the steam and heat generated by washers and mangles during the summer.

You can have daylight and air equal to that outside.

Both problems are solved where Fenestra Solid Steel Windows form the sidewalls of the building.

Wide glass areas provide the light.

Make the ceiling as high as possible. Place the ventilators through which hot air exits as near the ceiling as possible. Place ventilators through which fresh air enters as near the floor as possible. Result—good ventilation.

"Enticing a Breeze Through a Laundry" is a Fenestra booklet that will interest you. Write for a copy.

DETROIT STEEL PRODUCTS COMPANY

2612 East Grand Blvd. **Detroit, Michigan**

Fenestra

SOLID STEEL WINDOWS

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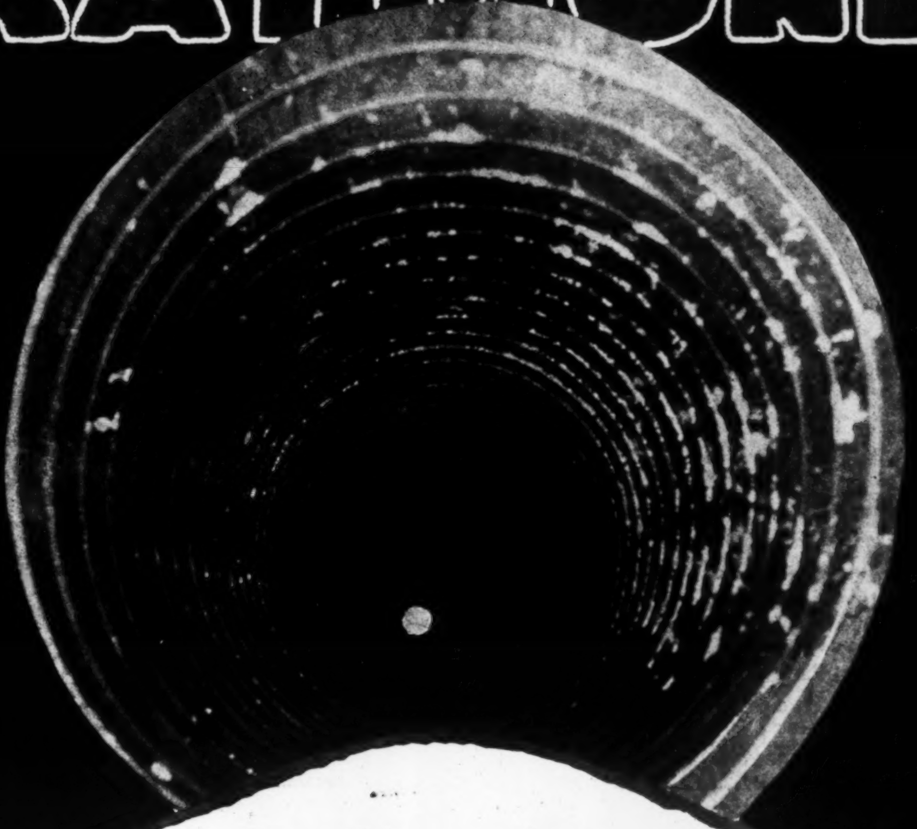
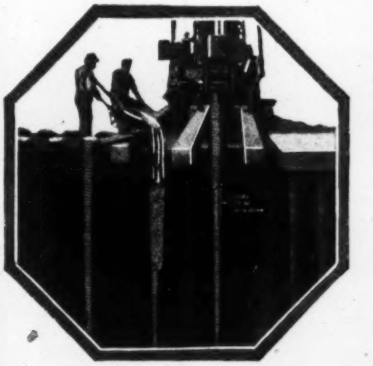
Youngstown Steel Car 1

RAYMOND



Looking down into the reinforced steel shell

Here is the interior of a driven, spirally-reinforced, steel "form" for a Raymond Concrete Pile. Here is the reason why, unknown or unguessed, underground conditions cannot distort or weaken the concrete pile column. The shell is left in the ground.



Raymond Concrete Pile Co.

New York: 140 Cedar Street
Chicago: 111 West Monroe Street
Montreal, Canada:
Raymond Concrete Pile Company, Ltd.

A Form for Every Pile—A Pile for Every Purpose

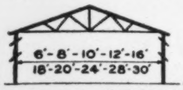
Top Photo:
Truscon Standard Building 50 feet x 210 [illegible]

In Oval:
Truscon Standard Building at plant of Thomas A. Edison, Inc., Orange, N. J.

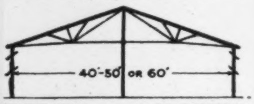
Bottom Photo:
Air tool shop, American International Shipbuilding Corp., Hog Island, Pa.

WIDTHS OF TRUSCON STANDARD BUILDINGS

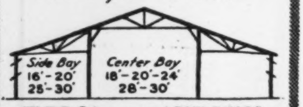
Any Length of Building varying by 2 ft.
Wall Heights, curb to eave, 7'-10" or 11'-6"



TYPE 1 (*Clear Span*) BUILDINGS

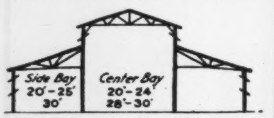


TYPE 2 (*Two Bay*) BUILDINGS
One Row of Columns in Center



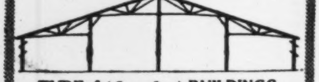
TYPE 3 (*Three Bay*) BUILDINGS
Two Rows of Columns in Interior

Widths - 50' 52'-56'-58'-60'-64'
68-70'-74'-78'-80'-84'-90'



TYPE 3M (*Monitor*) BUILDINGS

Widths - 60'-64'-68'-70'-74'
80'-84'-90'



TYPE 4 (*Four Bay*) BUILDINGS
Three Rows of Columns in Interior

Widths - 80' (*4 Bays @ 20'*)
100' (*4 Bays @ 25'*)

CONTINUOUS MONITOR 12'-0" WIDE CAN BE PROVIDED AT RIDGE OF ANY BUILDING

For a Good Building Quickly —Get Our Estimates

LEADING industries are using Truscon Standard Buildings for a large variety of purposes. The Hooker Electro-Chemical Company of Niagara Falls, N. Y., say: "Have used Truscon Buildings as repair shop, office, stores, laboratory, paint shop, locker room and fire hall. We consider this type very satisfactory." United States Coal and Coke Company have pump, compressor and fan houses and pump stations; other industries have factory and storage buildings of all kinds, also dining halls, garages, hospitals, etc. Manufacturers, like Packard Motor Car Co., Ford Motor Co., American Car & Foundry Co., U. S. Aluminum Co., and American Can Co., have given repeat orders for Truscon Standard Buildings.

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Truscon Standard Buildings meet a wide variety of requirements because of their flexibility in regard to shape and size. As they are built from interchangeable steel panels you can readily have them enlarged, rearranged and re-erected in new location.

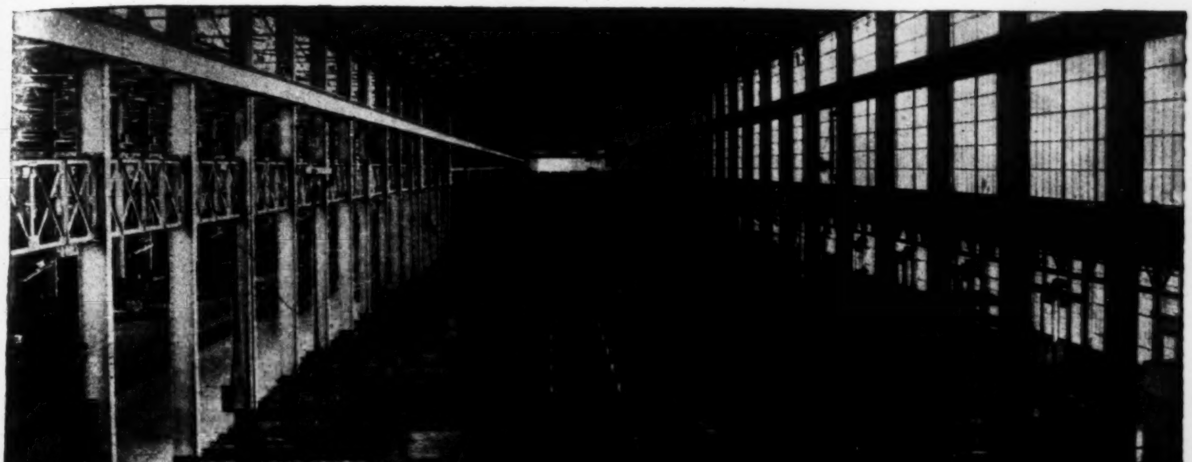
As panels are carried in warehouse stock ready for immediate shipment, you are assured prompt service in getting a new building ready for erection or additional stock units for enlarging or rearranging buildings which you have in use.

Tell us about the building you need—its approximate size and purpose. Use coupon below if convenient.

TRUSCON STEEL COMPANY
(FORMERLY TRUSSED CONCRETE STEEL CO.)
YOUNGSTOWN, OHIO.
WAREHOUSES AND REPRESENTATIVES IN PRINCIPAL CITIES
Reinforcing Steel, Metal Lath, Steel Windows, Steel Buildings, Pressed Steel, Cement Tile, etc.

TRUSCON
STANDARD TRUSCON STEEL CO. BUILDINGS

TRUSCON STEEL CO., Youngstown, Ohio
Send catalog and information on type....................Truscon Standard Building
.......**ft. long**.......**ft. wide**.......**ft. high, to be used for**..............................
Name.................................... **Address**.................................**E. N.-R**



Bright as day, the interior of the erection building of Ford shipbuilding plant, 250 feet wide.

From Daylight to Daylight

EXTENDING 1,700 feet in length and 250 feet in width, the erection building of the great Ford shipbuilding plant for constructing Eagle submarine chasers, has four acres of Truscon Steel Windows. When an Eagle was conveyed outside the plant, ready for launching, the daylight there was scarcely brighter than that inside the plant coming as it did through the great expanse of windows.

In other industries, no less than in shipbuilding, the well-lighted workroom is a prime asset. It insures greater accuracy, less waste, fewer accidents, and better health. Increased output, better products and economy in lighting bills are additional benefits. Truscon Steel Windows, characterized by trim, clean-cut lines and flat surfaces, represent the highest quality in design, construction, workmanship and hardware. Stock units, in thirty different types and sixty sizes, meet practically all requirements as regards size of window openings and ventilation. Their specification obviates delay and insures satisfaction.

Copy of handsome Truscon Steel Window Book mailed free on request. Use coupon if convenient.

The first Eagle leaves the building.

The Eagle passes from "daylight to day light."

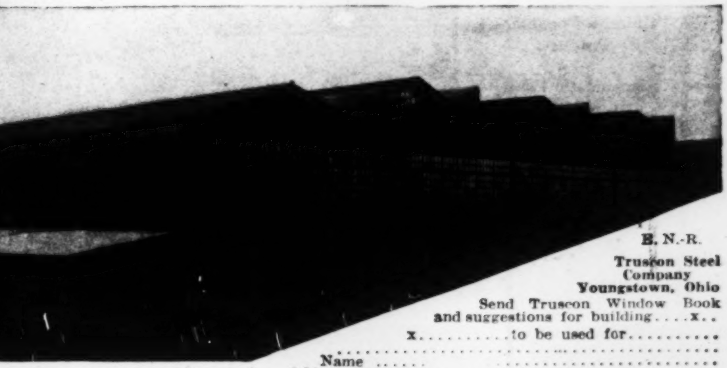
TRUSCON STEEL WINDOWS

Truscon Steel Co.
Youngstown, Ohio

Warehouses and Sales Offices in Principal Cities

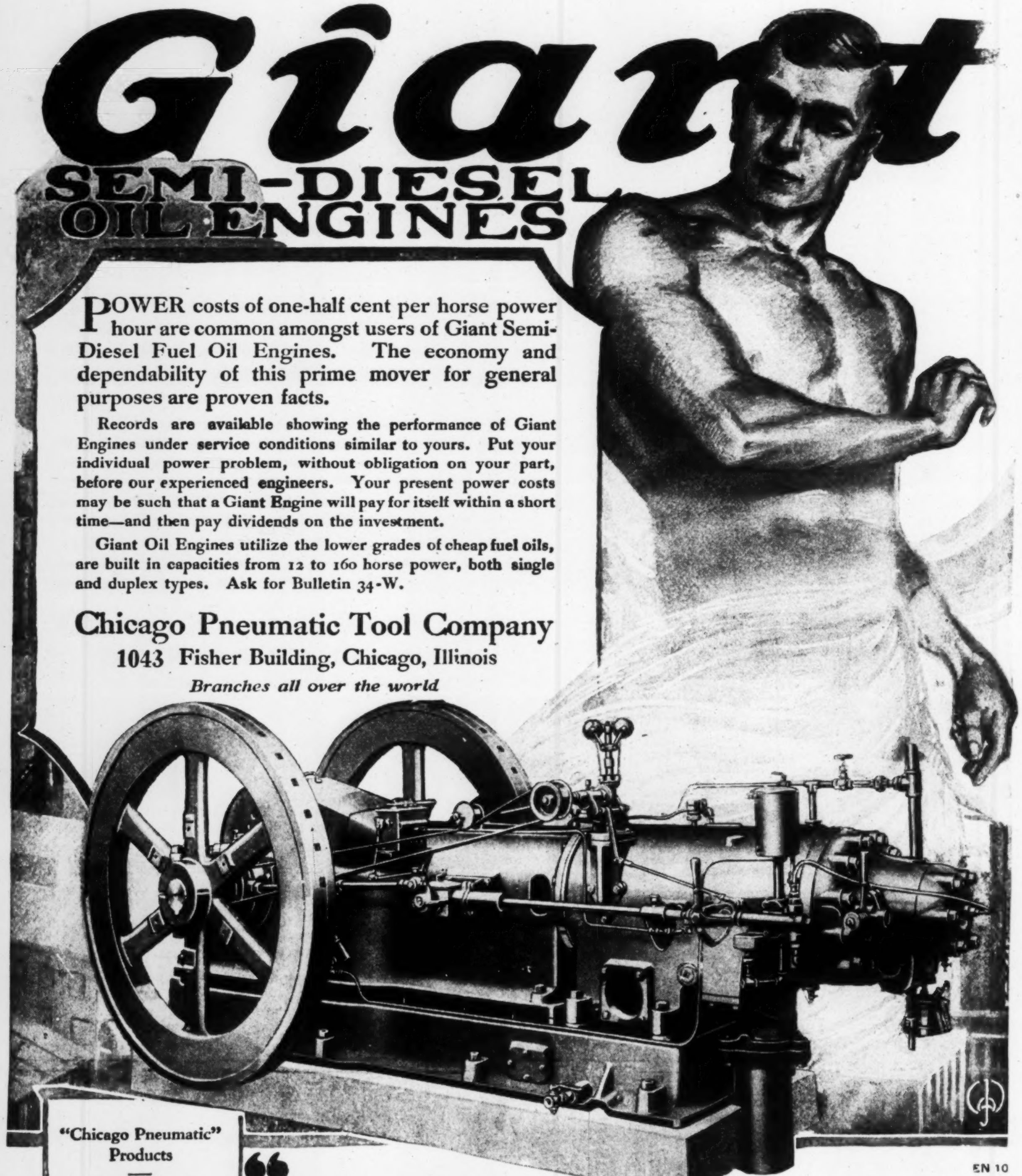
TRUSCON STEEL CO.
TRUSCON
BUILDING PRODUCTS

Erection building of Ford Eagle Plant, 1700 ft. long, 250 ft. wide. Four acres of Truscon Steel Windows. Albert Kahn, Archt.



E. N.-R.

Truscon Steel
Company
Youngstown, Ohio
Send Truscon Window Book and suggestions for building....x..
x..........to be used for..........
....
Name ....
Address ....



Giant

SEMI-DIESEL OIL ENGINES

POWER costs of one-half cent per horse power hour are common amongst users of Giant Semi-Diesel Fuel Oil Engines. The economy and dependability of this prime mover for general purposes are proven facts.

Records are available showing the performance of Giant Engines under service conditions similar to yours. Put your individual power problem, without obligation on your part, before our experienced engineers. Your present power costs may be such that a Giant Engine will pay for itself within a short time—and then pay dividends on the investment.

Giant Oil Engines utilize the lower grades of cheap fuel oils, are built in capacities from 12 to 160 horse power, both single and duplex types. Ask for Bulletin 34-W.

Chicago Pneumatic Tool Company
1043 Fisher Building, Chicago, Illinois
Branches all over the world

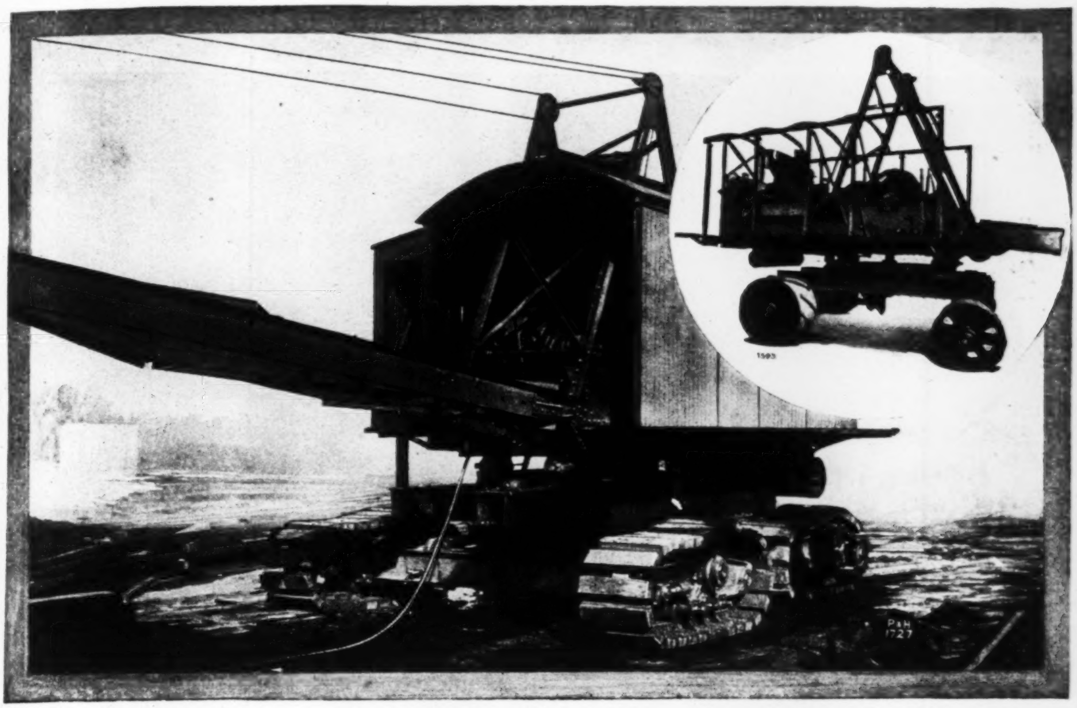
EN 10

"Chicago Pneumatic" Products

Pneumatic Tools
Electric Drills
Air Compressors
Oil, Gas and Steam Engines
Vacuum Pumps
Rock Drills

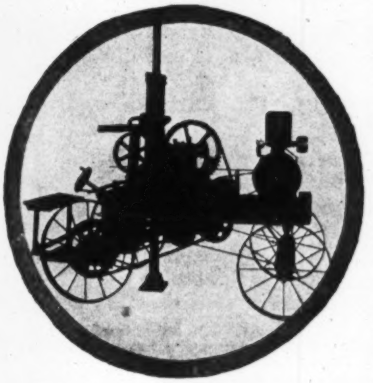
"CHICAGO PNEUMATIC"

Depend upon that name



"Built Like a Bridge"

THE entire mechanism is sustained on two heavy girders which in turn are supported on axles of I-beam construction and sturdy steel corduroys. A solid frame distributes the strain of operation evenly over the machine. These two facts are enough to convince you of the rugged construction of Dragline P & H Excavators, if you know machinery a bit.



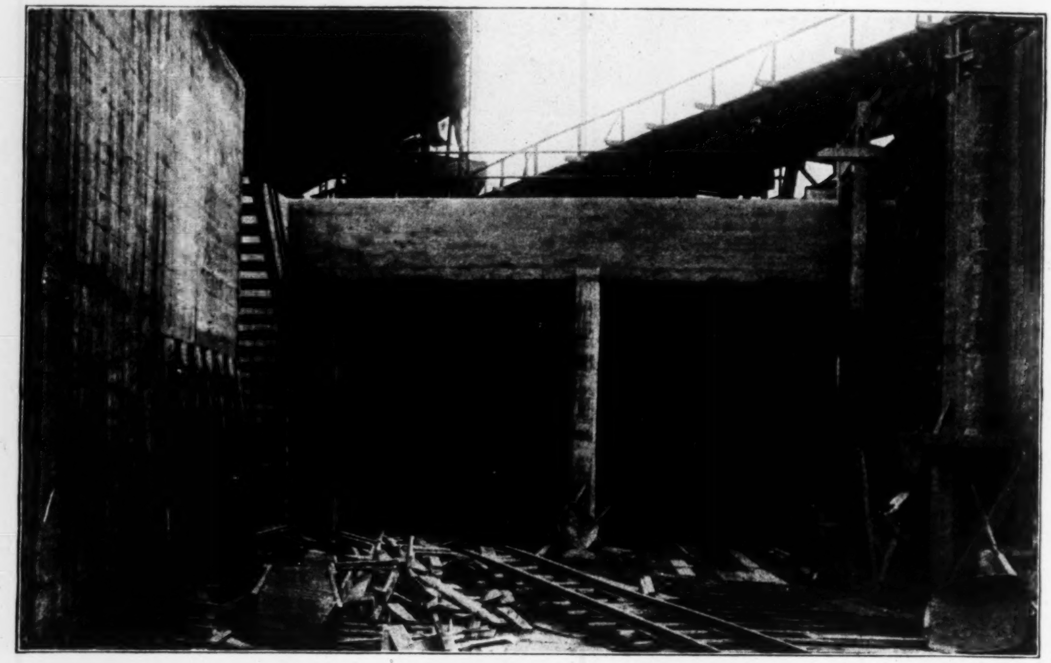
The P & H Power Traction Tamper strikes 42 blows per minute with a 150 lb. tamping head or ram, covering an area of 9 x 12 inches at one blow; it will thoroly tamp and compact 6 ft. of trench backfill per minute. Compare this with the efforts of your huskiest laborer. Cheaper, faster, more dependable in results than hand tamping; is that worth anything to you? Ask for Bulletin 8C—the P & H Power Tamper.

Even such a simple, commonplace affair as the engine house on this machine is built to a quality standard. It consists of angle iron framing incased in double beaded and matched yellow pine. Elaborate? Yes, but this housing must not only withstand the racking of dragline operations, but also protect the machinery against the wear and tear of the elements.

It is attention to little points of construction together with correct design and the use of good material thruout that puts P & H Excavators into the better class of contractor's machinery. Bulletin on the Draglines?

PAWLING & HARNISCHFEGER CO.
MILWAUKEE, WISCONSIN

P&H —excavators,— backfillers, tampers.



Switching Tunnel, Inland Steel Co., Indiana Harbor, Ind. Medusa Waterproofing in the Concrete

Watertight Under Heavy Water Pressure

The tunnel shown above connects Plants No. 1 and No. 2 of the Inland Steel Co., and carries an average water head of from 12 to as high as 16 feet.

The engineers in charge of construction took no chances on waterproofing materials. They used Medusa Waterproofiing, the original *integral* waterproofing for all cement and concrete work. The result is that the entire 2214 feet of this tunnel are watertight.

The floors and sidewalks were finished with a mortar coat $\frac{1}{2}$-inch thick, consisting of two parts sand and one part Medusa Waterproofed Cement. Medusa Waterproofing was also used in connecting the steel girders in the covered sections.

Medusa Waterproofing is the ideal waterproofing for all stucco, cement and concrete work. It comes in powder or paste form ready for use with any gray or white cement. It is mixed with the sand, cement and gravel and covers every granule and every pore with a water repellent film. Water cannot enter; dampness or ugly stains are impossible. No mere surface coating can equal Medusa Waterproofing. Always specify Medusa

MEDUSA
WATERPROOFING
PATENTED

"How to Make Concrete Waterproof" should be found in the library of every engineer. Copy will be sent you upon request.

The Sandusky Cement Company

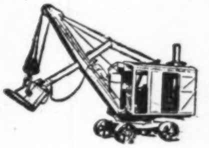
Department B, Cleveland, Ohio

Also Manufacturers of Medusa Gray and Medusa White Portland Cement — Plain and Waterproofed

MEDUSA WATERPROOFING

You will feel this way, too
when you own an Erie!—

"We have worked our ERIE for three years in shale, loose rock, gumbo, and hard clay. In all of this time we have done very little shooting to aid the shovel, although we have often dug material that should have been shot.



"In spite of this hard service our ERIE is in good condition, and does its work just as well as ever.

"I have watched every make of steam-shovel, but I have never seen any other 20-ton machine that can dig in the material which our ERIE handles regularly.

"We believe that the ERIE has no equal on the market today."

Signed P. S. Hornor, ALLEN & HORNOR
General Contractors
Clarksburg, W. Va.

ERIE SHOVEL
BALL ENG

ERIE Shovel owned by
Allen & Hornor, Clarksburg, W. Va.

Compared with hand labor, any good steam-shovel will prove to be a money-saver.

But there is a lot of difference in shovels—a difference which may amount to as much as 30 or 40 per cent. of your profits.

Before you buy, investigate carefully. Get the facts. Pick the best steam-shovel.

We would like to send you a bulletin showing just what the ERIE can do. Write for a copy of Bulletin N. Address:

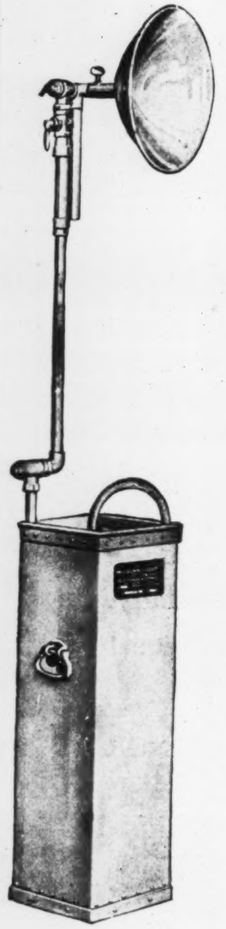
BALL ENGINE CO., Erie, Pa.

Builders of ERIE Steam-Shovels and Locomotive Cranes,
ERIE Railway-Ditchers; BALL Engines.

ERIE Revolving Shovels

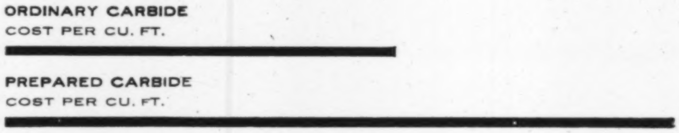
BALL
Engine Co
Erie, Pa.

MILBURN Lights Are Standard



The construction of MILBURN acetylene lights enables them to extract the maximum illumination from ordinary lump carbide—the cheapest form in which carbide is sold.

It costs you 73% more to use specially prepared carbide than if you use the ordinary kind, which is sold the world over. In the first place, prepared carbide sells for nearly 40% more than ordinary carbide, and besides it is not nearly as efficient. A pound of the expensive kind actually generates much less gas than the ordinary kind used in MILBURN light. Here is the story:



The operation of the MILBURN light is simplicity itself. Just fill the pockets—it can't be overcharged. After a day's use simply dump the used carbide and recharge. You don't have to bother to throw out the water or clean the tank. The most inexperienced workman can't go wrong on a MILBURN light.

Write for booklet No. 21 or send for the complete catalogue.

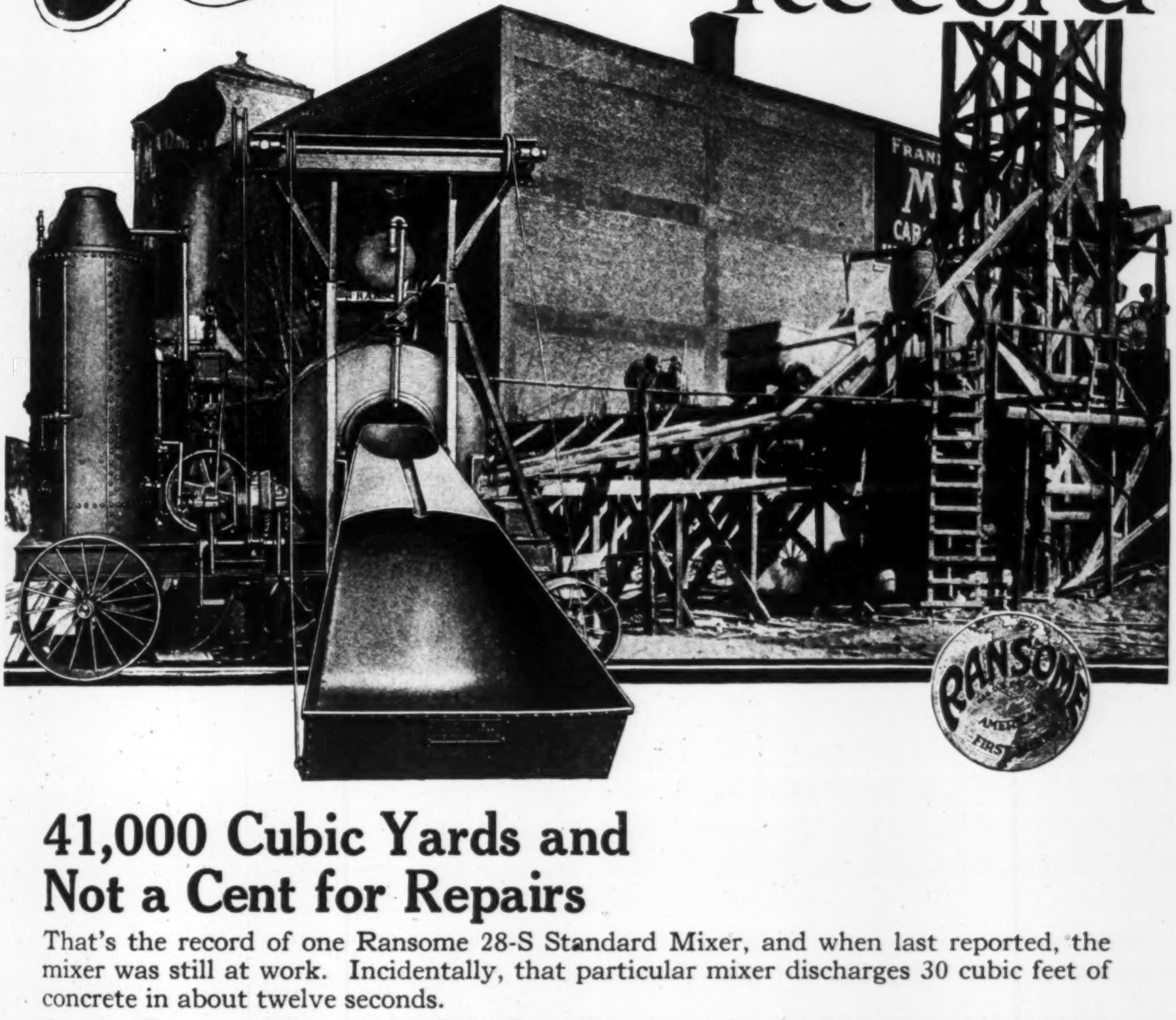
We also manufacture complete welding equipment—everything from a torch to the largest generators and compressors. Booklet No. 31 describes oxy-acetylene apparatus.

THE ALEXANDER MILBURN COMPANY - BALTIMORE, MD

New York	Chicago	Pittsburgh	San Francisco
51 E. 42d St.	1012 Kimball Bldg.	406 Bessemer Bldg.	1037 Monadnock Bldg.

Agencies throughout the United States and Canada

Making a Ransome Record



41,000 Cubic Yards and Not a Cent for Repairs

That's the record of one Ransome 28-S Standard Mixer, and when last reported, the mixer was still at work. Incidentally, that particular mixer discharges 30 cubic feet of concrete in about twelve seconds.

Another Ransome Mixer—a 7-E High Drum Paver, put down 470 square yards of 6-inch concrete in eight and a half hours, with an unskilled crew and the total repairs for 50,000 square yards was only one-tenth of a cent per square yard.

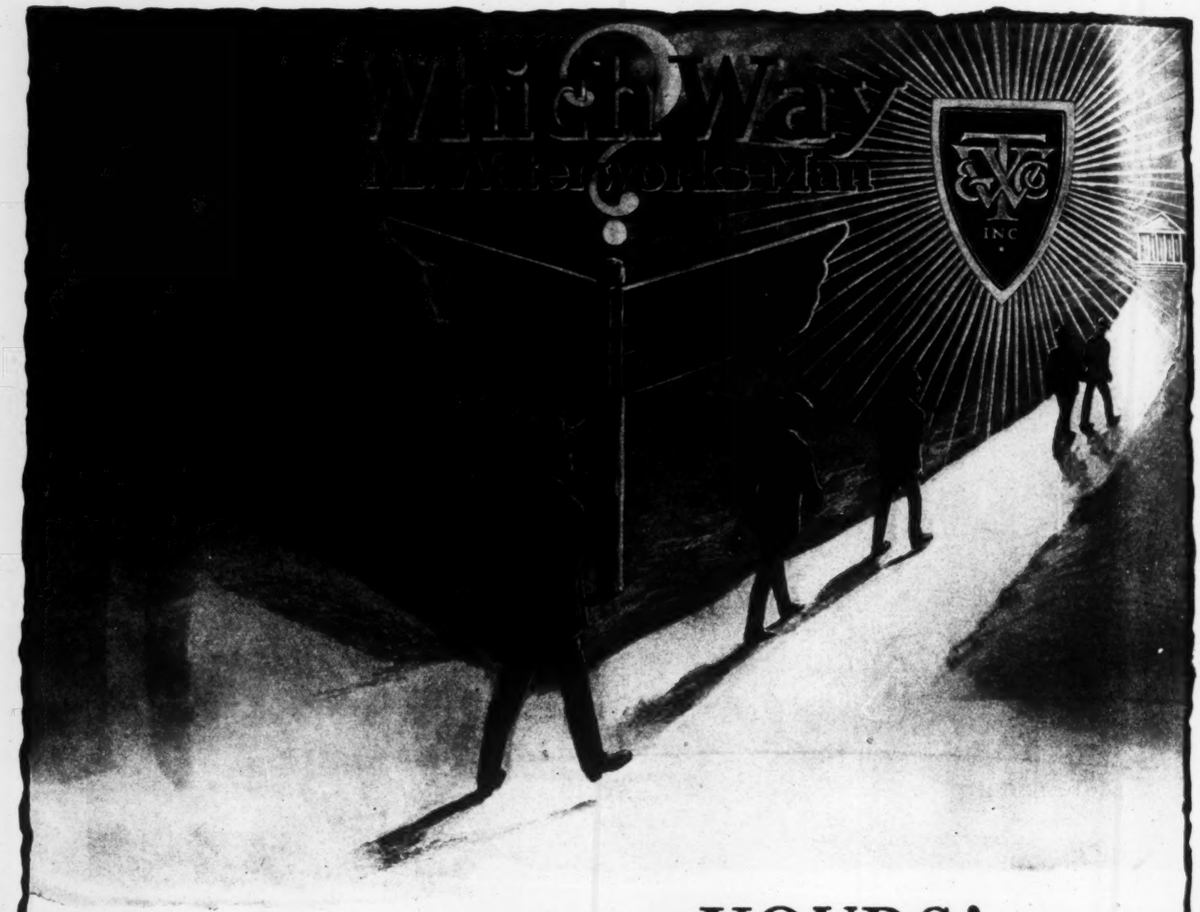
That's the sort of thing that explains the preference of contractors for Ransome Equipment.

Write for Bulletin 200 on Ransome Standard Mixers.

RANSOME CONCRETE MACHINERY CO.

Main Office and Works: 1750 Second Street, Dunellen, N. J.

Branch Offices: **Boston, New York, Chicago, San Francisco, Philadelphia, Pittsburgh, Detroit**
Canadian Representatives: **F. H. Hopkins & Co., Montreal and Toronto**
Agencies in all Principal Cities
Manufacturers of mixers, pavers, pneumatic mixers, chuting plants, hoist buckets, bins, cars, carts, etc. 31-82



The Responsibility is YOURS!

ONE WAY lies the ever potential danger of TYPHOID FEVER and similar water-borne diseases, through a polluted Water Supply

THE *OTHER* way—*the right way*, means complete protection by efficient sterilization to you, your family, your friends, your entire community.

There is but one way

to be sure that any water is safe—STERILIZE IT—
by Liquid Chlorine and

"W & T" Equipment

THE STANDARD CHLORINATOR

The water supplies of New York, London, Paris, and hundreds of other cities and towns, large and small, throughout the world are equipped with this apparatus, treating upwards of Three Billions of gallons daily.

The Cost? But 17 cents to 50 cents per million gallons.

Which Way, Mr. Waterworks Man?

WALLACE & TIERNAN CO., Inc.
349 Broadway New York
Peoples Gas Building, Chicago, Ill.

Canadian Representatives
The General Supply Co., of Canada, Ltd.
Ottawa, Montreal, Toronto, Winnipeg, Vancouver

Pacific Coast Representative
Kenneth Shibley, Merchants Exchange Building
San Francisco, Cal.

Southwestern Representative: David Morey, Jr., 507 Scollard Building, Dallas, Texas

INTAKE CRIB, BUFFALO PUMPING STATION.
NEW PUMPING STATION CITY OF BUFFALO, N.Y.

BUFFALO appreciates the quality of E. B. G. Liquid Chlorine, and E. B. G. Service.

Used exclusively since 1914

Typhoid Death Rate
of Buffalo

Before **Chlorination**
1910-1914—Average 17.4
per 100,000

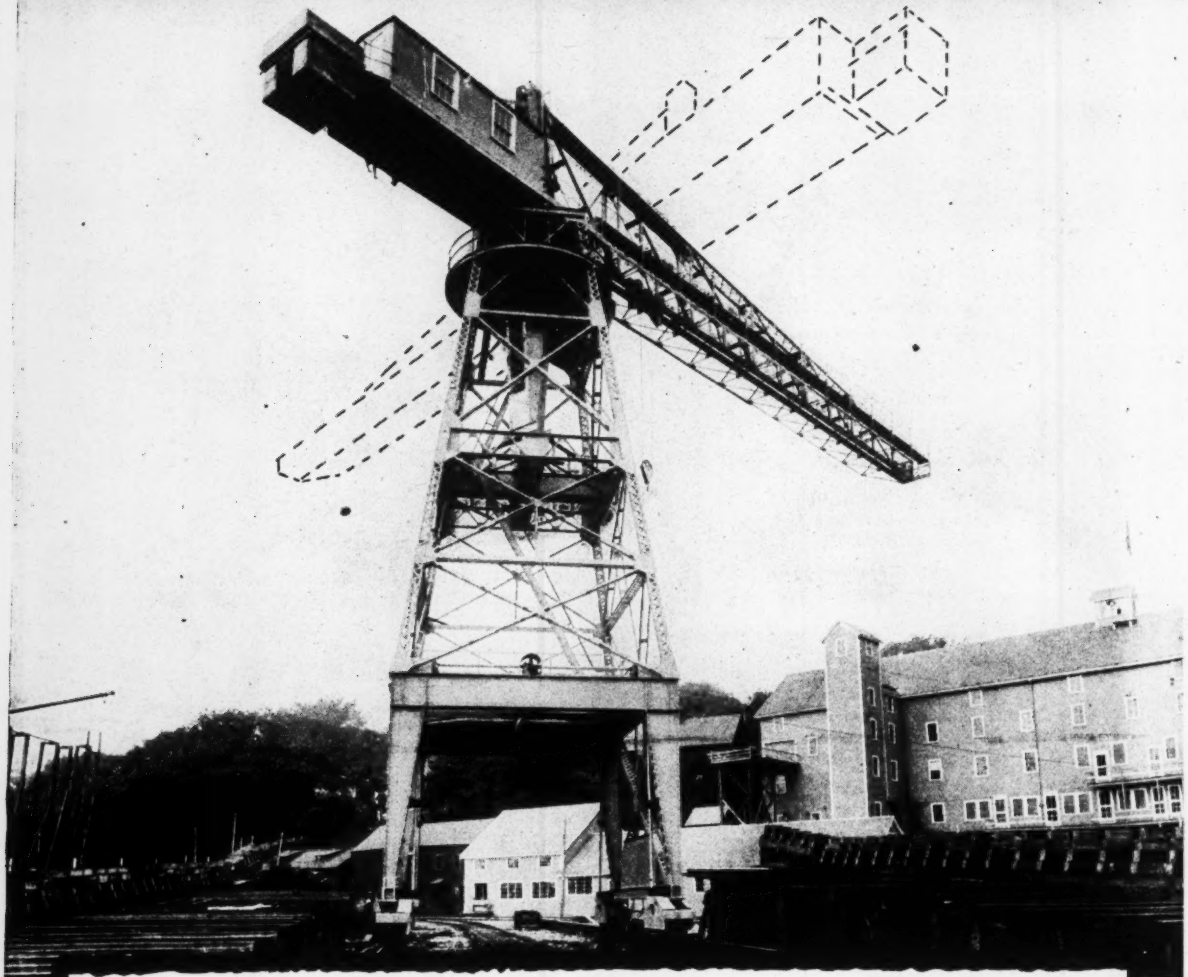
After Chlorination
1915-1918—9.5 per 100,000

ELECTRO BLEACHING GAS COMPANY
Pioneers and Leading Manufacturers of Liquid Chlorine
MAIN OFFICE: 18 EAST FORTY-FIRST STREET NEW YORK CITY

Plant: Niagara Falls, N. Y. **Chicago Office: 11 La Salle Street**

Liquid EBG Chlorine

LOCOMOTIVE CRANES
CLAM SHELL BUCKETS - SHIPBUILDING CRANES
CAR DUMPERS PILE DRIVERS
THE McMYLER INTERSTATE Co.
CLEVELAND OHIO



This Traveling Hammerhead Serves Two Ways

Two Shipbuilding Ways are covered by the swing of this crane, originated at Crane Headquarters. Capacity 10 tons at 50-ft. radius. But the principal point is this—it took vision, solid engineering skill and adequate shop facilities to build this crane. This is what makes McMyler Interstate of such value to men who want efficient handling equipment. Realize this, that you have in this organization a means of securing the crane you want. We build cranes varying in size from the smallest to the largest with equal success. Better get in touch with us now.

THE McMYLER INTERSTATE CO.

Chicago *Crane Headquarters* **Cleveland, Ohio** **New York** S.C.2

MICHIGAN PIPE

Laid Before the Eyes of Michigan Experts

There's no lost motion, time consumed building elaborate tackle where Michigan Pipe is laid. A water pipe expert from our own field staff is available to oversee the job from the unloading to the filling in. Common labor and this man lay Michigan Pipe perfectly and rapidly (2500 feet of 6-inch pipe is often laid in 5 hours). Compare this with ordinary water main construction costs.

If you are interested in the reason why far-sighted municipal engineers choose "Michigan" Pipe for permanent construction, it is found in the fact that this pipe is corrosion-proof, remains free from incrustations and algæ, preserves purity of water, has some 20 per cent. greater carrying capacity and only nominal maintenance cost. Let us send you the names of some municipalities using "Michigan."

Write for the "Michigan Pipe Book."

"Perfection Points"

Low Cost of Laying
Low Initial Cost
Durability—40 years' record
We Help to Lay it
Frost-proof
Corrosion-proof
Laid in a Wet Trench
Low Repair Costs
Enduring Strength
Service Connections Easily Made
Preserves Purity of Water
Light-weight (easily handled)
No Electrolysis
Greater Carrying Capacity
Nominal Maintenance Costs
Laid by Common Labor
Made by a firm with 40 years' experience

The Michigan Pipe Co., 17 North Madison Ave., Bay City, Mich.

New York City, N. Y......30 E. 42nd St.
Oklahoma City, Okla.....14 N. Dewey St.
Chicago, Ill.....Insurance Exchange Bldg.
Boston, Mass..............93 Broad St.
Cleveland, Ohio..........919 American Trust Bldg.
Chattanooga, Tenn...319 Hamilton Nat'l Bank Bldg.
Montreal, Ont., Canada............................204 St. James St.

"Steel for Strength—Wood for Durability"

OSGOOD 18

Reaches Far Out of the Pit

THIS picture shows an OSGOOD "18"—¾-yd. Revolving Steam Shovel, owned by Mr. Harry M. Saxbe, Urbana, Ohio, operating in a gravel pit. Note particularly that the long reach of the OSGOOD "18" enables the operator to swing the dipper far above the top of the wagon bed. Another interesting feature about this shovel is the remarkable yardage record which it established at Camp Knox.

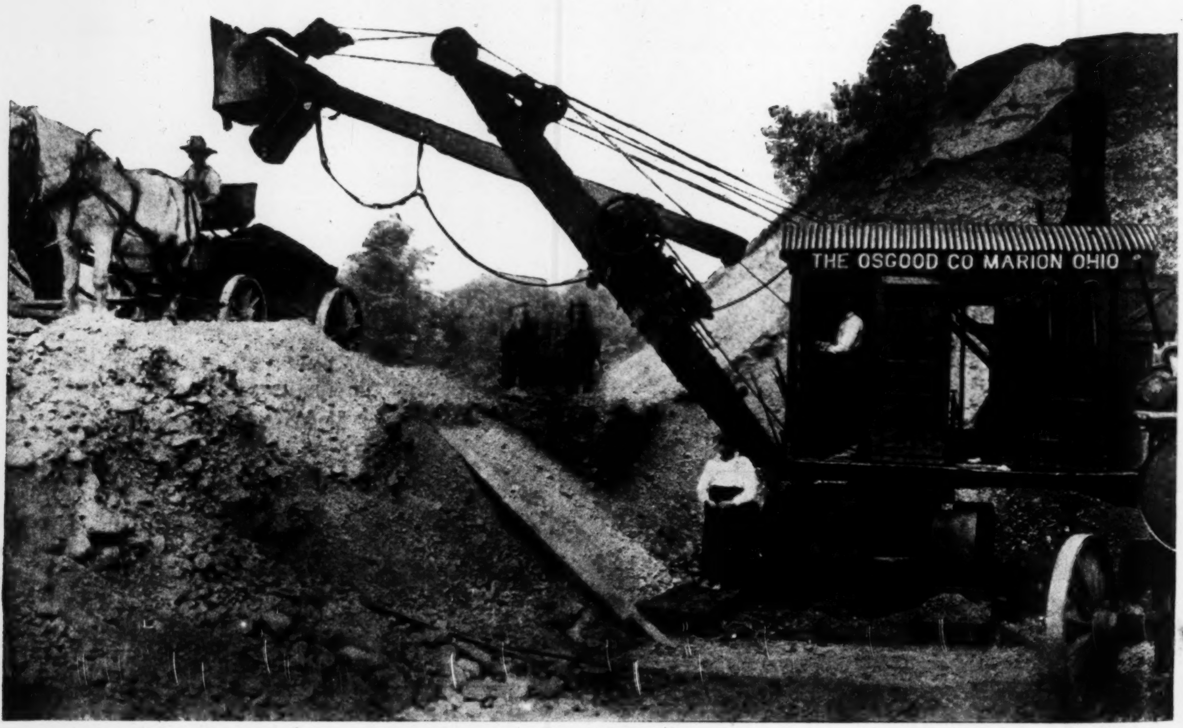
The OSGOOD "18" is a compact, powerful shovel that is adapted perfectly to Road Grading, Cellar and Sewer Excavations, Ditching, Dredging, Quarry Work, etc.

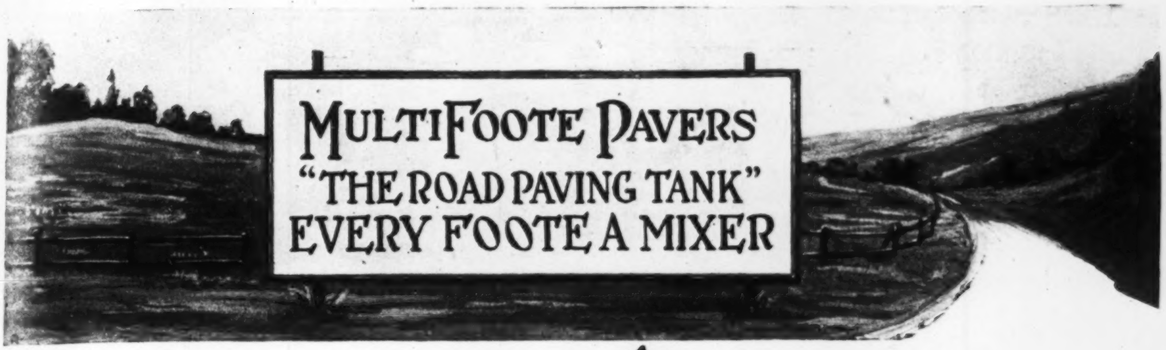
Write TODAY for information on OSGOOD "18".

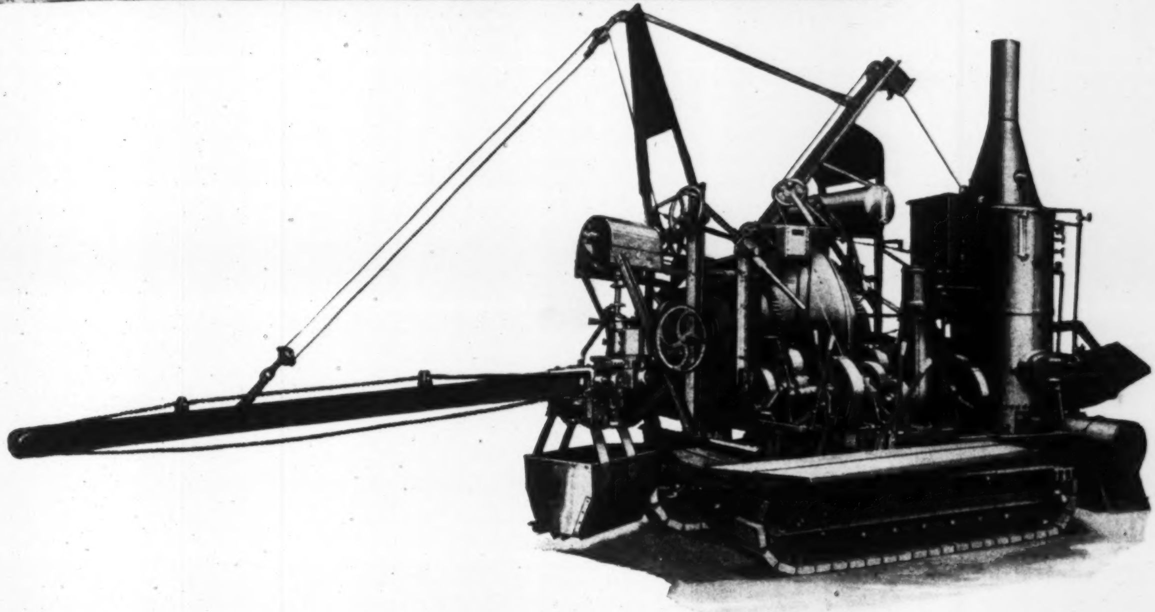
Ask for copy of our new General Catalog A-1.

Revolving and Railroad Types—¾ to 6 cu.yds.

The Osgood Company
Marion, Ohio







There Are Reasons Why 65% Of All Foote Sales Are Repeat Orders

I. Multifoote Traction

Multifoote traction eliminates traction troubles. Two speeds with reserve power.

II. Distribution

Either Boom and Bucket or Gravity Chute.

III. Power Equipment

Power equipment is the basis of all operation—that's why Foote's margin of safety calls for 50% reserve power.

IV. Foote Operation

From a large platform, one operator, out of the way of the gang, without moving away from his levers can see the loading, discharging and placing of the concrete. It prevents delays and means more yardage.

V. Foote Batchmeter

Insures uniform mix for every batch, locks and unlocks the discharge chute and it counts the number of batches.

VI. Foote Automatic Water Tank

Automatic measuring syphon type (no floating valves), quick, positive accurate.

VII. Foote Reputation

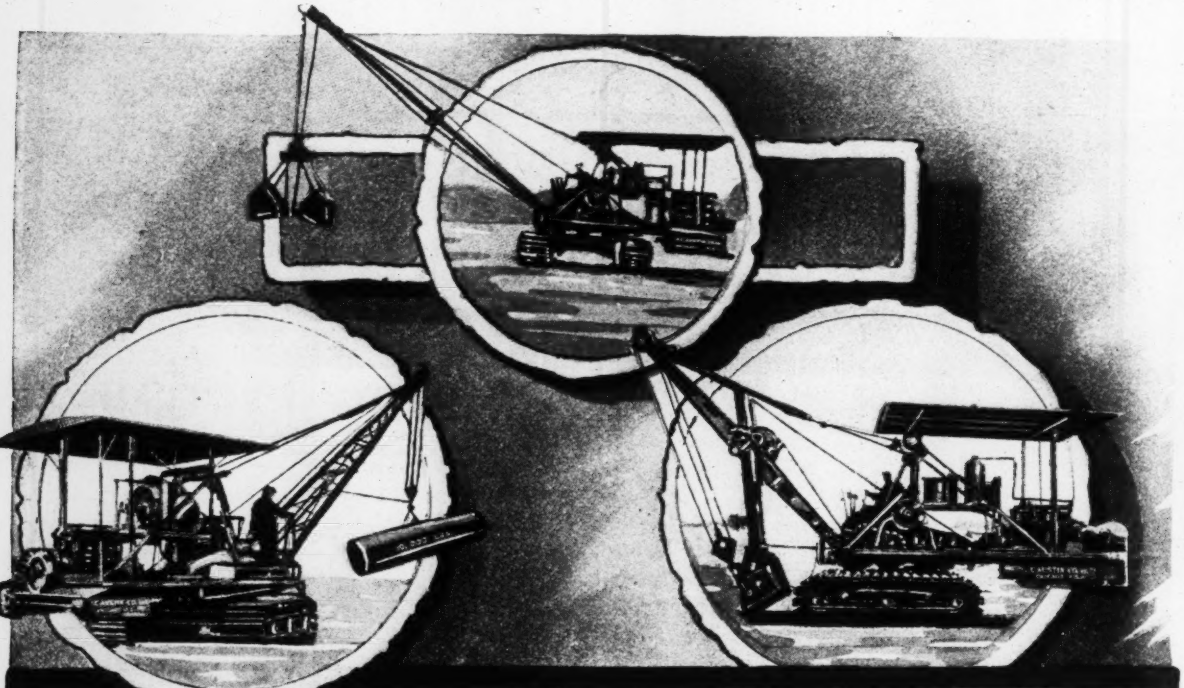
Twenty years of continued interest and study on thousands of Foote Pavers, after they were sold, has been the Foote policy. This policy has made the Foote a paver "without frills, built solely for service."

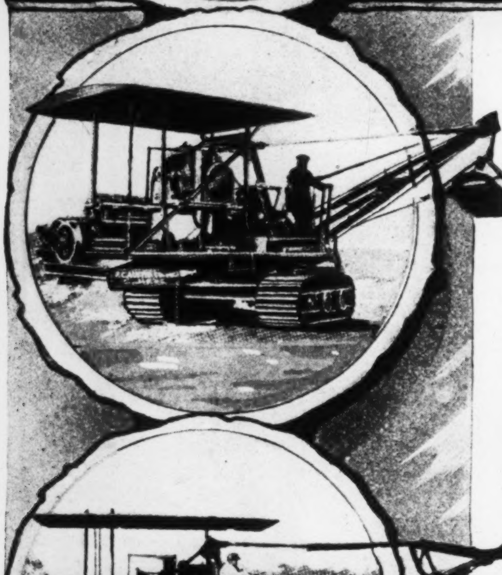
General Agents

Foote Concrete Machinery Co	1322 So. Michigan Ave., Chicago, Ill.
Wilcox Bros	26 Roosevelt Ave., Binghamton, N. Y.
E. J. McHarg & Co	3 Crandall St., Binghamton, N. Y.
Edward R. Bacon Co	51 Minna St., San Francisco, Calif.

Made by The Foote Co., Inc., Nunda, N. Y.

MULTIFOOTE PAVERS





An Ideal Combination Machine For Highway Construction Work

Plenty of Power and Strength—

At comparatively low initial outlay you may equip yourself for any road letting this year.

An Austin combination shovel—clamshell bucket, dragline, Crane-hoist—combines five machines into one.

It is operated by one man and will do economically and efficiently all the machine work on the job, preparatory to the concreting.

Use it first to unload all your equipment and materials. It does all your grading, ditching, backfilling and finishing. Use it to load your wagons or trucks, to place your pipe. Multipedal traction enables you to use it as a tractor in pulling your equipment over the subgrade without cutting it and to cross bridges without shoring.

This Austin No. 5 machine is a good investment for the road contractor and it will pay you to investigate. Many of them are in service throughout the country.

Catalog D.L. 103.

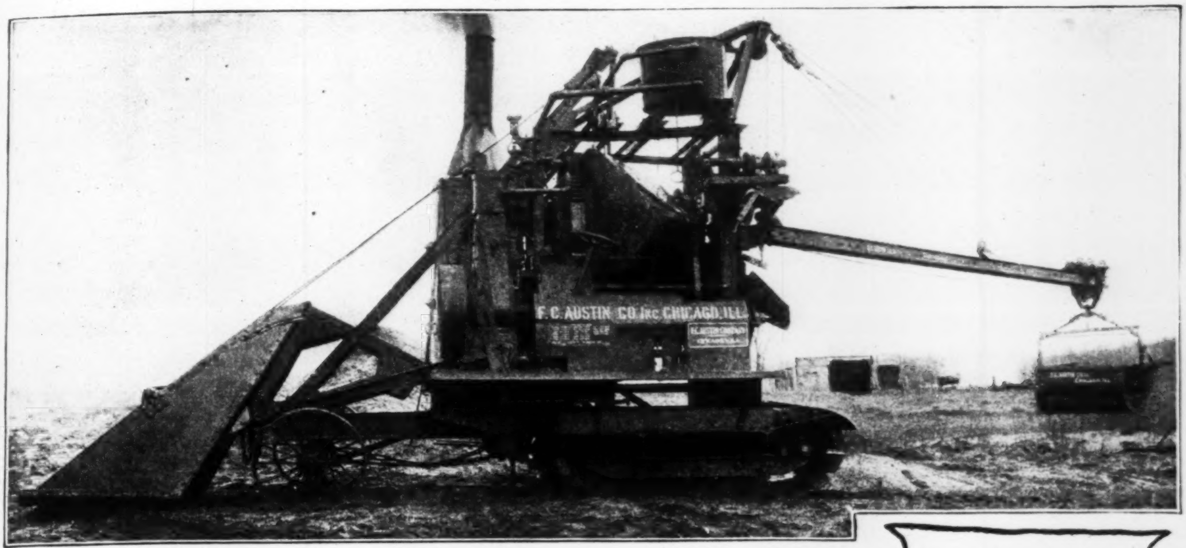
MANUFACTURERS OF

Trenching Machines
Backfillers
Farm Tile Trenchers
Dragline Excavators
Dry Land Dipper Dredges
Levee Builders
Multipedal Tractors
Wheel Tractors
Wagon Loaders

Cube Concrete Mixers
Cube Pavers
Cube Hot Mixers
Asphalt Mixers
Drum Mixers
Drum Pavers
Motor Flushers and Sprinklers
Motor Sweepers and Sprinklers
Motor Road Oilers

Ditching Machines with Bank Sloping Attachments
Drainage Excavators

Austin Combination
Shovel Dragline-Clamshell Bucket-Crane



Cube Mixers Are Intensive Mixers

Austin Cube Mixers knead the batch—they do not stir or dip, or plow the concrete, they knead it. Scientists call this action incorporation under pressure. Note the idea of incorporation. The thought is not segregation which is a stirring, plowing action, it is incorporation which is a kneading action. Austin Cubes fold and refold and squeeze the batch repeatedly in each revolution—they knead. Kneading acts on the whole batch, not on a fraction of the batch as does stirring or plowing, hence it is a quick mixing action as well as an intensive mixing action.

THE PRACTICAL GAINS ARE:

(1) The same quality of concrete is produced in less time or a much superior concrete in the same time.

(2) If time is set as is the practice in road work a more mobile or workable mixture is produced, one that can be more easily spread and compacted.

(3) If quality is set, as is the practice in most construction, more batches of standard quality are turned out per hour or day.

Interlining Plates Make Cubes Everlasting

Send for Catalog No. 3

F. C. AUSTIN COMPANY, Inc.
Main Office: **Railway Exchange Bldg., Chicago**
New York Office: **30 Church Street**

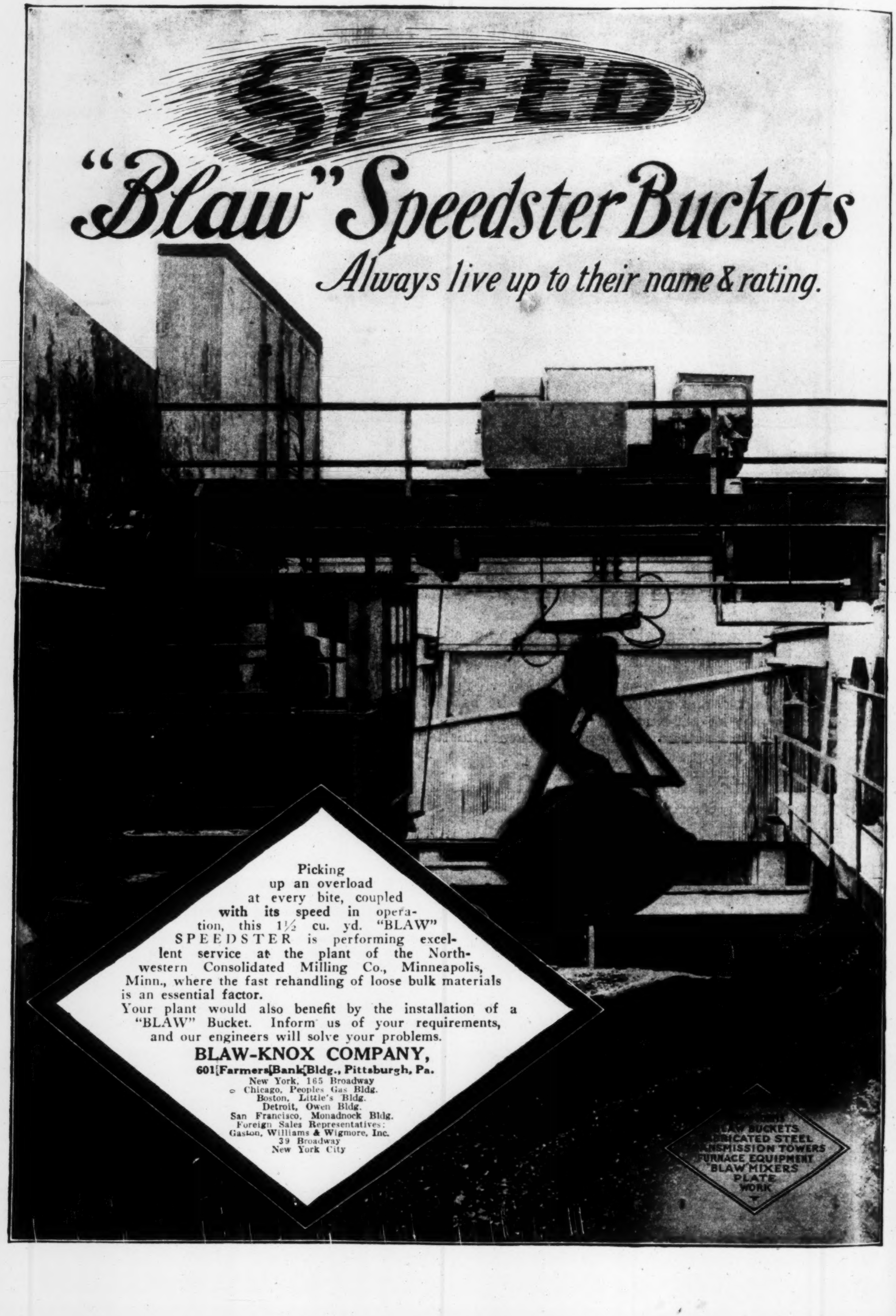
Prominent Authority Explains Value of Intensive Mixing

Few students of concrete have a reputation for sound thought and conservative speaking which equals that generally accredited to Prof. A. N. Talbot of the University of Illinois.

In a recent discussion before the American Railway Engineering Association Professor Talbot said:

More thorough mixing not only mixes the paste and better coats the particles, but it makes the mass mobile with a smaller percentage of mixing water, and this less dilute paste results in higher strength. Any improvement in method of mixing which increases the mobility of the mass will permit the use of a less dilute paste and thereby secure increased strength.

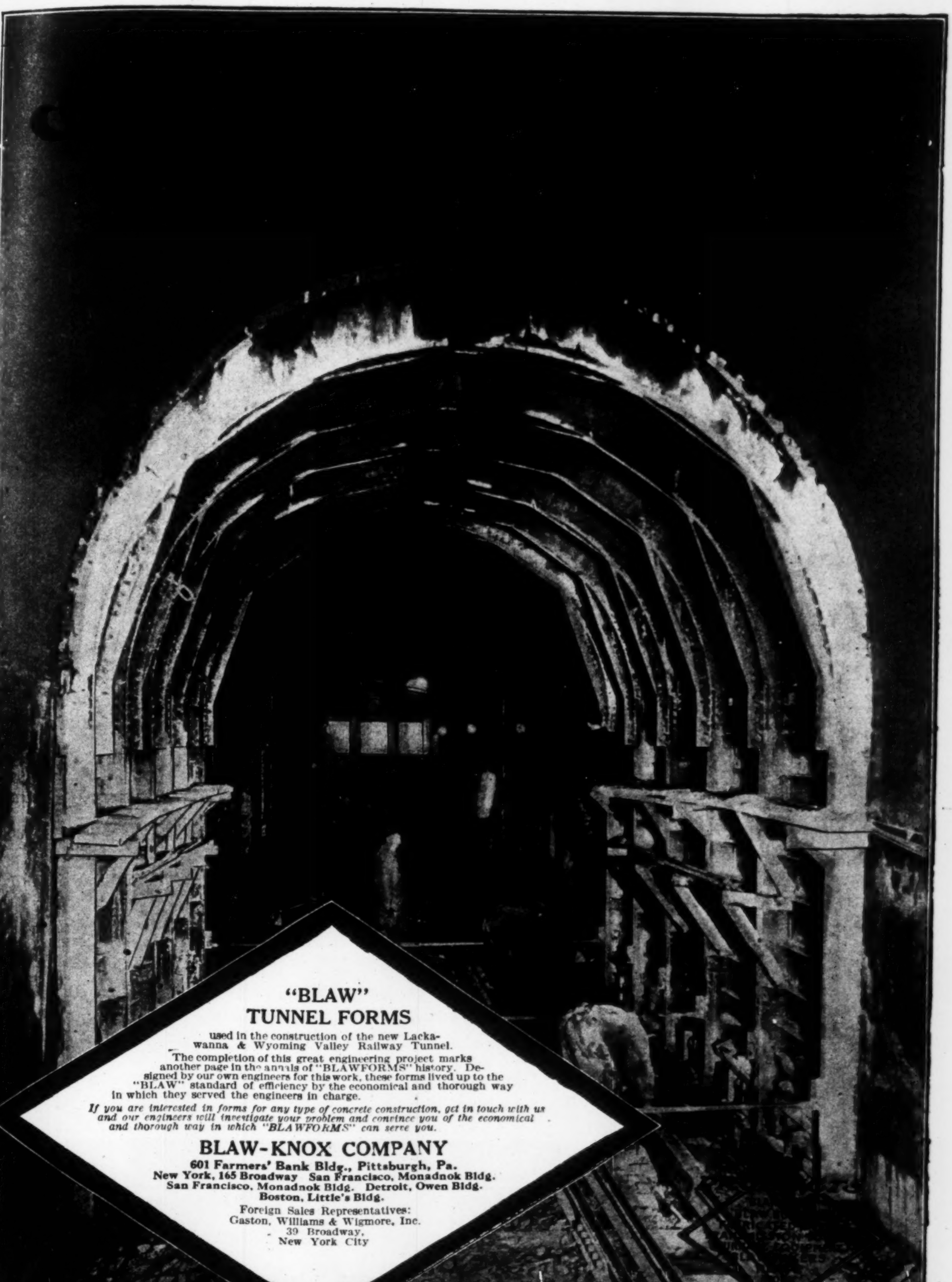
Austin
Cube Pavers


SPEED
"Blaw" Speedster Buckets
Always live up to their name & rating.
BLAW BUCKETS
FABRICATED STEEL
TRANSMISSION TOWERS
FURNACE EQUIPMENT
"BLAW" MIXERS
PLATE
WORK

Picking up an overload at every bite, coupled with its speed in operation, this 1½ cu. yd. "BLAW" SPEEDSTER is performing excellent service at the plant of the Northwestern Consolidated Milling Co., Minneapolis, Minn., where the fast rehandling of loose bulk materials is an essential factor.

Your plant would also benefit by the installation of a "BLAW" Bucket. Inform us of your requirements, and our engineers will solve your problems.

BLAW-KNOX COMPANY,
601 Farmers Bank Bldg., Pittsburgh, Pa.
New York, 165 Broadway
Chicago, Peoples Gas Bldg.
Boston, Little's Bldg.
Detroit, Owen Bldg.
San Francisco, Monadnock Bldg.
Foreign Sales Representatives:
Gaston, Williams & Wigmore, Inc.
39 Broadway
New York City



"BLAW"
TUNNEL FORMS

used in the construction of the new Lackawanna & Wyoming Valley Railway Tunnel.

The completion of this great engineering project marks another page in the annals of "BLAWFORMS" history. Designed by our own engineers for this work, these forms lived up to the "BLAW" standard of efficiency by the economical and thorough way in which they served the engineers in charge.

If you are interested in forms for any type of concrete construction, get in touch with us and our engineers will investigate your problem and convince you of the economical and thorough way in which "BLAWFORMS" can serve you.

BLAW-KNOX COMPANY

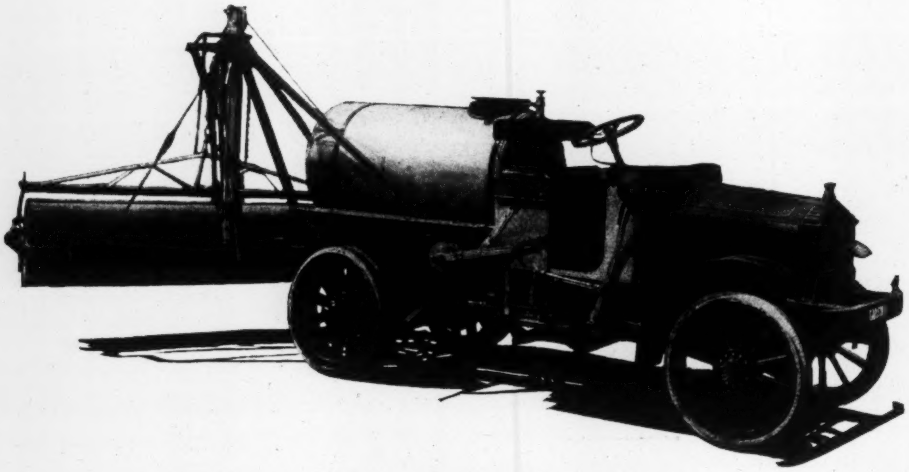
601 Farmers' Bank Bldg., Pittsburgh, Pa.
New York, 165 Broadway San Francisco, Monadnok Bldg.
San Francisco, Monadnok Bldg. Detroit, Owen Bldg.
Boston, Little's Bldg.

Foreign Sales Representatives:
Gaston, Williams & Wigmore, Inc.
39 Broadway,
New York City

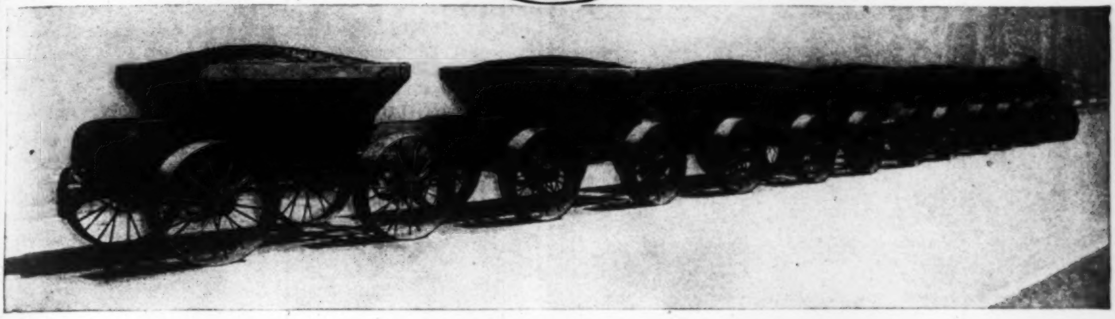
Garford
MOTOR
TRUCKS
FOR EVERY
PURPOSE

WHERE unfaltering, economical work must be done —Garford has won the confidence of thousands by giving dependable service *and low ton mile cost.*

"Users Know"



The Garford Motor Truck Company, Lima, Ohio
Motor Trucks of All Capacities
Distributors and Service Stations in all principal cities

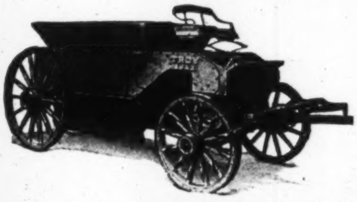


A train of 6 slow-speed Troy Trailers ("reversible wagons") carrying road material and hauled at 4 miles per hour by a "Caterpillar" Tractor.

Troy Trailers PERFORM. They are dependable. They are always RIGHT THERE. The contractor KNOWS when he uses Troy Trailers to haul his material that his material will be there—not one load at a time, but SIX LOADS every trip.

Troy Trailers

are made in both slow-speed for use behind road engines and tractors (see above) and also high-speed for use behind motor trucks, as per illustration below.

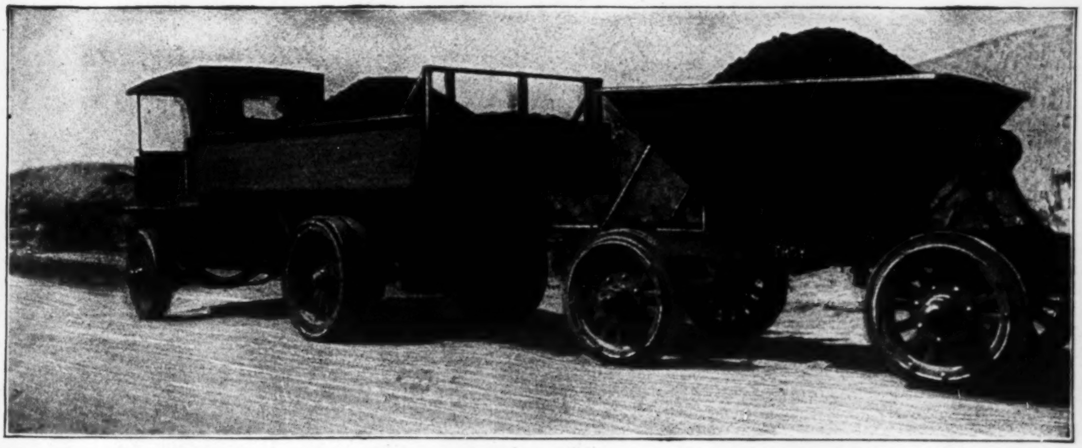


We are still building the famous old Troy Ajax, team-drawn, dump wagon.

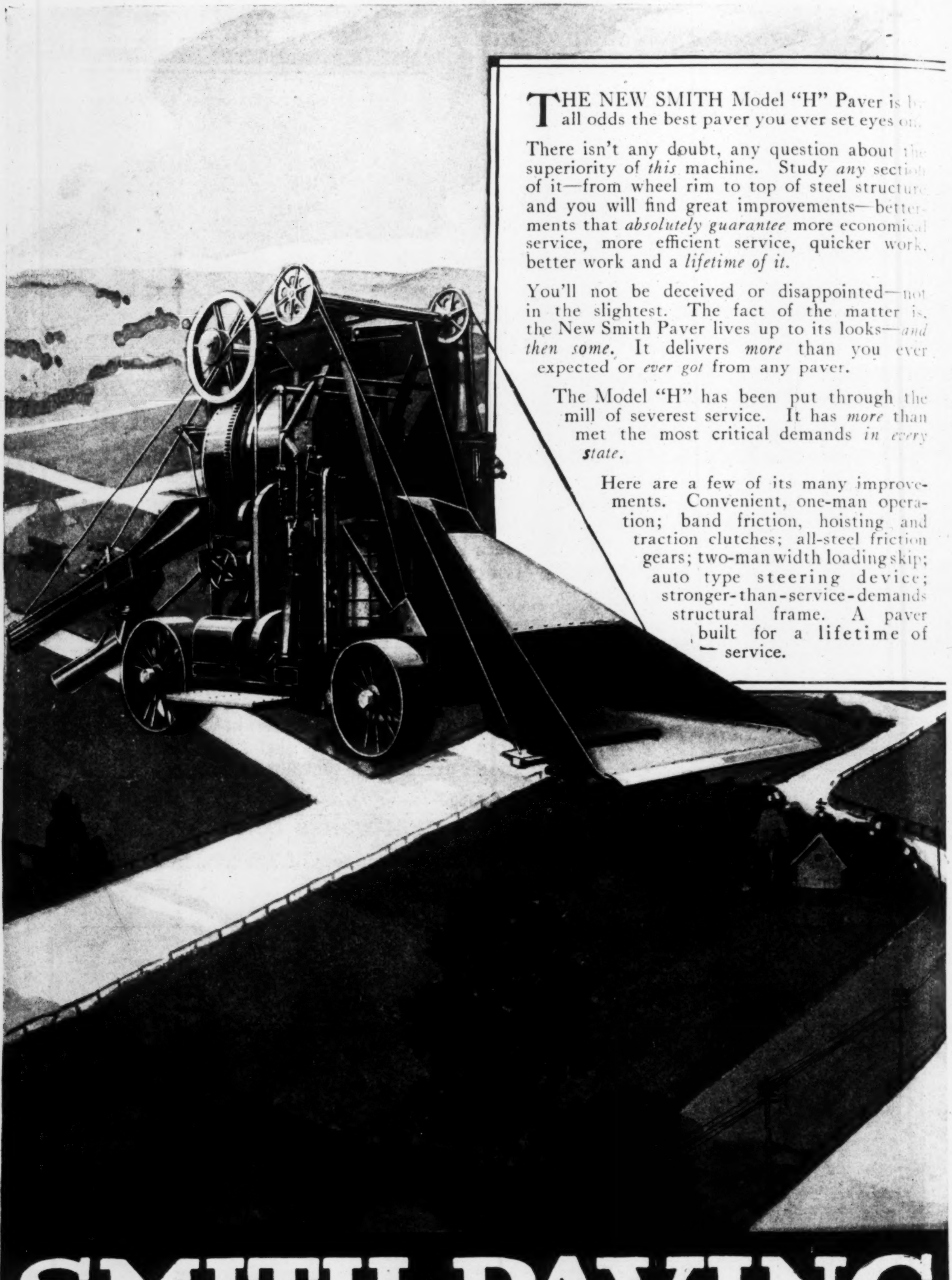
Send for folder of "Some Users" of Troy Trailers

THE TROY WAGON WORKS COMPANY, Troy, Ohio

Oldest and largest makers of Trailers, making possible highest grade construction at lowest cost.



Troy Trailers working for the O. & C. Construction Company. They could not be convinced that trucks would pay until they made a trial with trucks and trailers; they now have four TROYS.



THE NEW SMITH Model "H" Paver is by all odds the best paver you ever set eyes on.

There isn't any doubt, any question about the superiority of *this* machine. Study *any* section of it—from wheel rim to top of steel structure and you will find great improvements—betterments that *absolutely guarantee* more economical service, more efficient service, quicker work, better work and a *lifetime of it.*

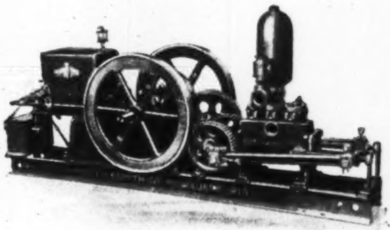
You'll not be deceived or disappointed—not in the slightest. The fact of the matter is, the New Smith Paver lives up to its looks—*and then some.* It delivers *more* than you ever expected or *ever got* from any paver.

The Model "H" has been put through the mill of severest service. It has *more* than met the most critical demands *in every state.*

Here are a few of its many improvements. Convenient, one-man operation; band friction, hoisting and traction clutches; all-steel friction gears; two-man width loading skip; auto type steering device; stronger-than-service-demands structural frame. A paver built for a lifetime of service.

SMITH PAVING

Send for our new Paver Bulletin No. 409. Get the facts. It will pay you. Write today. The Model "H" has met with a tremendous demand. There will be only a limited number of these machines available this year, so "speak up" if you are interested in turning out more work, better work—at less cost and bigger profit.

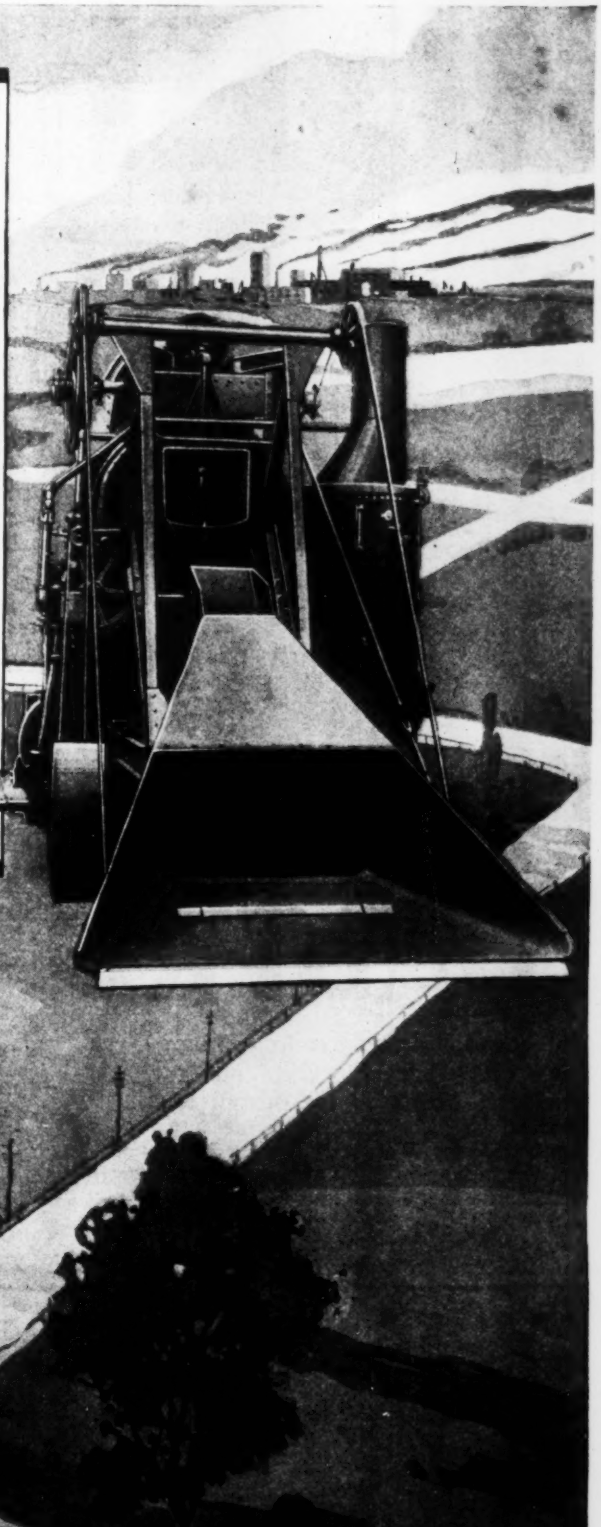


SMITH High Pressure Force Pumping Outfits

Always on the job. Never out of order. Absolutely dependable. Can't and won't go back on you under severest conditions. Abolish delays. Put a stop to repair costs. Most advanced type on the market. Last a lifetime. Never grow old. Do not wear out. Do not depreciate in service value. Best investment you can make. Catalog will prove it.

Send for Copy.

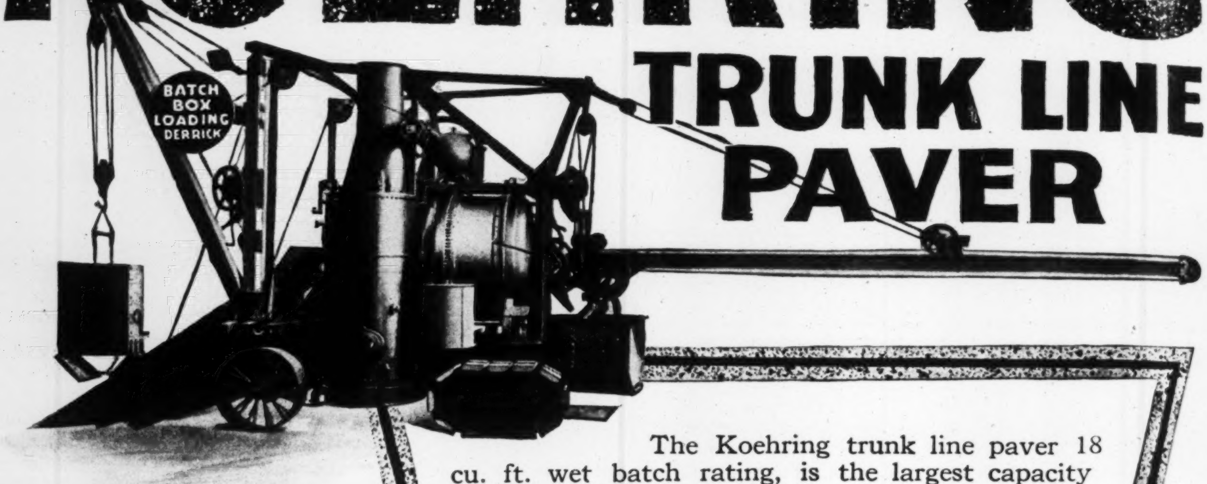
The T. L. Smith Co.
3227 Locust Street
Milwaukee, Wis.



MIXER 1919 MODEL

KOEHRING

TRUNK LINE PAVER



The Koehring trunk line paver 18 cu. ft. wet batch rating, is the largest capacity machine that good judgment will put on highway work under average conditions. The Koehring book of Blue Prints will show you why

Underslung frame for boiler and engine, to keep the center of gravity low—a big feature of low maintenance in this big paver.

The fastest paving *unit*, because automatic features of operation, both of mixer and boom and bucket system, mean a big extra yardage. Loading derrick interchangeable to either side of mixer—optional on Koehring pavers.

Koehring capacities in cu. ft. wet batch rating

Pavers 12 cu.ft., 18 cu.ft., with or without loading crane to lift batch boxes from industrial cars or trucks.
8 cu. ft., without loading derrick.
Construction Mixers 7, 10, 14, 21, 28 cu.ft.
Hot Mixers for bituminous work, 9, 14 cu.ft. side charging type; 18 cu.ft. paver type.
Gasoline, steam and electric power.

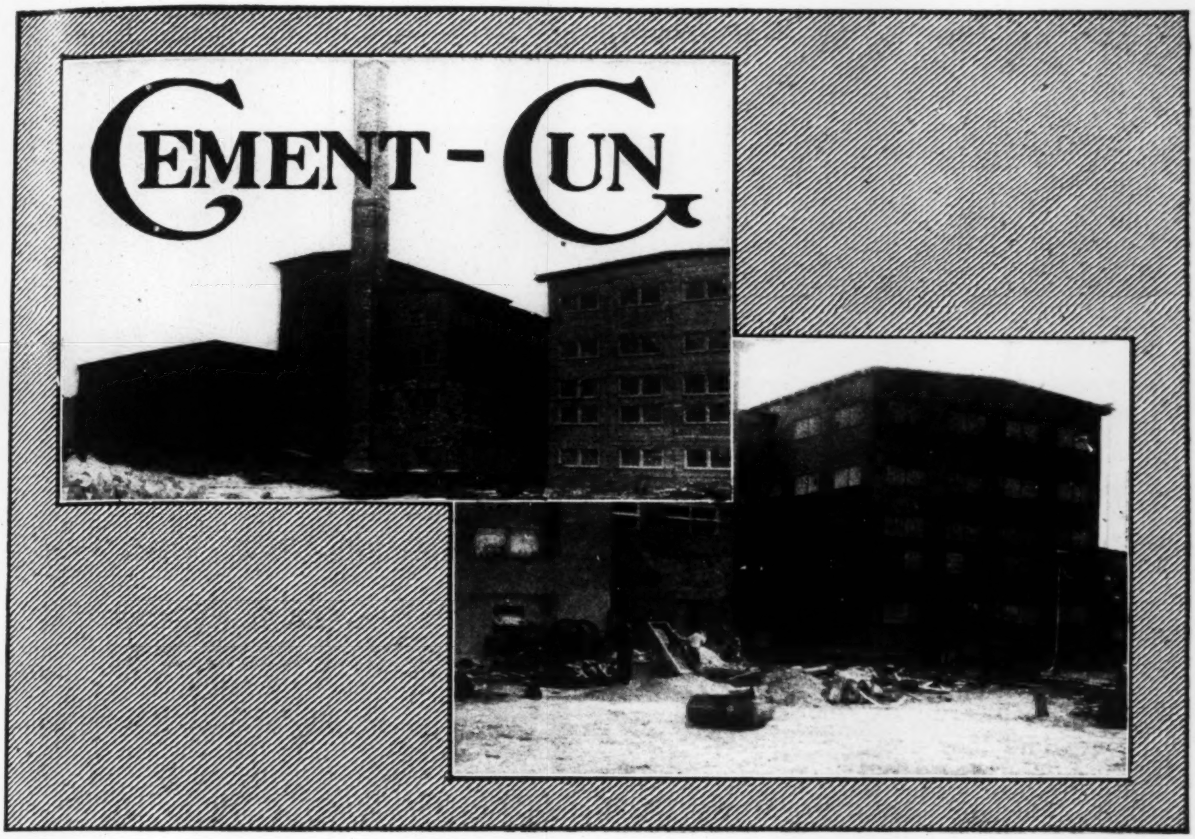
Save two-thirds of your haulage equipment—it can often be done by using two mixers instead of one. The Koehring Book of Blue Prints, each blue print 36 in. long, show you how—shows 9 ways of handling highway contracts. Glad to send it to you. Ask for Blue Print Book X.

KOEHRING MACHINE CO.
MILWAUKEE, WIS.
Sales and Service Offices and Warehouses
in all parts of U. S.

5492

KOEHRING MIXER LOADER

The cost-saving way to load mixer from the subgrade. Cuts out all wheelers. Measures the proportions for every batch, is adjustable to measure all proportions for all capacity mixers. Measuring bins move along top of frame for convenient shoveling. Materials fed through bottom gates of bins to conveyor belt that shoots charge to charging skip at speed of 500 ft. per minute. Ask for Mixer Loader catalog C-137.



Fireproofing Wooden Mill Buildings

UP in Hillsborough, New Brunswick, a big fire completely destroyed the old mills of the Albert Manufacturing Company. *After* they had rebuilt their buildings according to "mill construction" classification (heavy southern pine frames, solid floors, 2-in. tongue-and-groove spruce sheathing), they thought of *fire-proofing*.

Cement-Gun did the trick. Strips of battens were nailed outside the sheathing; coarse wire netting stretched, and Gunite (the cement-sand product of the Cement-Gun) shot all over the buildngs.

Today fire cannot harm the outside of these buildings—they are encased in *stone*. Why not fireproof your wooden buildings in the same way?

Write for bulletins on Cement-Gun work now.

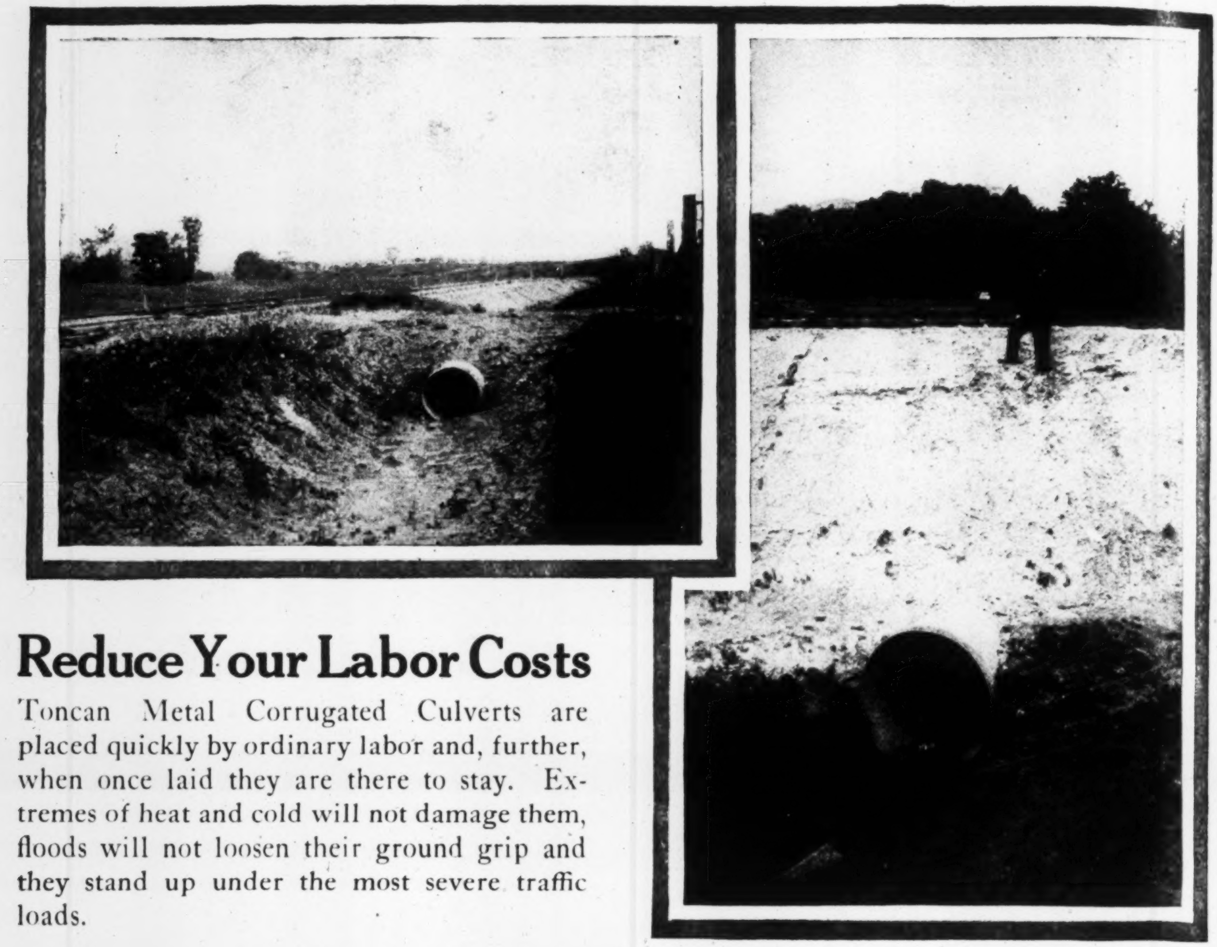
CEMENT GUN COMPANY, Inc.

Allentown, Penna.

New York Office: 30 Church St.
Chicago Office: 1414 Fisher Bldg.
Los Angeles Office: Citizens Bank Bldg.
Spokane Office: Mohawk Block
Taylor Engineering Co., Vancouver, B. C.

R. E. Cleaton & Co., 20 St. Nicholas St.,
Montreal, Canada
General Supply Co. of Canada, Ltd.,
Winnipeg, Canada.

The Cement-Gun is not a restricted article. It may be purchased outright from us and used by anyone.



Reduce Your Labor Costs

Toncan Metal Corrugated Culverts are placed quickly by ordinary labor and, further, when once laid they are there to stay. Extremes of heat and cold will not damage them, floods will not loosen their ground grip and they stand up under the most severe traffic loads.

Toncan Metal SPC. TONCAN METAL Corrugated Culverts

Resist Corrosion

The reason is that those impurities which promote corrosion have been removed. The metal is of uniform density and good all the way thru. Years of use under most trying conditions have proven that there is nothing more durable made from iron ore. In SPC. Toncan Metal we have a sheet manufactured especially for culverts. Every sheet is full weight to gauge and carries two ounces of galvanizing to every square foot of double exposed surface.

If you are interested in better iron and better culverts you will be interested in our 100 page book, "Corrosion—The Cause—The Effect—The Remedy." This contains authentic information appreciated by those who want to know the reason of things. For the past several years it has been in great demand as a reference book by architects, contractors, engineers and colleges. As long as the supply lasts we will send the book with our compliments to those who request. The demand this Spring has been exceedingly severe and we suggest an early inquiry if you are interested.

Tell us of the culvert work you have in mind and we will put you in touch with the culvert manufacturer nearest you who can supply your needs promptly. Toncan Metal Culverts are ready for immediate delivery from numerous points thruout the United States and Canada. Kindly address Department Q24.

THE STARK ROLLING MILL COMPANY, Canton, Ohio

As Long or as Short as You Want It

A Ferguson standard building can be built any length or width, conforming with given units of measurement.

The Standard No. 3, shown in the illustration, can be extended to any length in units of 20 feet and to any width in units of 50 feet.

An Owner can erect as small a building as he wishes and expand it to accommodate increased business at any time in the future by removing an end or side wall.

An Owner can erect a Ferguson Standard Building with his own building force or his local Builder.

Ferguson will sell him steel, timbers and sash at market prices, with complete erection instructions, and make prompt shipment on receipt of order.

When increased business demands additions the same building force or local builder can obtain the necessary Ferguson materials and perform the additional construction.

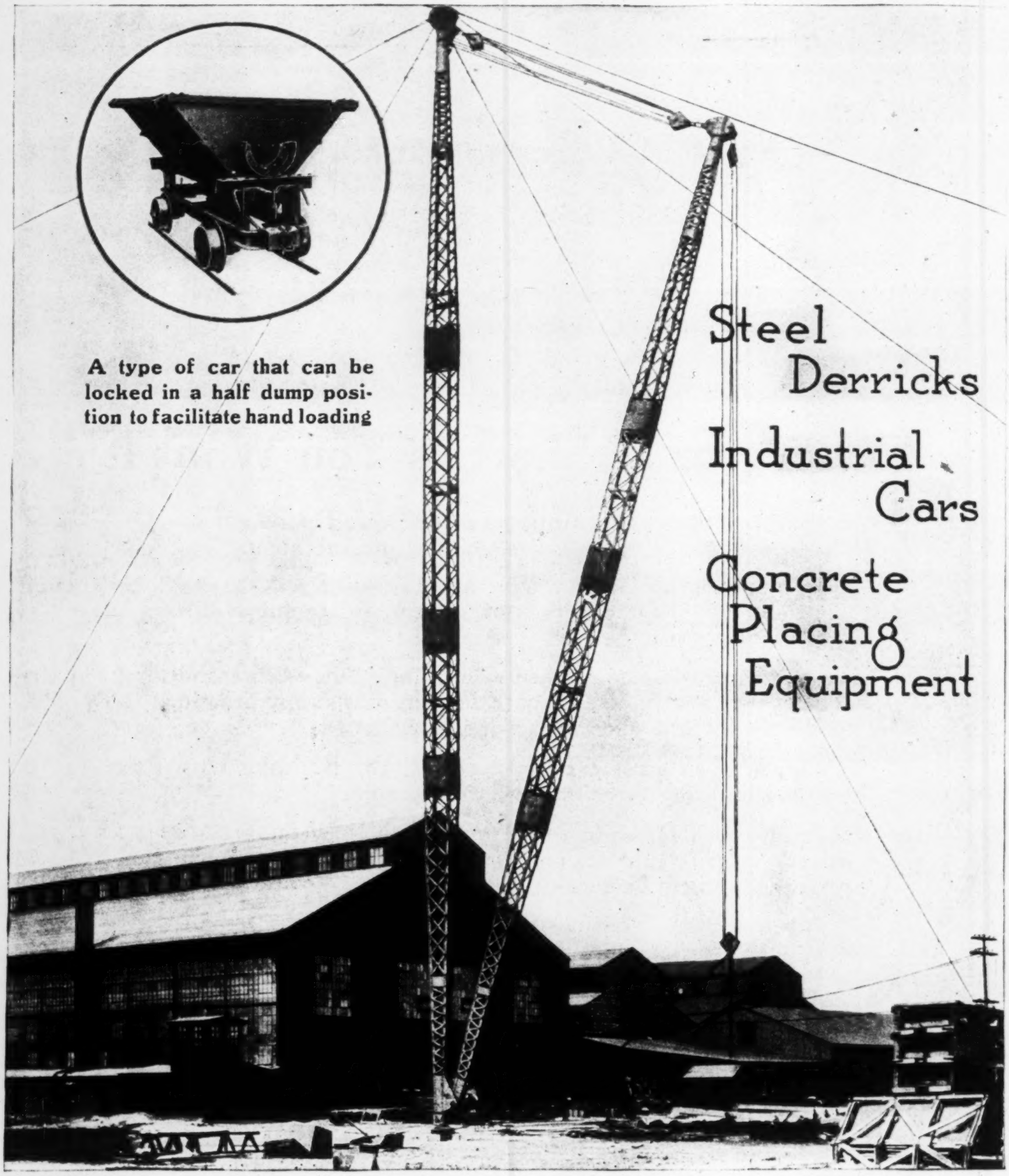
For further information regarding Ferguson Standard or Special Buildings, Phone, Wire or Write

FERGUSON ORIGINATED STANDARD FACTORIES

FERGUSON ORIGINATED STANDARD FACTORIES

The H. K. Ferguson Company
Engineers and Builders
6523 Euclid Avenue CLEVELAND, OHIO Rosedale 6854

Ferguson
STANDARD AND SPECIAL BUILDINGS


Steel
Derricks
Industrial
Cars
Concrete
Placing
Equipment

A type of car that can be locked in a half dump position to facilitate hand loading

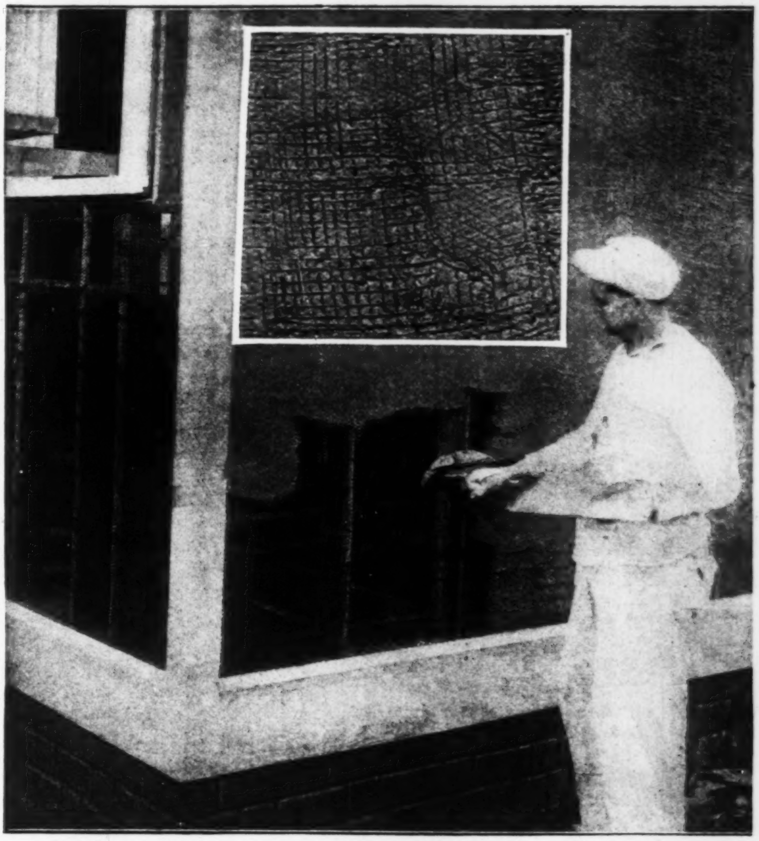
Insley Engineering Service has designed a large number of the concrete plant layouts that have been used on recent important Government construction projects. This same service is at your disposal.

INSLEY MANUFACTURING CO.

Engineers INDIANAPOLIS, INDIANA Manufacturers

NO. 16

For Stucco Construction



A quickened sense of fire risk, scarcity of lumber and the high cost of paint and labor have turned the attention of builders everywhere to stucco for exteriors.

Stucco gives beauty, adaptability, fire-resistance, enhanced value, actual economy and permanence, if it is properly applied to *the right backing.*

Berger's Expanded Metal Lath

A consideration of cost, fire-resistance, freedom from cracking and permanence, in the light of careful examination of dozens of Stucco houses will add considerable weight to our recommendation:—

"Use Stucco on Berger's Expanded Toncan Metal Lath applied direct to studding and back-plastered".

Expanded Metal Lath is a reinforcement in every direction, Toncan Metal gives extra assurance of permanence under trying conditions.

Your nearest Berger Branch can supply the lath and they'll gladly send you Metal Lath Handbook F-24—Write today.

The Berger Mfg. Co., Canton, Ohio

Branches: Boston New York Philadelphia Chicago St. Louis Minneapolis San Francisco
Export Dept.: Berger Bldg., New York City, U. S. A.

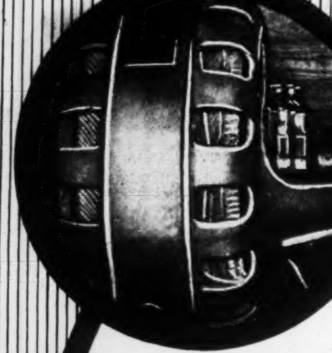
BERGER

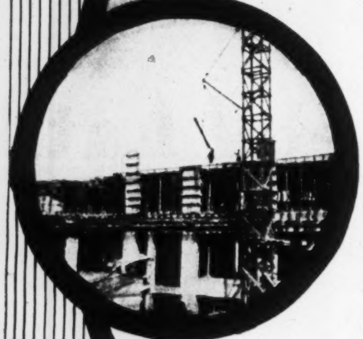
BERGER

EXPANDED METAL LATH-FLOOR CORES-REINFORCING PLATES-METAL LUMBER
STEEL FILING CASES-LOCKERS-FACTORY STORAGE BINS AND SHELVING
STEEL CEILINGS-ROOFING-SIDING AND OTHER PRESSED STEEL PRODUCTS

Electrification Cuts Costs on a big Construction Job

Electricity speeded up the Concrete Mixing and Distributing the Form Work, the Steel Placing, the Roofing.—





WHEN Turner built the American Can Factory in Brooklyn — a 200 x 300 ft. building consisting of 6 stories and basement and involving 22,000 cu.yds of concrete — *electricity* reduced the construction costs. The same power that helped break records in shipbuilding, steel production, and coal mining was called upon to get this building up in shorter time — for less money. And it succeeded.

To electrify a job is to keep pace with progress. *To select the right electrical equipment is just as important.*

This particular job was typical of most construction work. These Westinghouse motors operated in dusty, dirty, damp surroundings. Two were about 3½ years old; another, over 4½ years. All were veterans of five or six previous hard jobs, equally dusty, dirty and damp. All were still in *excellent condition.* None had needed much repairing.

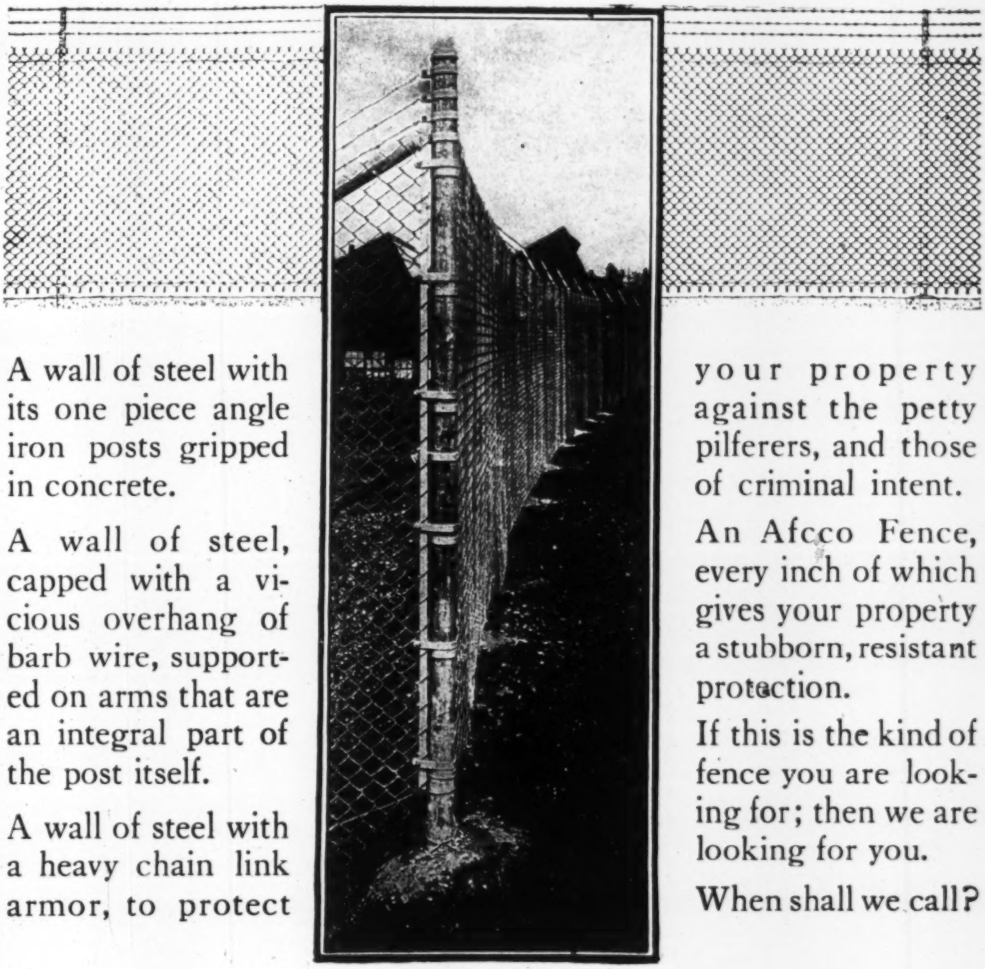
Whether you face the question of selecting electrical equipment, rearranging present electrical equipment, or applying electric power to apparatus now driven by other means, the services of Westinghouse Engineers are at your disposal to help you cut costs and speed your work.

Westinghouse Electric & Mfg. Co
East Pittsburgh, Pa.
Sales Offices in All Large American Cities

W
WESTINGHOUSE ELECTRIC

Westinghouse

There the Fence Stands With Its Stubborn Wall of Steel



A wall of steel with its one piece angle iron posts gripped in concrete.

A wall of steel, capped with a vicious overhang of barb wire, supported on arms that are an integral part of the post itself.

A wall of steel with a heavy chain link armor, to protect your property against the petty pilferers, and those of criminal intent.

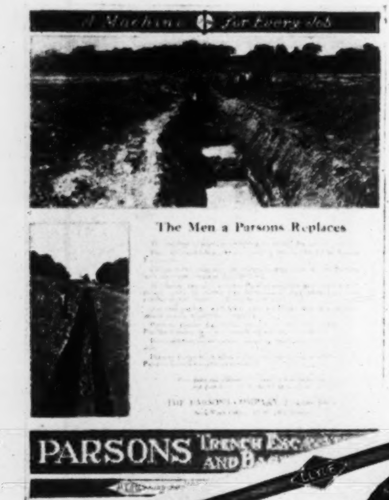
An Afcco Fence, every inch of which gives your property a stubborn, resistant protection.

If this is the kind of fence you are looking for; then we are looking for you.

When shall we call?

American Fence Construction Co.
108 Church Street, New York

How the Domestic Buyer
by this "Allied"



A Machine for Every Job

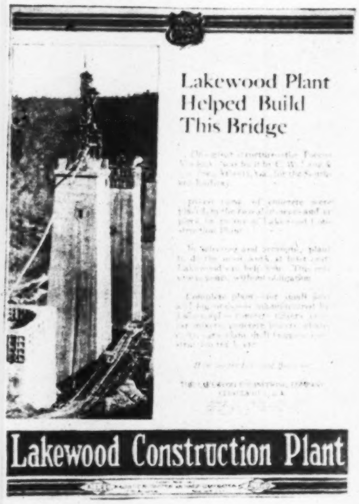
The Men a Parsons Replaces

PARSONS

Clyde Boiler Anchorage Is Most Rigid and Substantial

CLYDE IRON WORKS

Hoisting Machinery



Lakewood Plant Helped Build This Bridge

Lakewood Construction Plant

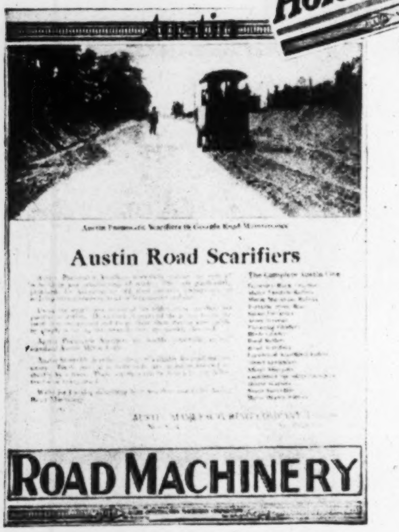
The Allied Construction Machinery Corporation

Under the Management of the American International Corporation

120 Broadway, New York City

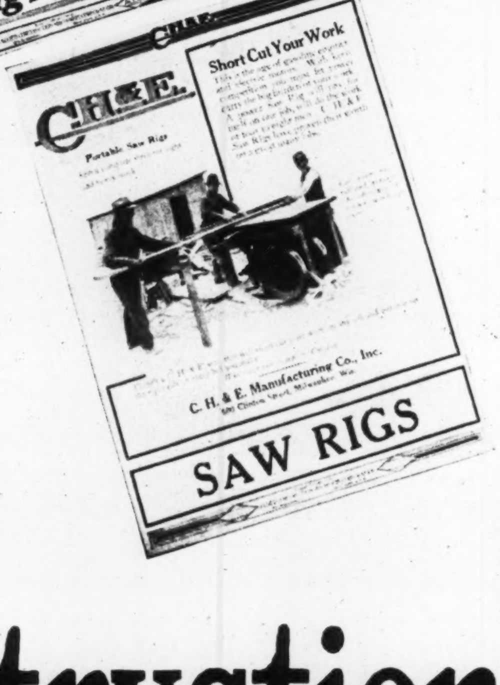
Export Representatives for

- **The Lakewood Engineering Co., Cleveland**
- **The Thew Automatic Shovel Co., Lorain, O.**
- **The Austin Manufacturing Co., Chicago**
- **The Western Wheeled Scraper Co., Aurora, Ill.**
- **The Barber-Greene Co., Aurora, Ill.**
- **The Parsons Co., Newton, Iowa**
- **The Clyde Iron Works, Duluth, Minn.**
- **The Carbic Manufacturing Co., Duluth, Minn.**
- **The Sterling Wheelbarrow Co., Milwaukee, Wis.**
- **The C. H. & E. Manufacturing Co., Milwaukee, Wis.**
- **The Hydraulic Pressed Steel Co., Cleveland (Concrete Form Dep't)**



Austin Road Scarifiers

ROAD MACHINERY



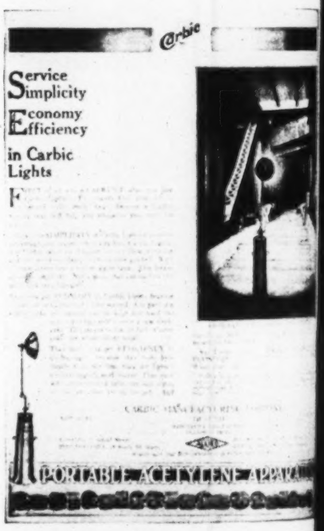
C. H. & E.

Portable Saw Rigs

Short Cut Your Work

C. H. & E. Manufacturing Co., Inc.

SAW RIGS



Carbic

Service Simplicity Economy Efficiency in Carbic Lights

PORTABLE ACETYLENE APPAR

Construction & La

for Export has Benefited Export Service

These non-competing American manufacturers have, during the last few years, developed a most successful cooperative plan for serving the foreign buyer.

In the development of this export service much of the equipment has been standardized, resulting in higher perfection of product, more efficient manufacturing methods and higher engineering ability.

While these advances are due, primarily, to the efforts of these manufacturers to perfect a cooperative service to the foreign buyer—

The Domestic Buyer for Export

is also offered highly perfected and standardized equipment for all kinds of construction (buildings, bridges, excavation, roads, sewers, etc.), as well as for conserving labor and increasing industrial efficiency.

Catalogues and complete information will be sent on request.

Note 14-page display section in July 3rd issue.

Allied Machinery Company
New York City

Industry Series

Street Grading

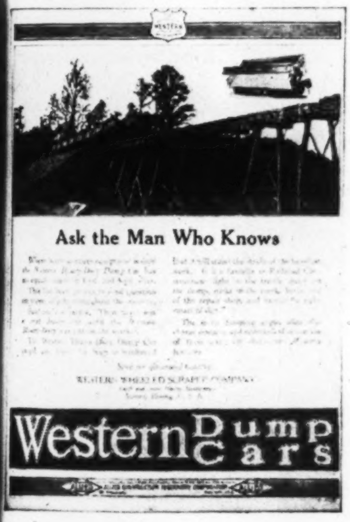
THEW Power Shovels

Sterling

The Reasons for Sterling Wheelbarrow Superiority

STERLING WHEELBARROW COMPANY

WHEELBARROW



Ask the Man Who Knows

WESTERN WHEELED SCRAPER COMPANY

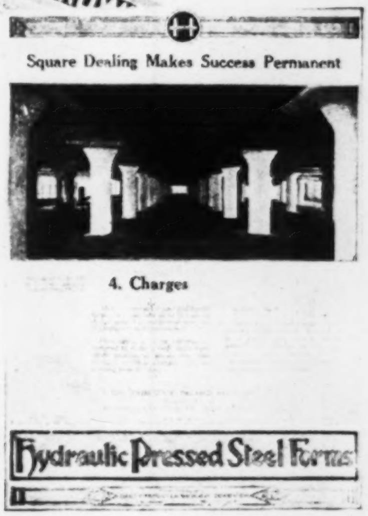
Western Dump Cars

How a Contractor Solved His Paving Problem with a B-G Self-Feeding Bucket Loader

Loader Feeds Itself

BARBER-GREENE COMPANY

B-G LOADERS

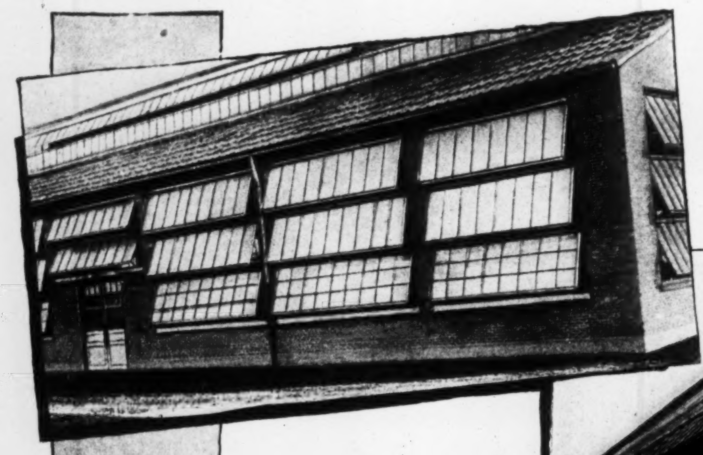


Square Dealing Makes Success Permanent

4. Charges

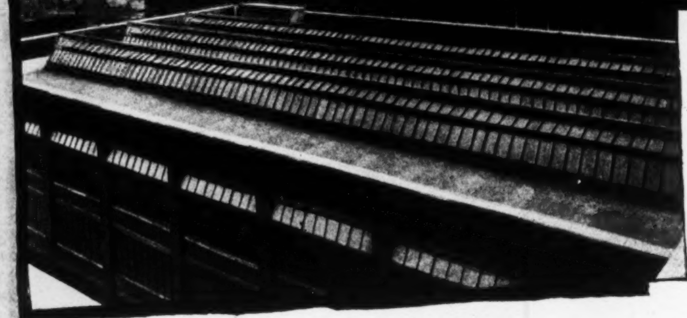
Hydraulic Pressed Steel Forms

or Saving Machinery



Pond Continuous Sash in short lengths between pilasters. Controlled in lines or groups by Pond Operating Device.

Pond Continuous Sash in foundry monitor. Underlapping storm panels exclude rain at ends of lines. Electric motors may be used to operate very long lines.



Pond Continuous Sash in sawtooth roof. For maximum ventilation the sawtooth sash lines may be operated in groups by electric motors. This construction, on the top floor of a multi-story factory, enables all the most exacting work to be done under ideal conditions. A building so designed may be made wider or higher than would otherwise be practicable.

More Air

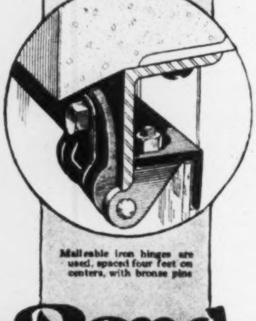
The intensive production of tomorrow demands a new standard of ventilation.

Not merely larger openings, but *mass control*, is often the answer. Stop depending on the individual workmen to open windows and place entire control in the hands of the foreman.

POND CONTINUOUS SASH does just that. When hung outside of structural work, with underlapping storm panels at the ends of lines, it is fully weather-protecting. The Pond Operating Device, with spirals and counterweights to balance the load when open, renders control of long lines easy.

Wider buildings, better planned buildings, and larger output follow the correct use of Pond Continuous Sash.

We gladly co-operate with architects and engineers. Shall we send booklets on the use of Pond Continuous Sash?



Malleable iron hinges are used, spaced four feet on centers, with bronze pins

Pond
CONTINUOUS SASH
PATENTED
WEATHER-PROOF WHEN OPEN

DAVID LUPTON'S SONS COMPANY

Tulip and Westmoreland Sts. Philadelphia, Pa.

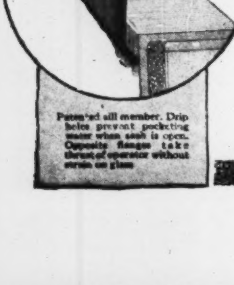
Makers of modern equipment for daylighting and natural ventilation

Canadian Manufacturers: The A. B. Ormsby Co., Ltd., Toronto.

Pond Continuous Sash is top-hung under an overhanging angle, and overlaps storm panels 2 feet wide at the ends. Its 20-foot units are connected by weather proof expansion caps giving needed flexibility for alignment with steel work.

Its members are extra heavy and rigid; all joints are oxy-acetylene welded. Control in long lines is made easy by the patented Pond Operating Device, hand or motor driven.

Immediate deliveries from stock.



Patented sill member. Drip helps prevent pocketing water when sash is open. Opposite flanges take thrust of operator without strain on glass

Lupton

INVESTMENT VALUE

PURCHASING

Thirty-five Years' Study of Markets

THE careful, scientific selection of materials and their purchase at the most favorable terms and prices are quite as important factors in our service as the actual design and construction of a project.

Before being accepted as suitable for the purpose, materials submitted to us are carefully and searchingly tested by our experts in our own laboratories. Failure to measure up to our rigid specifications means prompt rejection.

The manager of our purchasing department has been in continuous employment with us in that capacity for twenty years. He is posted on sources of supply located in every part of the world. His grasp of markets and materials has saved our clients large sums.

Furthermore the magnitude of our operations results in our commanding prices not available to the smaller buyer, and is a substantial factor in cutting construction costs.

WESTINGHOUSE CHURCH KERR & CO., Inc.

Engineers & Constructors

37 Wall Street, New York

MONTREAL
Shaughnessy Bldg.

WASHINGTON
Wilkins Bldg.

ENGINEERS and CONSTRUCTORS
A purely engineering organization with nothing to sell except services.
W·C·K

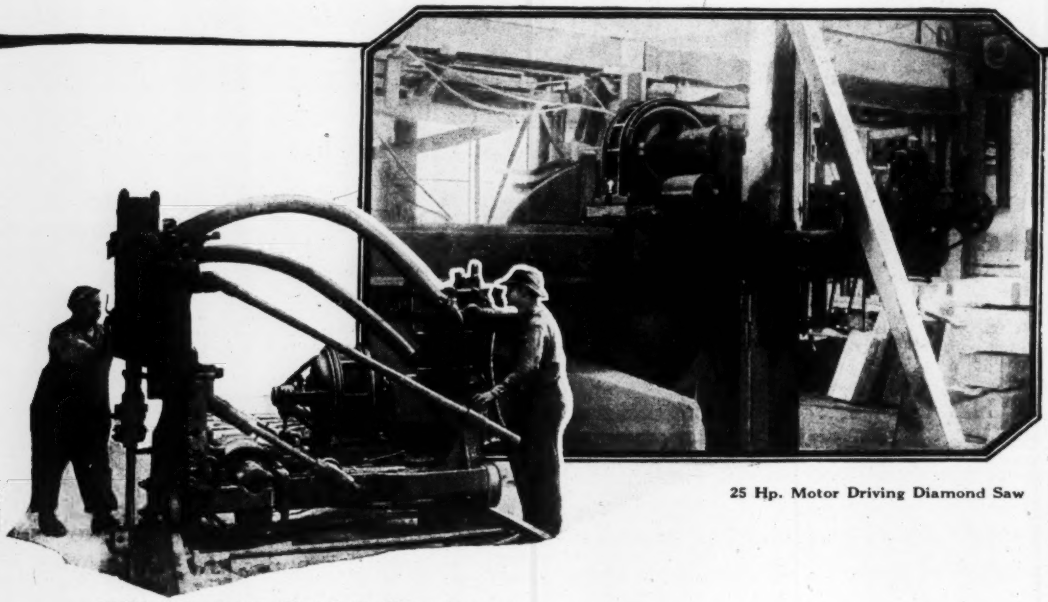
CHICAGO
Conway Bldg.

SAN FRANCISCO
Southern Pacific Bldg.

DALLAS
Western Indemnity Bldg.

No. VI

Dependable. Economical Electric Power from Central Stations Is Being Widely Used in Quarries



25 Hp. Motor Driving Diamond Saw

22 Hp. Motor Driving Electric Air Channeler

Marble Quarrying and Finishing Is Readily Done With Electric Power

Electric power is generated in large quantities very economically and dependably.

It is transmitted to portable machinery about the quarry easily by running a wire to the point of use.

This power is easily applied by strong, reliable G-E motors which reliably operate at high efficiency.

Our Bulletin No. 48023, "Electricity in Quarrying and Finishing Marble," would interest you. Send for a copy.

General Electric Company

General Office Schenectady, N.Y.

ASECo Service lights the way to export markets

Dependable service is needed today more than ever before.

The foreign buyer of machinery and equipment demands service—the manufacturer, if he would share in the growing overseas business, must have it.

Service by experts both in construction and consultation, plus an expert knowledge of every export trade requirement and the requisite facilities to comply with them.

All this you will find in

ASECo

Our Engineering Department will secure and ship a single piece of machinery or an entire manufacturing equipment.

Engineering Booklet on request.

AMERICAN STEEL EXPORT COMPANY
Woolworth Building, New York, U. S. A.

PRODUCER ASECo CONSUMER

"This advertisement was scheduled to appear in the June 19th issue. Delay in its transmission made this impossible. The new price on the Lakewood Road Finisher will, therefore, not become effective for readers of Engineering News-Record until July 3rd. Orders will be accepted at the old price, by mail or wire, until that date."

The upper picture on the opposite page is the Lakewood Road Finishing Machine we began telling you about two years ago to sell for $1,250.00, f.o.b. Milwaukee.

The lower view shows the latest 1919 model which we have been selling at the price established for the 1917 and 1918 models.

To help get business going early in the year we advertised generally that we would not change any of our prices before July 1.

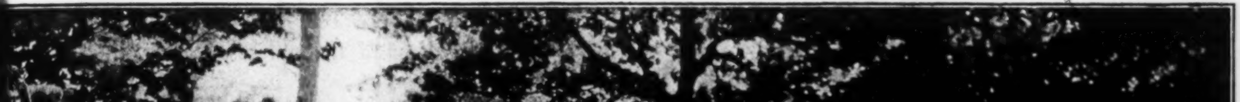
Beginning July 1, 1919, the price of the 1919 Model Lakewood Road Finishing Machine will be $1,650.00, f. o. b. Cleveland, for 16, 18 or 20-foot road widths and 1-inch or 2-inch crowns.

This price is effective from July 1, to December 31, 1919.

THE LAKEWOOD ENGINEERING COMPANY
Cleveland, U. S. A.

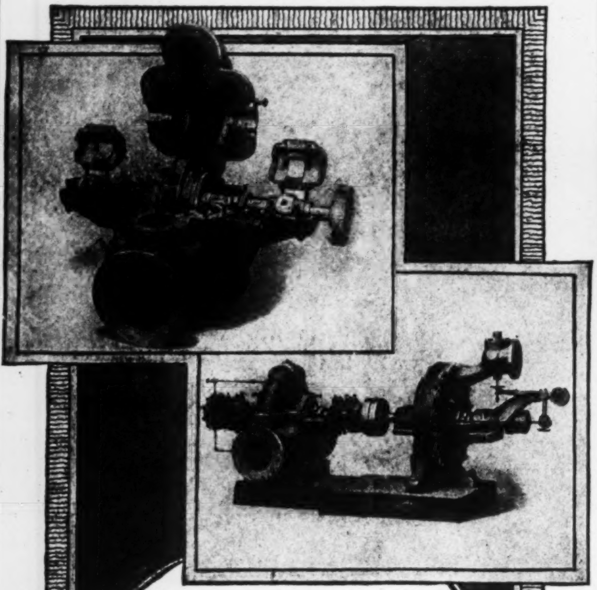
Offices in New York, Boston, Philadelphia, Washington, Pittsburgh, Detroit, Chicago, Milwaukee, Salt Lake City, Los Angeles, Seattle, Kansas City Oklahoma City and Houston

1917-18 *Model*—$1,250.00 *f.o.b. Milwaukee.*



1919 *Model*—$1,650.00 *f.o.b. Cleveland.*

We had more work at Milwaukee than that plant could handle.
Greater manufacturing facilities at the Cleveland plant insure more prompt delivery.

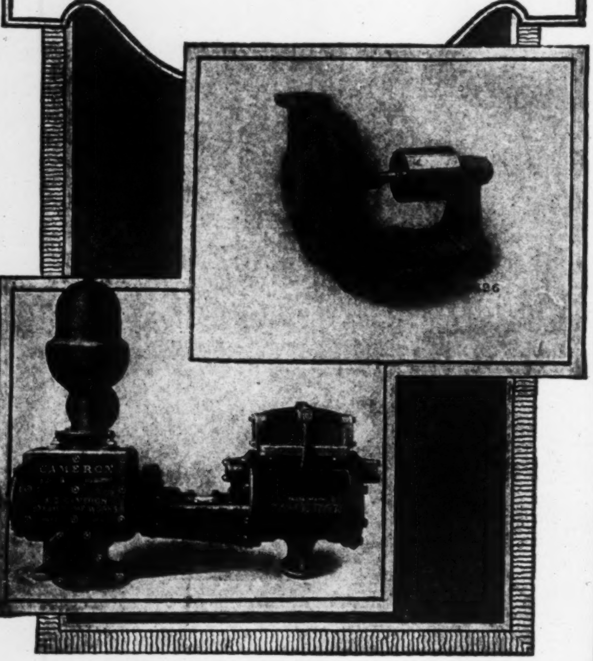


Cameron pumps have attained that peculiar degree of excellence where they have an individuality of their own. For any drive—for any service specify CAMERON. There is one for every need.

Send for Bulletins

A. S. Cameron Steam Pump Works
11 Broadway, New York
Offices the World Over

10CM



"Jackhamer" drilling concrete blocks in New York subway

Down in the Subway

The building of the New York subways was and is a stupendous feat of engineering. Such projects are made possible only by modern methods which demand the use of the best of modern tools.

"Jackhamers" drilled the underpinning of New York City, at times far below the surface—at times immediately under the hurrying feet of millions.

Swiftly and surely "Jackhamers" drove their way through solid rock, working day and night, efficiently and steadily. "Jackhamers" helped immeasurably to turn romance into reality—to complete miles of tunnel and cut under the heart of the greatest city.

Send for Bulletin 4321

INGERSOLL-RAND COMPANY

GENERAL OFFICES, 11 BROADWAY, NEW YORK

DOMESTIC OFFICES

BUTTE
JUNEAU
DULUTH
DENVER
BOSTON
EL PASO
SEATTLE
ST. LOUIS
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SCRANTON
HOUGHTON
CLEVELAND
PITTSBURGH
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DETROIT
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SAN FRANCISCO
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SANTIAGO, CHILE
LIMA, PERU
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MANILA
TOKIO
HONOLULU
HAVANA
BUENOS AIRES
ANTOFAGASTA
LA PAZ, BOLIVIA
VANCOUVER B. C.

APPLY TO NEAREST OFFICE

187-JD

"LITTLE TUGGER"

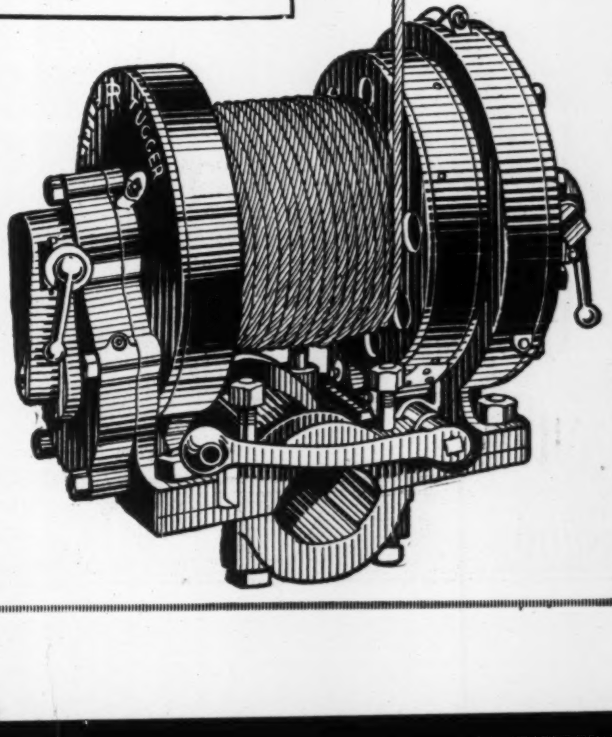
The "ONE MAN" Hoist

One "Little Tugger" operator can hoist or haul the load without any assistance. The hoist is so constructed that its drum can be thrown out of gear by a single motion of one lever, allowing the cable to run freely off the drum. The cable can then be conveyed to the "hitching" point by the operator. This means a SAVING IN POWER as well as LABOR as this cable does not have to be payed out under power.

This particular feature is but one of many money saving qualities of the "Little Tugger" Hoist. Bulletin 4333 may suggest a way for you to reduce operating expense. A copy will be sent you upon request.

"LITTLE TUGGER"

Works equally well on compressed air or steam.
Hoists loads up to 1000 lbs.
Can be mounted anywhere in any position.

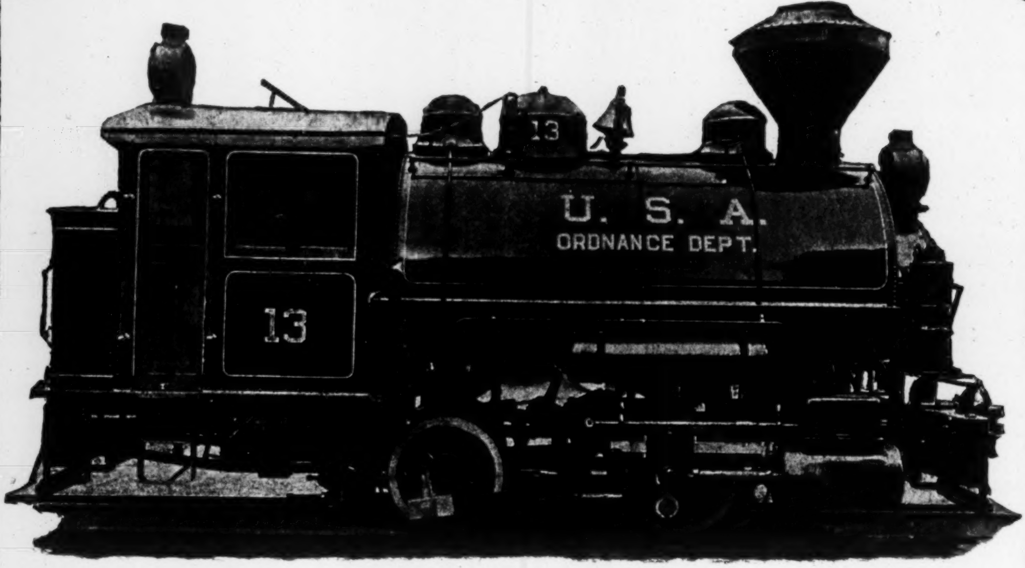


Ingersoll-Rand Company
11 Broadway, New York
165 Q. Victoria St., London

Offices the World Over

60-LH

VULCAN



Special Locomotives for Special Places

WHERE inflammable or explosive materials have to be transported in bulk, the locomotive must be built so that perfect safety may be assured.

Not only must sparks from the smoke stack be arrested, but no hot coals must be dropped from the ash pan. The equipment must be so designed that no burning or very hot materials can be dropped accidentally where they might come in contact with anything inflammable or explosive.

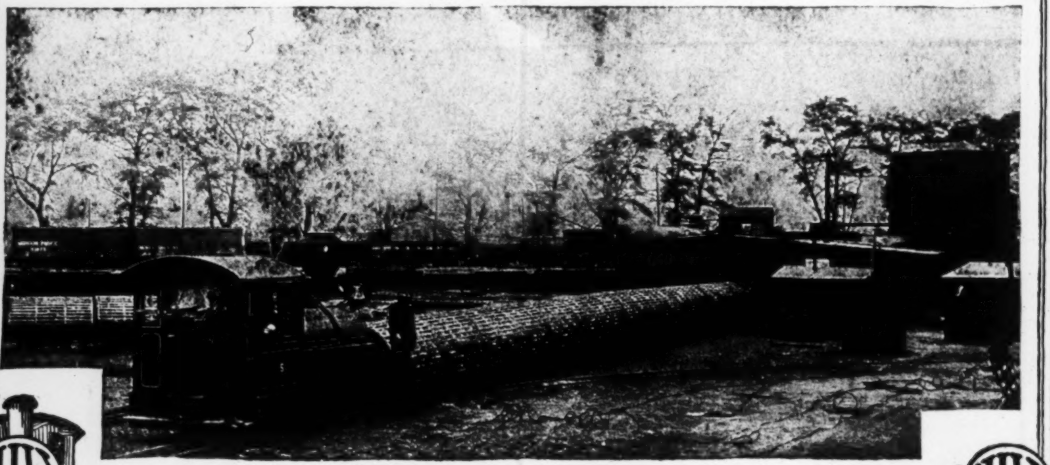
Special VULCAN Locomotives are built with spark and fire arresting devices of such a dependable character as to afford absolute protection in powder and dynamite plants, in lumber yards, around saw mills or in the timber in dry weather.

Correspondence Invited

VULCAN IRON WORKS, 1737 Main St., Wilkes-Barre, Pa.

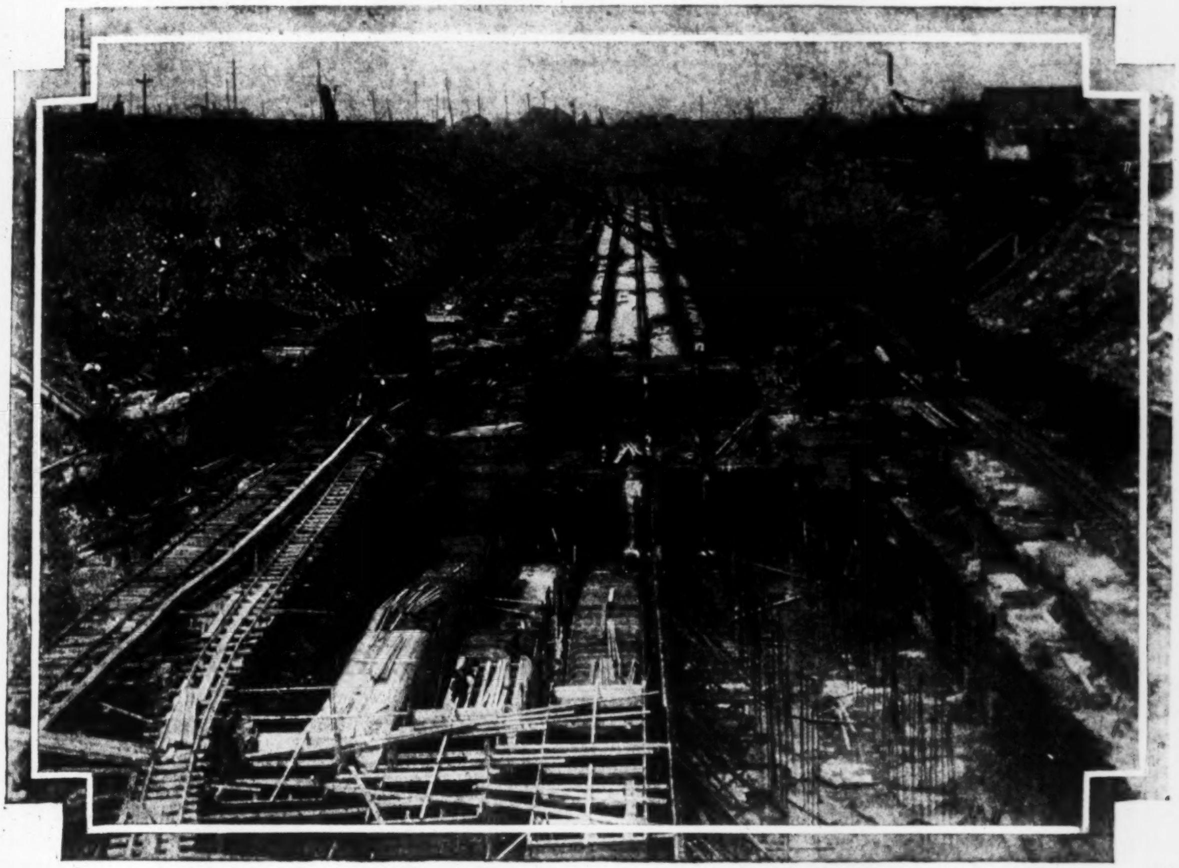
Locomotive Builders for Forty-Eight Years.

5893-1687



Creosoting Plant of Jennison-Wright Co.

VULCAN



Industrial Cranes

Erecting Concrete Forms

Five separate operations were being handled while these 25-ton Industrial Cranes hurried up the Calumet Sag Channel. John O. Heyworth knew the versatility of Industrial Cranes, so, besides using a drag scraper bucket, his cranes laid their own track, drove piles with a steam hammer rig, handled grab bucket and did the heavy material handling. It is performance like this that keeps Industrial Cranes first in favor wherever there is heavy lifting to do. There is a size and type for practically every requirement.

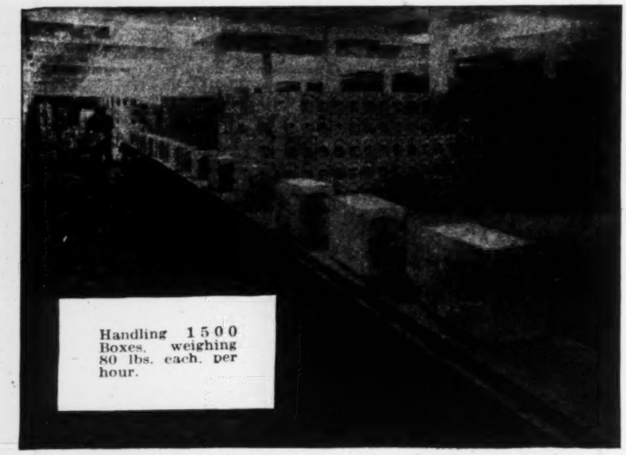
INDUSTRIAL WORKS

Bay City, Mich.

NEW YORK	PHILADELPHIA	DETROIT	CHICAGO
50 Church St.	Widener Bldg.	Book Bldg.	McCormick Bldg.

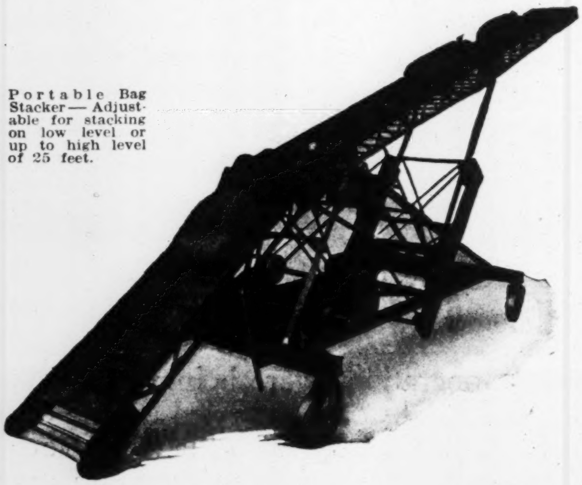
Agents: C. B. Davis Engineering Co., Birmingham, Ala.; J. G. Miller, St. Louis, Mo.; F. H. Hopkins & Co, Montreal, Que.; N. B. Livermore & Co., San Francisco, Calif.; Northwestern Equipment Co., Portland, Oregon and Seattle, Washington.

Products: Locomotive, Erection and Wrecking Cranes, 5 to 160 tons capacity. Pile Drivers, Pillar Cranes, Transfer Cranes, Rail Saws.

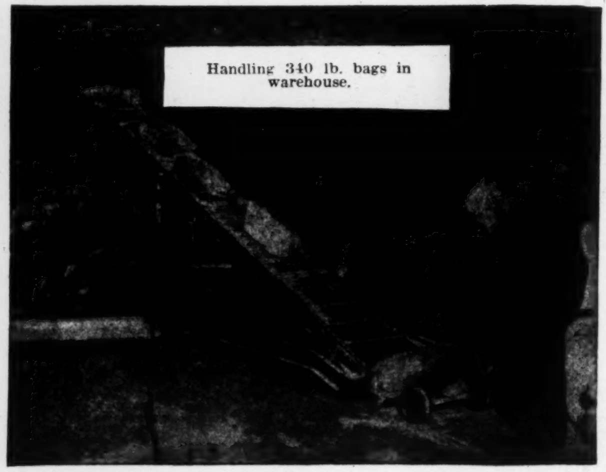


Handling 1500 Boxes, weighing 80 lbs. each, per hour.

This Portable Belt Conveyer is doing the work that formerly required 30 men with hand trucks.



Portable Bag Stacker—Adjustable for stacking on low level or up to high level of 25 feet.



Handling 340 lb. bags in warehouse.

This stacker is designed for piling from a minimum height of 6 ft. to a maximum of 14 ft. 6 in.

Handle it Mechanically

Save

Labor
Time
Storage Space

By using

JEFFREY PORTABLE CONVEYERS

For handling and piling boxes, sacks, packages, bags, etc., they are money-savers on a big basis.

Portable Belt Conveyer

Made up of short, easily connected sections of any length desired. Can be easily run from one part of building to another. Avoids the delay incident to unloading of hand trucks, and does the work of a large number of men and trucks at far less cost.

Portable Bag Stackers

Especially adapted for handling and stacking bags, boxes, etc., breaking down piles and for loading material onto shipping platform, into freight cars, etc. Save Labor and Time and increase warehouse capacity by allowing higher piling. Designed for heavy duty, yet of light weight. Only two men required to push them about.

Our new Bulletin No. 266A

gives details of construction, and features interesting installations of Jeffrey Portable Conveyers and Stackers. Send for your copy.

The Jeffrey Mfg. Co.
Columbus, Ohio

New York
Boston
Philadelphia
Scranton
Pittsburgh
Charleston, W. Va.
Cleveland
Chicago
St. Louis
Birmingham
Dallas
Milwaukee
Denver
Seattle
Montreal

Handle it Mechanically

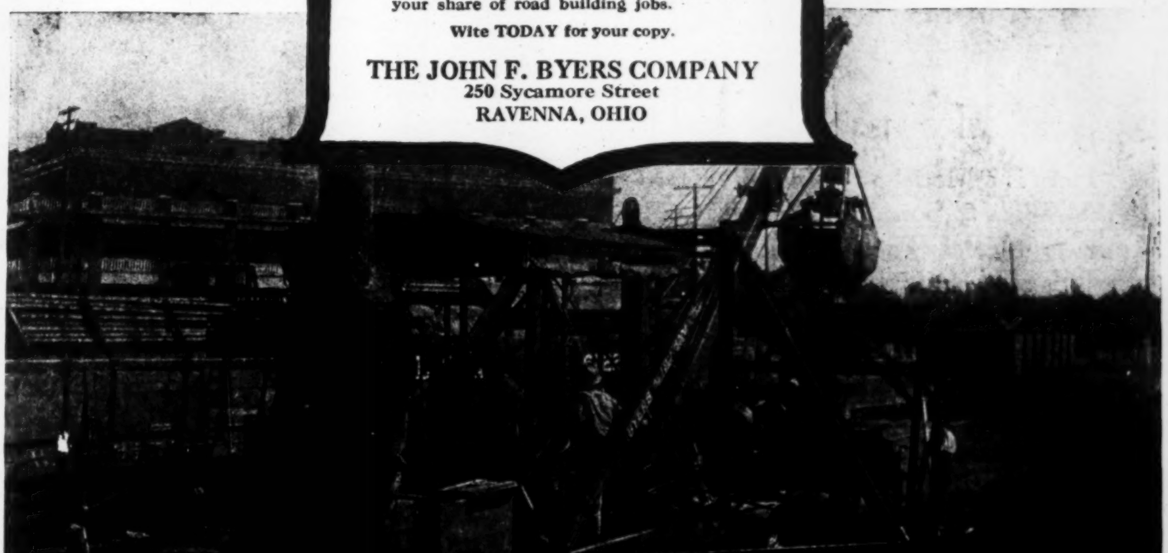
AUTO-CRANE Efficiency Cuts Road Building Costs

MATERIAL handling is a mighty big factor in road building costs. BYERS AUTO-CRANES provide a most EFFICIENT method of handling road material and consequently an effective weapon for fighting high costs.

An AUTO-CRANE will jump right into a road building job at the very start. It will transfer materials from railroad cars on the siding directly into overhead bins, into waiting motor trucks or on to the roadbed itself. Grading, excavating, etc., are strictly AUTO-CRANE jobs. It gives efficient crane service and will handle with ease the every-day tasks of the road builder and general contractor.

AUTO-CRANES are built in a choice of Steam, Gasoline or Electricity, for Power and with Mountings of Road Wheels, Rail Trucks and Caterpillars.

The Good Roads Movement Is On!



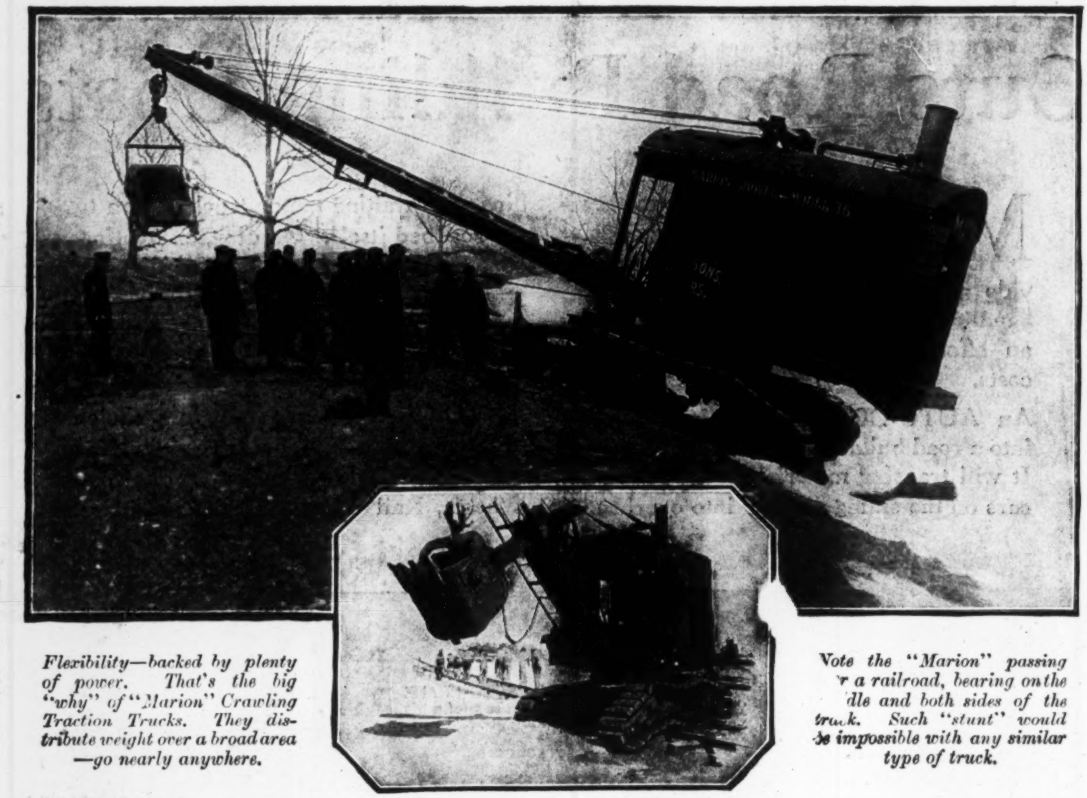
Bulletin 1015 tells how the AUTO-CRANE will enable you to handle most profitably your share of road building jobs.

Wite TODAY for your copy.

THE JOHN F. BYERS COMPANY
250 Sycamore Street
RAVENNA, OHIO

Byers AUTO-CRANES

TRADE MARK BECKWITH PATENTS



Flexibility—backed by plenty of power. That's the big "why" of "Marion" Crawling Traction Trucks. They distribute weight over a broad area—go nearly anywhere.

Note the "Marion" passing r a railroad, bearing on the dle and both sides of the truck. Such "stunt" would be impossible with any similar type of truck.

Take the "Short Cut" to the Next Job!

Here is a Model 36 "Marion" owned by A. V. Wills & Sons, on its way to work on a levee job near Brewster, Ill. It is going up this steep bank under its own mighty power—shoving along, tank-fashion, just as though it were an ordinary stunt for shovels to climb steep grades without help.

Even *that* wasn't all. This same machine had crossed a frozen creek just a few minutes earlier—without outside help of any kind. It smashed into the ice, sloughed through the mud, bucked the bank—and went over the top with a hurrah.

That's the real "Marion" spirit—the spirit that tackles jobs with a vim, then *sees them through.* There's no "laying down" to a "Marion"—you can always count on its being in as strong at the finish as at the start.

Let us help you plan that new job. Te us what you have to do and we w show you how "Marions" will help u do it.

THE MARION STEAM SHOVEL COMPANY

Established 1884 Marion, Ohio

CHICAGO NEW YORK SAN FRANCISCO

Marion

Efficient Water Pressure

Charles E. Golden
President and General Manager

Mr. Golden says:

"Those surges and fluctuations in your distribution lines mean money loss to you. Install—

GOLDEN-ANDERSON

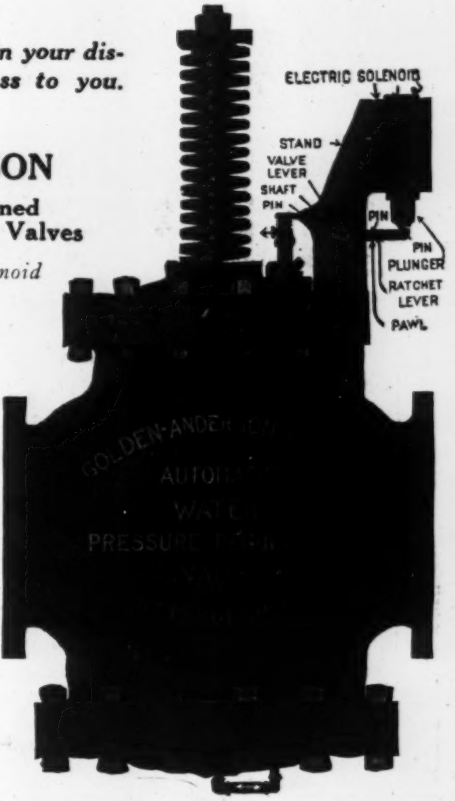
Patent Automatic Cushioned Water Pressure Regulating Valves

Furnished with or without Solenoid Attachment

and you will save many times the amount of the slight outlay in both **operating** and **maintenance** expenses.

They will provide the simplest, most economical and most satisfactory means of attaining this ideal condition. Note the following points.

1. Positive in action and always dependable.
2. Perfectly cushioned by water and air both in opening and closing.
3. Fitted with electric solenoid that enables the valves to be opened wide from distant point in case of fire or other emergency.
4. Again closing the circuit for a few seconds will automatically restore the valves to normal position.
5. Provided with special safety operating piston making the accidental entrance of high pressure into the low pressure side impossible.
6. Easily adjusted to deliver the desired pressure from the outside.
7. All water passages are large to prevent danger of clogging.
8. Made in sizes to 24 inches.
9. Correct in every detail and virtually indestructible.



Golden-Anderson Patented Life and Property Insurance Valves

Globe Angle and Elbow Patterns

Sizes to 20 in.

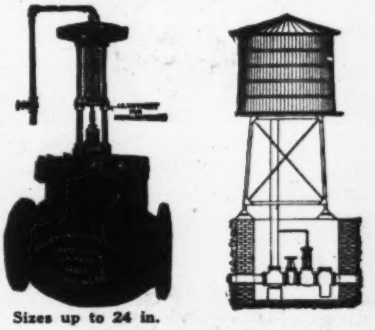
1. Automatically protects the plant against complete boiler shutdown, in case of accident, to any one boiler, by absolutely preventing back flow of steam.
2. Positively protects against pipe explosions by instantly shutting off all steam flow when a break occurs in any steam pipe line.
3. Automatically equalizes pressure between all boilers.
4. Automatically cuts a boiler into service.
5. Prevents inflow of steam to a cold boiler.
6. Positively cushioned. No hammering, spinning or sticking.
7. 1650 repeat orders from U. S. Steel Corp.

Golden-Anderson Patented Cushioned Automatic Altitude Controlling Valves

They stop all water waste down the overflows of reservoirs, standpipes, tanks, etc., by automatically maintaining the water level constant at the desired level. They operate without floats or fixtures.

Three ways of closing:

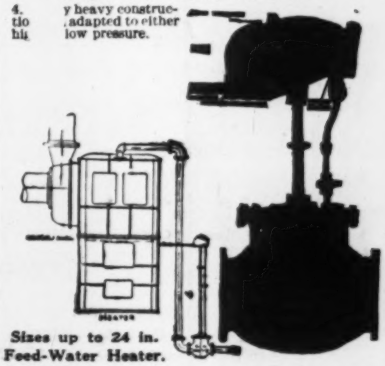
1. By water.
2. By electricity from distant points.
3. By hand.



Sizes up to 24 in.

Golden-Anderson Patented Automatic Cushioned Controlling Float Valves

1. They eliminate the heavy loss of water down your feed water heater hot well and other tank overflows by accurately controlling the make-up water.
2. Automatically hold a constant water level without atte on.
3. fectly cushioned both by water and air.
4. y heavy construc- tio , adapted to either hi low pressure.

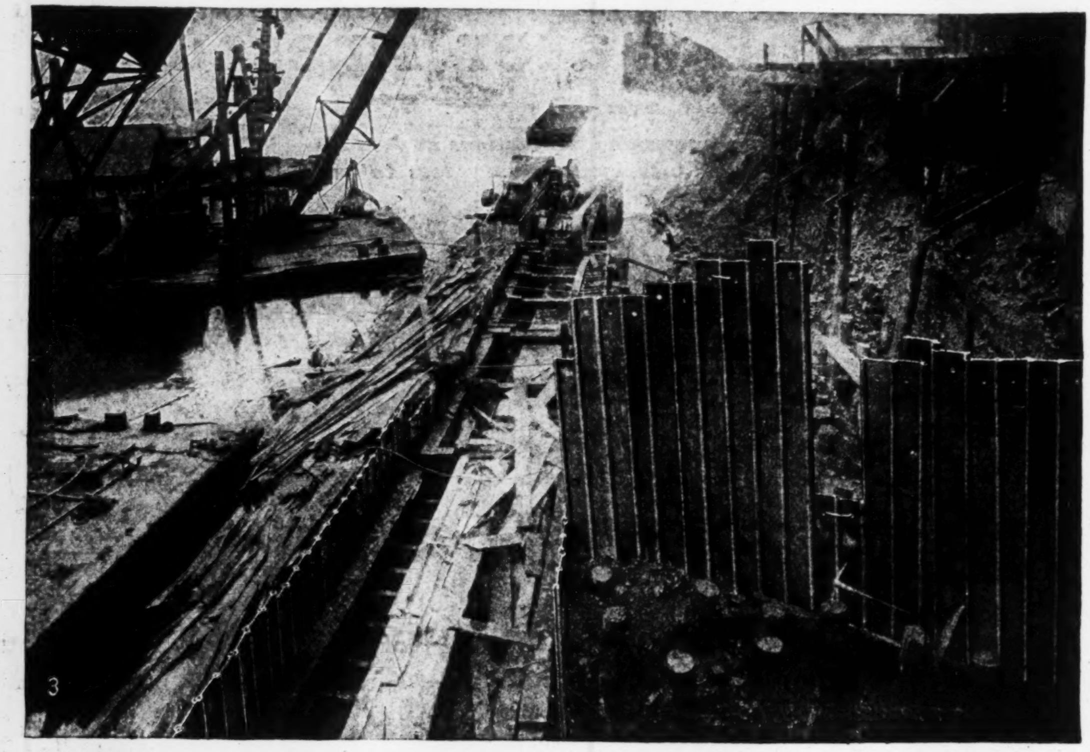


Sizes up to 24 in.
Feed-Water Heater.

"Hosts of References"—"Every Valve With an Absolute Guarantee"

Golden-Anderson Valve Specialty Company

1202 Fulton Building, Pittsburgh, Pa.



A good way to use Lackawanna Steel Sheet Piling in building river retaining walls

Here is a good type of unit cofferdams of Lackawanna Steel Sheet Piling for building river retaining walls. In this particular instance, at the plant of the Pressed Steel Car Co. of Pittsburgh, a coal pocket was built behind the retaining wall and made part of it, with the cofferdam protecting the foundation of coal pocket during construction.

These cofferdams were about 100 feet long, the last one, however, being 200 feet long, and the concrete work extended to about 14 feet below pool level. From the nature of the work, it is evident that the Lackawanna Steel Sheet Piling was used a number of times, and that if the 200-foot cofferdam could be successfully unwatered and kept dry in a sand and gravel soil as exists here *Lackawanna Steel Sheet Piling must be watertight.*

The method of construction adopted by the contractors here, The Dravo Contracting Co., Pittsburgh, was economical in that the permissible preliminary dredging was done before setting the steel sheet piling walls, which had to be driven subsequently only about eight feet.

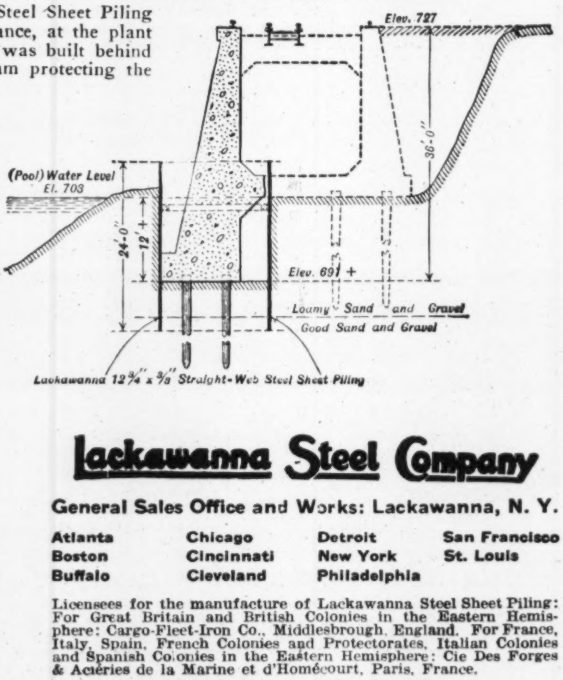
We are told that although water came up through the bottoms of the excavated cofferdams, no trouble was experienced in maintaining dryness, a 10-inch centrifugal pump running at moderate speed having met all requirements.

The unfailing dependability of properly selected and driven Lackawanna Steel Sheet Piling is always a source of profit to the wise contractor and gives him a confidence as to uninterrupted progress not otherwise obtainable.

Try one installation and you will want more. Our literature and our engineers will help you to get the most from the investment.

DOUBLE-LOCK LACKAWANNA INTERLOCK

A tightening action under pressure that makes a single wall cofferdam watertight, even in deep, clear water.



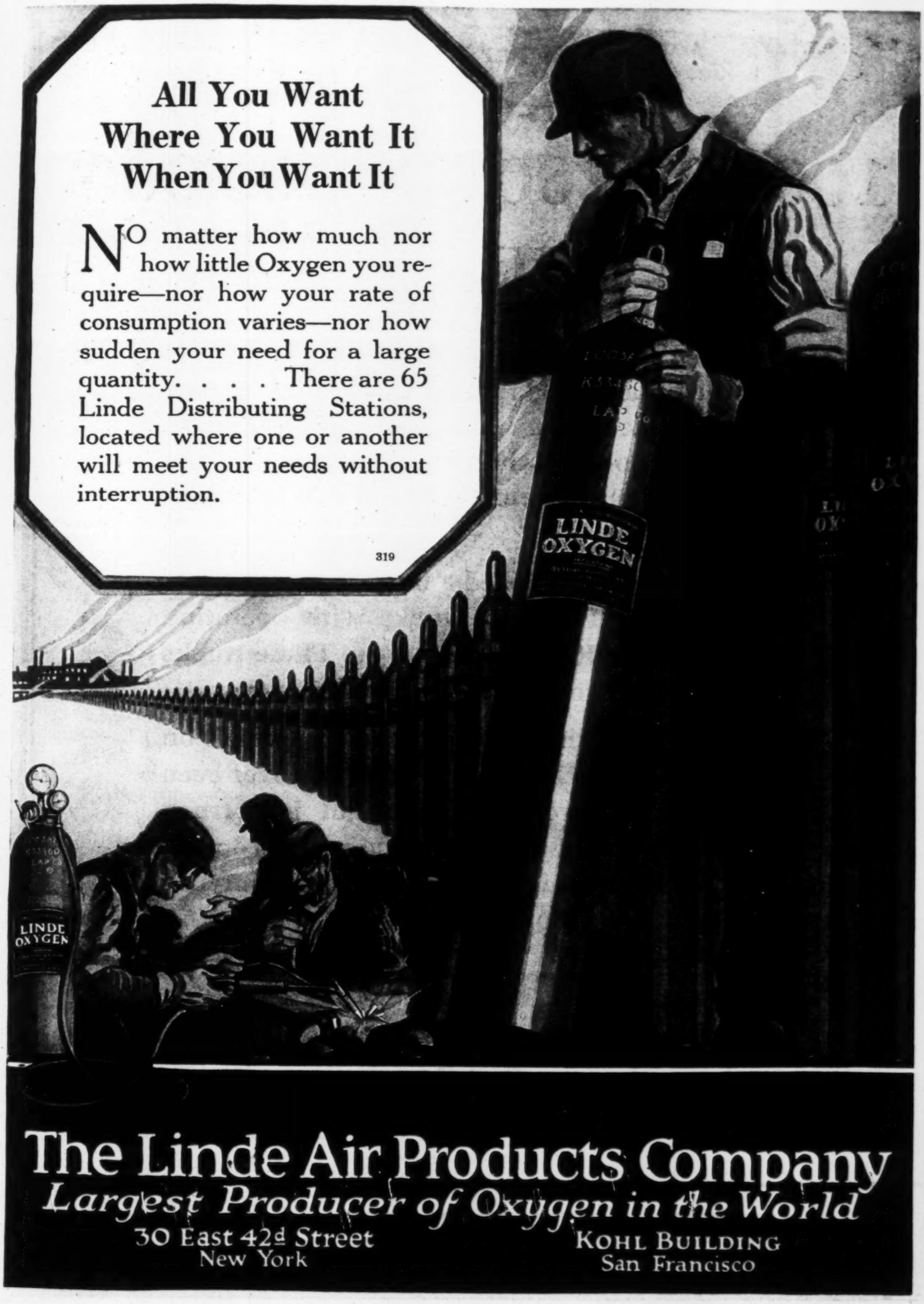
Lackawanna Steel Company

General Sales Office and Works: Lackawanna, N. Y.

Atlanta	**Chicago**	**Detroit**	**San Francisco**
Boston	**Cincinnati**	**New York**	**St. Louis**
Buffalo	**Cleveland**	**Philadelphia**	

Licensees for the manufacture of Lackawanna Steel Sheet Piling: For Great Britain and British Colonies in the Eastern Hemisphere: Cargo-Fleet-Iron Co., Middlesbrough, England. For France, Italy, Spain, French Colonies and Protectorates, Italian Colonies and Spanish Colonies in the Eastern Hemisphere: Cie Des Forges & Aciéries de la Marine et d'Homécourt, Paris, France.

Sole Exporters for Other Countries:
Consolidated Steel Corporation, 165 Broadway, New York



All You Want Where You Want It When You Want It

NO matter how much nor how little Oxygen you require—nor how your rate of consumption varies—nor how sudden your need for a large quantity. . . . There are 65 Linde Distributing Stations, located where one or another will meet your needs without interruption.

319

The Linde Air Products Company

Largest Producer of Oxygen in the World

30 East 42d Street
New York

Kohl Building
San Francisco

Owners Records of

100,000-200,000-300,000 MILES

THE ultimate mileage of White Trucks is still unmeasured. Some have rounded out 300,000 miles. Many have run 200,000 miles. Hundreds, probably thousands, have passed the 100,000 mark—a very common White performance.

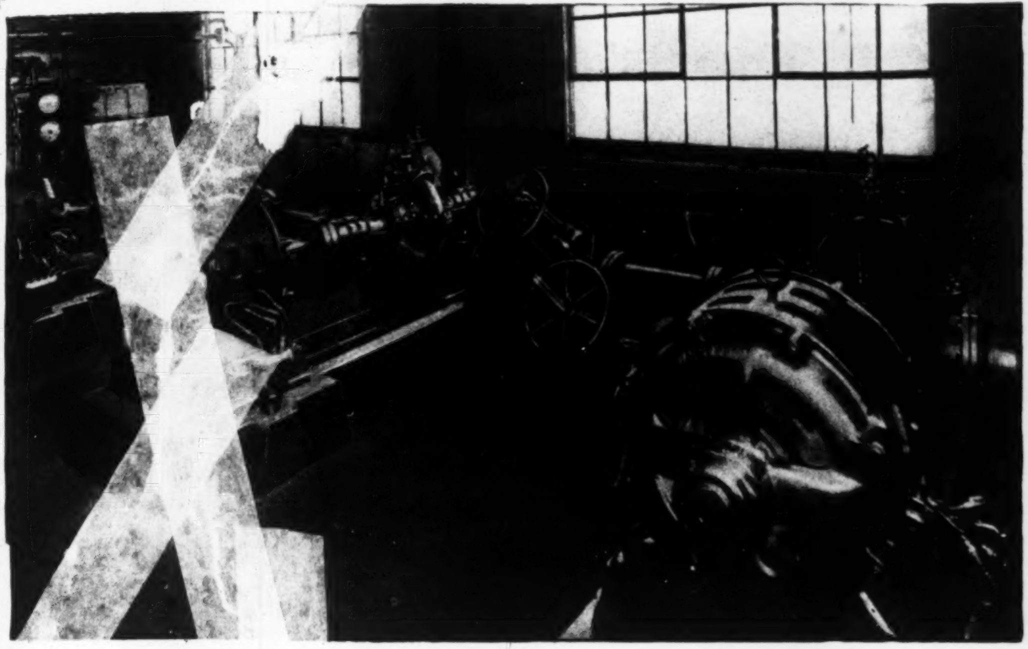
We have just published a book which tells of more than 400 White Trucks with operating records of 100,000 miles and over. These trucks are still giving good service today.

This book is the most convincing exhibit on the subject of truck durability that has ever been presented. It gives a new insight into truck economy through truck longevity. A copy of "100,000 Miles and More" will be sent to anyone interested, upon request.

WHITE TRUCKS

THE WHITE COMPANY, *Cleveland*

AMERICAN
TRADE MARK REG U.S. PAT OFFICE



The Barrett Company Are Well Satisfied With the Above Installation of "AMERICAN" Pumps and Had No Hesitancy in Saying So

Their letter follows:

Frankford, Philadelphia
March 19, 1919

"We are pleased to state that the three 8-inch American Centrifugal Pumps, operated in our filter plant for the past two years, have proven very satisfactory indeed."

(Signed) THE BARRETT COMPANY,
Chemical Department,
H. J. WRIGHT, Plant Engineer.

The installation which was sold by Sciple Gochenour Mfg. Co., our Philadelphia representatives, consists of three AMERICAN Type DSMB, 8-inch special centrifugal pumps, direct connected to a 75-hp., 220-volt, 2-phase, 60-cycle a. c. motor, operating at 1800 r. p. m.

This pump has a capacity of 1400 g. p. m. against a total head of 150 feet, including a suction head of 25 feet.

The shells were built to withstand a pressure of 250 lbs pressure

Impeller, wearing rings, shaft sleeves and gland are of bronze.

Efficiency developed was 74 per cent.

The original order was for two pumps and later, after a thorough trial, the third pump was added.

This is cited, merely as another among many instances, indicating the satisfaction rendered by AMERICAN pumps in service.

Catalog 149 describes our centrifugal pumps and No. 130A our deep well plunger pumps These will be sent to any address on request.

The American Well Works

General Offices and Works: Aurora, Ill., U. S. A. Chicago Office: First National Bank Bldg.

District Sales Agencies:

New York City
Philadelphia, Pa
Pittsburgh, Pa
St. Paul, Minn.
St Louis Mo
Dallas, Texas
Birmingham, Ala.
Kansas City, Mo.
Joplin, Mo.
Lincoln, Neb.
Denver, Colo.
San Francisco, Cal.
Salt Lake City, Utah
Los Angeles, Cal.
Artesia, N. Mex.
Edmonton, Alta.
Calgary, Alta.
Chatham, Ont.
Montreal, Canada.

Roof planks of weave shed of textile-mill destroyed by decay in nine years.

(Courtesy F. J. Hoxie, eng., Associated Factory Mutual Fire Insurance Cos., Boston.)

Partly Decayed Wood is a Serious Fire Hazard

The Inspection Department of the Associated Factory Mutual Fire Insurance Companies, in their pamphlet "Dry Rot In Factory Timbers" states—"*The loss to mills from rotting timber is many thousands of dollars a year. Wood infected by dry rot ignites more easily than sound wood, and mill timbers with rotted ends fall more quickly under fire.*"

Rotted timbers are also apt to fail mechanically, jeopardizing the life and limbs of workmen.

The use of Carbosota Creosote Oil will retard decay, practically eliminating rot and lessening the fire hazard. *Creosoted wood, when dry, is no more combustible than sound untreated wood, and is decidedly less inflammable than partly decayed wood.*

"Of whatever kind of wood the outer part of the roof is (referring to a double roof), *it should be completely penetrated with hot creosote so as to sterilize it and prevent the development of fungus. Such an outer* insulating covering will be found *as practicable for a concrete roof as for a wooden roof.*" (F. J. Hoxie, American Architect, 1-29-19).

Non-pressure treatments are most suitable to the conditions encountered in new construction, or repairs to roofs. Every mill should be equipped with a simple open tank creosoting plant, and all timbers and boards which will be placed in a situation favorable to development of decay, should be creosoted.

Barrett **B**

Carbosota
Grade-One Liquid
Creosote Oil

Carbosota Creosote Oil is a pure, high-grade coal-tar creosote oil, especially refined for use in non-pressure processes. It conforms to the recognized standards, as represented by Specification No. 128, issued by the United States Shipping Board Emergency Fleet Corporation.

The services of our experts may be obtained gratis, when required.

(Green wood cannot be effectively creosoted by non-pressure processes. It should be air-dry. In regions of moist, warm climate, wood of some species may start to decay before it can be air-dried. Exception should be made in such cases, and treatment modified accordingly.)

The Barrett Company

New York Chicago Philadelphia Boston St. Louis Cleveland
Cincinnati Pittsburgh Detroit New Orleans Birmingham Kansas City
Minneapolis Nashville Salt Lake City Seattle Peoria Atlanta
Duluth Milwaukee Dallas Bangor Washington Johnstown
Lebanon Youngstown Toledo Columbus Richmond Latrobe
Bethlehem Elizabeth Buffalo Baltimore
THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg
Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

Plant for creosoting roof boards and timbers with Carbosota by Open Tank Process. Two wooden tanks lined with galvanized sheet iron, soldered at joints, one for "hot treatment," the other for "cold treatment."

Permanent portable plant built by large paper mill for creosoting roof boards and miscellaneous lumber. (a) Tank for hot treatment. (b) Tank for cold treatment. (c) Tank for catching drippings.